

ENVIRONMENTAL EVALUATION OF FACILITIES DEVELOPMENT ACTIONS

Wisconsin Department of Transportation
DT2094 12/2013

BASIC SHEET 1 – PROJECT SUMMARY

Project ID 2250-12-00	Project Termini Buena Park Road to Milwaukee Avenue (WIS 36)	Funding Sources (check all that apply) <input checked="" type="checkbox"/> Federal <input checked="" type="checkbox"/> State <input checked="" type="checkbox"/> Local								
Construction ID 2250-12-70		Estimated Project Cost and Funding Source (state and/or federal). Year of Expenditure (YOE) dollars include delivery cost. \$16,600,000 (FY 2018)								
Route Designation (if applicable) 75' Restricted Truck Route (State)	Nearest Community Village of Waterford	Real Estate Acquisition Portion of Estimated Cost (YOE) \$970,000 (FY 2018)								
National Highway System (NHS) Route <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Town of Waterford	Utility Relocation Portion of Estimated Cost (YOE) TBD								
	Village of Rochester									
Project Title WIS 20/83, Main Street/South First Street	Section / Township / Range Sections 27, 34, & 35 T-4-N, R-19-E									
	Sections 1 & 2 T-3-N, R-19-E									
County Racine		<table border="1"> <tr> <th>Right of Way Acquisition</th> <th>Acres</th> </tr> <tr> <td>Fee</td> <td>4.84</td> </tr> <tr> <td>TLE</td> <td>6.96</td> </tr> <tr> <td>PLE</td> <td>0.00</td> </tr> </table>	Right of Way Acquisition	Acres	Fee	4.84	TLE	6.96	PLE	0.00
Right of Way Acquisition	Acres									
Fee	4.84									
TLE	6.96									
PLE	0.00									
Bridge Number(s) (if applicable) B-51-150 (proposed)	Scheduled start date – m/d/yyyy (Operational Planning Meeting (OPM) or Scoping Meeting) Meeting (OPM) October 4, 2011									

Functional Classification of Existing Route (FDM 3-5-2)	Urban	Rural	WisDOT Project Classification (FDM 3-5-2)	
Freeway/Expressway	<input type="checkbox"/>	<input type="checkbox"/>	Resurfacing	<input type="checkbox"/>
Principal Arterial	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pavement Replacement	<input type="checkbox"/>
Minor Arterial	<input type="checkbox"/>	<input type="checkbox"/>	Reconditioning	<input type="checkbox"/>
Major Collector	<input type="checkbox"/>	<input type="checkbox"/>	Expansion	<input type="checkbox"/>
Minor Collector	<input type="checkbox"/>	<input type="checkbox"/>	Bridge Rehabilitation	<input type="checkbox"/>
Collector	<input type="checkbox"/>	<input type="checkbox"/>	Bridge Replacement	<input type="checkbox"/>
Local	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>
			Preventive Maintenance	<input type="checkbox"/>
			Safety	<input type="checkbox"/>
			Other – Describe:	<input type="checkbox"/>

- FHWA Draft Categorical Exclusion (CE), Draft Type 2c/WisDOT Draft Environmental Report (ER). No significant impacts indicated by initial assessment.
- FHWA Final Categorical Exclusion (CE), Type 2c/WisDOT Final Environmental Report (ER). No significant impacts will occur.
- FHWA Environmental Assessment (EA), Type 3/WisDOT Environmental Assessment (EA). No significant impacts indicated by initial assessment.

R.A. Smith National Inc. 3/2/2015 Env. Coord.
(Signature – Company/Organization) (Date – m/d/yy) (Title)

WisDOT 3/2/2015 Project Manager
(Signature – Company/Organization) (Date – m/d/yy) (Title)

Region Aeronautics Rails & Harbors

(Signature – Director, Bureau of Technical Services) (Date – m/d/yy)

Daniel L. Holt 6/9/15 *Projects Team Leader*
(Signature) (Date – m/d/yy) (Title)

FHWA FAA FTA FRA

After reviewing and addressing substantive public comments, updating the Environmental Assessment (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 Categorical Exclusion / Final Environmental Report.
- Will NOT significantly affect the quality of the human environment. This document is a Finding of No Significant Impact (FONSI).
- Has potential to significantly affect the quality of the human environment. Draft Environmental Impact Statement (EIS) required.

PREPARER

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

(Signature – Company/Organization) (Date – m/d/yy) (Title) (Signature) (Date – m/d/yy) (Title)

Region Aeronautics Rails & Harbors FHWA FAA FTA FRA

BASIC SHEET 2 – PURPOSE AND NEED

1. Purpose and Need

Purpose of the Project

The purpose of the proposed action is to address poor pavement condition, traffic demand and capacity, safety, drainage, and to provide for adequate bicycle and pedestrian facilities. The WIS 20/83 project is approximately 1.9 miles in length and extends from just west of Buena Park Road along West Main Street to South First Street, and then turns south onto South First Street and then onto Beck Drive, and ends just north of WIS 36 in Racine County (see Exhibits 1 and 2). The Village of Waterford has requested the inclusion of East Main Street between South Second Street and Milwaukee Street as non-participating (100% of the design and construction cost funded by the Village of Waterford).

Need for the Project

The need for proposed improvements is demonstrated through a combination of factors that include regional/local transportation and land use planning, system linkage and route importance, existing highway deficiencies, traffic demand, safety concerns, and environmental aspects.

Transportation and Land Use Planning

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) prepares land use and transportation plans for a seven-county region including Racine County. This planning is conducted under the guidance of various technical and advisory committees consisting of representatives from state and federal agencies, universities, municipal and county planning, transportation, and public works departments, transit groups, private utilities, and environmental organizations. Public input is obtained through newsletters, public involvement meetings and hearings, and publication and distribution of various informational materials.

The Recommended Jurisdictional Highway System Plan for Racine County: 2035 from the adopted 2035 Regional Transportation Plan (*A Regional Transportation System Plan for Southeastern Wisconsin: 2035, SEWRPC Report #49*; and *Review and Update of the Year 2035 Regional Transportation Plan, SEWRPC Report #215*) and the *Amendment to the Racine County Jurisdictional Highway System Plan-2000, SEWRPC Planning Report #22* indicates expanding WIS 20/83 from 2 travel lanes to 4 travel lanes (2 travel lanes in each direction) between Buena Park Road and South First Street.

At the local level, in 2009 the Villages of Waterford and Rochester and Town of Waterford adopted *A Multi-Jurisdictional Plan for Racine County: 2035, SEWRPC Community Assistance Planning Report #301* as its comprehensive plan. The scope of the document includes profiles of the demographic, economic and housing characteristics of Racine County including the Village of Waterford, the Town of Waterford, and the Village of Rochester, an inventory and assessment of the environment, community facilities and natural resources, visions, goals, objectives, policies and implementation strategies, and a series of maps that depict existing and future land use patterns in the municipalities adjacent to the WIS 20/83 project corridor.

The Village of Waterford Zoning Map (2011) and the Comprehensive Plan (2000) indicate existing land use is primarily a mix of urban and suburban residential, commercial, and institutional uses with some agricultural use in the Town of Waterford. The Comprehensive Plan indicates future land use in 2035 along the project corridor is projected to be largely the same as existing consisting of urban and suburban residential, commercial, and institutional uses.

Preliminary engineering for and construction of the proposed WIS 20/83 highway project is included in the 2013-2016 Transportation Improvement Program (TIP) for Southeastern Wisconsin under TIP #422: Reconstruction of Main Street/South First Street (WIS 20) from Northwest Highway (WIS 83) to Milwaukee Avenue (WIS 36) in the Village of Waterford 2.1 Miles), Project Type: Highway System Preservation. The purpose of the Transportation Improvement Program for Southeastern Wisconsin is to identify transportation improvements recommended for advancement during the 2013-2016 time frame, provide for a staging of improvements over the period 2013-2016 consistent with the regional transportation system plan, include estimates of costs and revenues for the period 2013-2016, and relate the improvements recommended in the program to the adopted 2035 Regional Transportation Plan.

System Linkage and Route Importance

WIS 20/83 is part of the National Highway System (NHS) as designated under the National Highway System Designation Act of 1995. The NHS includes the Interstate Highway System as well as other roads, such as WIS 20/83, important to the economy, defense, and mobility. The NHS was developed by the United States Department of Transportation (DOT) in cooperation with the states, local officials, and metropolitan planning organizations (MPOs).

WIS 20/83 is an east-west highway, functionally classified as a principal arterial. Principal arterial highways are intended to serve moderate length through trips, higher density traffic, movements between regional economic centers, and to provide access to adjacent development while maintaining a high level of through traffic mobility. WIS 20/83 provides a link to IH 43 and IH 94 and connects the rural areas of LaGrange and East Troy in Walworth County, Waterford and Mount Pleasant in Racine County and the City of Racine. WIS 20/83 serves as the backbone for north-south highways and roadways that collect and distribute traffic in eastern Walworth County and throughout Racine County.

Existing Highway Characteristics and Deficiencies

Existing highway characteristics were reviewed and analyzed for compliance with the Wisconsin Department of Transportation (WisDOT) Facilities Development Manual (FDM). The FDM provides policy, procedural requirements, and guidance encompassing the facilities development process within the WisDOT Division of Transportation Systems Development (DTSD). The FDM is applicable to all types of highway improvements on the state trunk highway system, other street/highway systems for which federal-aid highway funds may be utilized, state facilities road systems funded with state funds administered by the department, and other highways and roads for which the department may act as an administrative agent. Adherence to the requirements contained in the FDM will provide for the uniform development of highway systems and plans that reflect sound engineering practice and sensitive environmental concern.

Pavement Condition and Typical Sections

The roadway from Buena Park Road to Rivermoor Drive consists of a rural two-lane facility with 12-foot travel lanes and variable width asphalt and gravel shoulders. The existing pavement structure in this segment of WIS 20/83 consists of 5 to 7 inches of asphalt over 7 inches of concrete pavement on aggregate base course. The concrete pavement within this section was originally constructed in 1928, resurfaced in 1956, and widened and resurfaced in 1971. The existing pavement is in poor condition, with rutting, alligator cracking, transverse cracking, longitudinal cracking, and deteriorated patching. See Exhibit 3 – Existing Typical Sections.

The roadway from Rivermoor Drive to Jefferson Street consists of an urban two-lane facility with 12-foot travel lanes and variable width parking or auxiliary lanes. The existing pavement structure in this segment of WIS 20/83 consists of 3 to 8 inches of asphalt over 4 to 7 inches of concrete pavement on aggregate base course. The concrete pavement within this section was originally constructed in 1928, resurfaced in 1956, and widened and resurfaced in 1971. The existing pavement is in poor condition, with transverse cracking, longitudinal cracking, and deteriorated patching. See Exhibit 3 – Existing Typical Sections.

The roadway from Jefferson Street to South First Street consists of an urban two-lane facility with 12-foot travel lanes and variable width parking lanes. The existing pavement structure in this segment consists of 2.5 to 3.5 inches of asphalt over 6 to 8 inches of concrete pavement on aggregate base course. The concrete pavement within this section was originally constructed in 1928, resurfaced in 1956, and widened and resurfaced in 1971. The existing pavement is in poor condition, with transverse cracking, longitudinal cracking, and deteriorated patching. See Exhibit 3 – Existing Typical Sections.

WIS 20/83 from East Main Street to River Road and East Main Street from South First Street to Milwaukee Street consists of an urban two-lane facility with 12-foot travel lanes and 12-foot parking lanes. The existing pavement structure in these segments consists of 9 inches of concrete pavement on 6 inches of aggregate base course. This section of WIS 20/83 was reconstructed in 1961. The existing pavement is in poor condition, with transverse and longitudinal cracking that are deteriorated, and joints that have deteriorated as well. See Exhibit 3 – Existing Typical Sections.

The roadway from River Road to WIS 36 consists of an urban two-lane facility with 12-foot travel lanes and 4-foot shoulders with curb and gutter. The existing pavement structure in this segment of WIS 20/83 consists of 8 inches of concrete pavement on 4 inches of open graded base course on 6 inches of aggregate base course. This section of WIS 20/83 was reconstructed in 1993. The existing pavement is in poor condition, with transverse and longitudinal cracking that are deteriorated, and joints that have deteriorated as well. See Exhibit 3 – Existing Typical Sections.

The Pavement Condition Index (PCI) is 40 from WIS 83 to South First Street and 43 from East Main Street to WIS 36. PCI is defined as the visible sign of pavement deterioration and ranges from 0 (worst) to 100 (best). At a PCI threshold of 75, an improvement should be considered and at a threshold of 60, an improvement must be considered, therefore, the existing pavement requires replacement using this measure. Given that much of this section of WIS 20/83 was originally constructed prior to 1965 and the poor condition of the existing pavement, the existing asphalt overlay and concrete pavement have exceeded their design life, and consequently, the WIS 20/83 pavement structure requires replacement.

Shoulder Width

The existing shoulders of WIS 20/83 within the rural portion of the project are 0 to 6 feet wide (0 to 3 feet paved). Ten-foot wide shoulders (5-foot width paved for bicycle accommodation) are desirable, with an 8-foot wide minimum shoulder width (5-foot paved for bicycle accommodation).

Vertical Curves

The following vertical curves along WIS 20/83 within the project limits are outside of desirable design criteria for the design speed. The substandard curves listed below create a stopping sight distance deficiency that could become a safety concern as traffic volumes along the corridor increase.

Begin STA	End STA	Location	Type	Existing Stopping Sight Distance	Desirable Stopping Sight Distance*
340+35	340+85	At Rivermoor Dr.	Crest	145 ft.	200 ft.
341+05	341+65	East of Rivermoor Dr.	Crest	145 ft.	200 ft.
357+45	358+45	At Jefferson St.	Crest	126 ft.	200 ft.

*Design Speed = 30 mph

The beginning of a horizontal curve for eastbound traffic is located near the crest of the substandard crest vertical curve from STA 341+05 to STA 341+65. This combination of a substandard vertical curve and horizontal curve may make it difficult for a driver to recognize the beginning of the horizontal curve. The intersections of Rivermoor Drive and Racine Street also fall within this section of WIS 20/83. Drivers turning onto WIS 20/83 from these side streets may have difficulty in determining appropriate gaps due to the substandard geometrics.

WIS 20/83 Bridge over the Fox River

WIS 20/83 travels over the Fox River on existing bridge B-51-444 within the project limits. This structure is a 3-span pre-stressed concrete deck girder bridge originally constructed in 1939. The bridge was redecked and widened in 1986. The most recent bridge inspection completed in 2012 noted that following National Bridge Inventory (NBI) ratings:

- Deck: 6, satisfactory, structural elements show minor deterioration
- Superstructure: 7, good condition, some minor problems
- Substructure: 5, fair condition, all primary structural elements are sound but may have minor corrosion, cracking or chipping

The clear roadway width of the existing structure is 48-feet, which carries 3 travel lanes; 2 in the eastbound direction and 1 in the westbound direction. Any widening of the roadway would require replacement of the bridge, since this 48-foot width would not meet current design standards while providing bicycle accommodations.

Traffic Demand and Capacity

Existing and future traffic (Design Year 2038) is summarized in the table below. Annual Average Daily Traffic (AADT) reflects average travel conditions during the year rather than daily or seasonal fluctuations. Existing traffic volumes were derived from WisDOT's year 2011 manual count data.

Existing traffic in the WIS 20/83 corridor ranges from 7,000 to 13,900 vehicles per day (vpd) and is expected to reach a range of 9,000 to 18,100 vpd in Design Year 2038. Approximately 14.2% of the total AADT is truck traffic.

WIS 20/83 Traffic Summary

Roadway Section	Existing Traffic 2011 AADT	Future Traffic Design Year 2038 AADT	Percent Increase (2011 – 2038)
Buena Park Road to Jefferson Street	10,400	13,800	33%
Jefferson Street to South First Street	13,900	18,100	30%
East Main Street to River Road	6,800	9,000	32%
River Road to WIS 36	7,000	9,300	33%

The future design year (2038) traffic volumes as shown above for the WIS 20/83 segments from Buena Park Road to Jefferson Street (13,800 AADT) and from Jefferson Street to South First Street (18,100 AADT) exceed the capacity threshold for a 2 lane urban roadway. The WisDOT Facilities Development Manual (FDM) defines the design year ADT threshold for an urban roadway as falling between 6,500 AADT (worst case scenario) and 20,000 AADT (best case scenario). The AADT threshold for these segments of WIS 20/83 falls closer to the worst case scenario (6,500 AADT) based on the following conditions:

- WIS 20/83 truck percentage is 14.2% - the FDM defines the worst case scenario as 6% trucks or greater
- One travel lane in each direction. Vehicles turning right and left off of WIS 20/83 impede the fluid progression of through traffic since there is no safe way around them as they slow down or stop to make the turn.
- Left turn bays are provided at the Buena Park intersection and at the westbound approach to the Jefferson Street intersection, but they are not provided anywhere else within these segments. The lack of left turn bays does not allow for left turning vehicles to leave the through traffic lane if they must stop for oncoming traffic. Through traffic is delayed by waiting for the left turning vehicle to clear the through lane.
- The FDM AADT thresholds are based on uninterrupted facilities, whereas these WIS 20/83 segments are interrupted with traffic signals. Traffic signal operation adversely affects the capacity of a roadway by stopping through vehicles to wait for crossing traffic and turning vehicles.
- Residential and commercial driveways are scattered throughout these segments. Access points like driveways generate turning movements off of and onto the roadway which can slow and potentially stop the through movement of traffic.
- There are 10 intersections within these segments, 3 of which are signalized and 7 are stop controlled on the minor approach only. Vehicles slowing down to turn at these intersections impede the free flow of through vehicles behind them until they have cleared from the roadway.
- Three T-intersections have poor intersection angles and difficult sight lines. This makes turning off of WIS 20/83 more difficult. More time is needed for vehicles to make these turning movements safely, creating slower conditions along the segment. It is also difficult to turn onto WIS 20/83 from side streets.
- Three vertical curves (as shown above) within these segments are deficient and do not meet sight distance requirements. Reduced sight distance may cause drivers to slow down to a more comfortable speed for the condition. Vehicles turning onto WIS 20/83 may also inadvertently pull out in front of oncoming traffic causing through traffic to slow down.

Level of Service (LOS) is a quantitative measure that refers to the overall quality of traffic flow ranging from very good, represented by LOS A, to very poor, represented by LOS F. For state trunk highways, such as WIS 20/83, on the National Highway System within rural and small urban areas, LOS C is considered the acceptable level of service by roadway section.

WIS 20/83 Level of Service by Roadway Section

Roadway Section	Existing LOS	Design Year No-Build LOS
Buena Park Road to Jefferson Street	C	D
Jefferson Street to South First Street	D	E
East Main Street to River Road	C	C
River Road to WIS 36	C	C

A traffic study was completed to determine improvements required to provide acceptable intersection operations and safe travel. The study evaluated safety along the entire corridor and analyzed traffic operations at the Buena Park Road, Rivermoor Road, Jefferson Street, and East Main Street/South First Street intersections with WIS 20/83.

The weekday morning and evening peak hour existing traffic conditions were analyzed using the procedures set forth in the 2010 Highway Capacity Manual (HCM) to evaluate the existing traffic operations based LOS.

Existing traffic volumes and geometrics were used to evaluate the study intersections during the weekday morning and evening peak hours.

Year 2038 traffic volumes were analyzed using the existing geometrics and existing/planned traffic control. Traffic signal control was assumed for WIS 20/83 intersection with East Main Street/South First Street (signals installed late in 2014). The weekday peak hour operational analysis results are shown below.

**Year 2038 – No Build
Weekday Peak Hour Operating Conditions**

WIS 20/83 Intersection	Traffic Control	Peak Hour	Level of Service per Movement by Approach												Level of Service by Intersection
			Northbound			Southbound			Eastbound			Westbound			
			L	T	R	L	T	R	L	T	R	L	T	R	
Buena Park Road	Traffic Signal	AM	C	B	B	C	B	B	B	B	B	C	B	B	B
		PM	B	B	B	B	B	B	B	A	A	B	A	A	B
Rivermoor Road	Two-Way Stop Control ¹	AM	D	D	D	F	F	F	A	(A)	A	B	(A)	A	D
		PM	C	C	C	D	D	D	A	(A)	A	A	(A)	A	C
Jefferson Street	Traffic Signal	AM	D	D	D	D	D	D	C	C	C	C	A	A	C
		PM	C	C	C	C	C	C	B	B	B	A	A	A	A
East Main Street/South First Street	Traffic Signal ^{2,3}	AM	D	(-)	C	(-)	(-)	(-)	(-)	C	A	B	B	(-)	C
		PM	D	(-)	C	(-)	(-)	(-)	(-)	D	A	B	D	(-)	D

Note: The (-) indicates movement not possible and (A) indicates a free flow movement. Intersection level of service for TWSC intersections determined based on weighted average of side street movements and mainline left-turn movements.

¹WIS 20/83 free flow

²Assumes 2014 planned traffic signal

³Operating conditions based on HCM 2000 methodology due to HCM 2010 methodology limitation analyzing signal timings with non-standard phasing.

As shown above, the Rivermoor Road and East Main Street/South First Street intersection operate unacceptably at LOS D (LOS C is desirable).

Safety

Five years (2007 to 2011) of crash data were analyzed along the study corridor. A total of 61 crashes were reported with 41 occurring at major intersections, 8 occurring at minor intersections, and 12 occurring at midblock locations. From a safety perspective, major intersections are characterized as those that experience a grouping of crashes that potentially constitute a crash pattern. For this safety analysis, the four study intersections of Buena Park Road, Rivermoor Road, Jefferson Street, and East Main Street/South First Street along with the River Street and Elizabeth Street intersections were considered major.

Corridor Crash Analysis

The corridor had a crash rate of 214 crashes per 100 million vehicle miles-traveled (MVMT) during the study period. This is just below the 2007 to 2011 WisDOT statewide, five-year average crash rate of 233 crashes per 100 MVMT for meta-manager Group 10 facilities (small urban state highways, excluding freeways and expressways).

Midblock and minor intersection crashes included primarily rear end (8), angle (5), and fixed object (4) crashes. The injury rate for these crashes was relatively low (3 of 20; 15%). No discernible crash patterns were identified.

Intersection Crash Analysis

All six major intersections had crash rates of less than 0.4 crashes per million entering vehicles (MEV); well below the 1.0 crashes per MEV WisDOT threshold used to indicate potential safety issues. Injury rates were generally low at less than 25% (with exception of Rivermoor Drive at 2 of 5; 40%).

Each of the major intersections experienced 10 or fewer crashes during the five year study period. The WIS 20/83 intersection with Jefferson Street experienced the highest number of crashes with 10. At this intersection, rear-end crashes were the most common (6 of 10; 60%). It is common for signalized intersections to experience a higher number of rear end collisions when compared to other intersections. No specific crash patterns were identified at any of the major intersections.

Drainage

There are existing drainage concerns throughout the project corridor. Storm sewer is undersized between Center Street and the Fox River Bridge and lacks an adequate number of catch basins.

The existing rural section between Buena Park Road and Rivermoor Road has poor drainage, lacks well defined ditches in some areas and is prone to standing water after rain events.

Pedestrian and Bicycle Accommodations

Administrative Code Trans 75, which became effective on January 1, 2011, prohibits WisDOT from funding a new construction or reconstruction project without bicycle and pedestrian accommodations unless there is an approved exception. From Buena Park Road to Rivermoor Road existing pedestrian facilities include a multi-use path located on the south side of WIS 20/83. This path is not continuous and there is no facility along part of the Waterford School District property. Bicycles within this section are accommodated on the paved shoulder of WIS 20/83; however the paved shoulder is not continuous along the entire section. From Rivermoor Road to Water Street pedestrian facilities include concrete sidewalks along both sides of WIS 20/83. Bicycles are accommodated via the parking lane on each side of WIS 20/83. From Water Street to River Road, pedestrian facilities include sidewalks on both sides of WIS 20/83. Bicycles are accommodated by a shared parking lane that is not continuous throughout this section. From River Road to WIS 36, pedestrian facilities include a sidewalk on the northeast side of WIS 20/83. Bicycles are accommodated in a wide travel lane.

2. Summary of Alternatives

No Build

This alternative would perpetuate the existing roadway without any changes to the physical dimensions of the roadway. This alternative would include stop-gap repair procedures such as patching of potholes or other severely deteriorated areas. Other than temporarily improving the spot problem locations, this alternative would not address the need to correct the identified deficiencies of the existing facility, and as such, is not recommended as the preferred alternative. While the No Build Alternative does not meet the project goals to improve pavement condition and operational deficiencies for the project, it does serve as a baseline for a comparison of impacts related to the other alternatives.

Resurface from Buena Park Road to the Fox River Bridge, Reconstruct from the Fox River Bridge to WIS 36

This alternative would consist of resurfacing WIS 20/83 from Buena Park Road to South First Street and reconstructing WIS 20/83 from East Main Street to WIS 36 as a two lane facility. The existing bridge over the Fox River would remain in place. Addition of pedestrian and bicycle accommodations where none currently exist would be included in the reconstruction section. Other than a short term solution to improving the pavement surface and adding pedestrian and bicycle facilities where none currently exist, it does not address the long term traffic demand and capacity deficiencies of WIS 20/83 between Buena Park Road and South First Street. Therefore, this alternative would not meet the purpose and need of the project and is not selected as the Preferred Alternative.

Reconstruction (Preferred Alternative)

This alternative would include reconstructing WIS 20/83 as a two through lane facility (one travel lane in each direction) with pedestrian and bicycle accommodations. From Buena Park Road to Jefferson Street this alternative would allow for one lane of through traffic in each direction separated by a continuous center two-way left turn lane (TWLTL). Between Jefferson Street and South First Street, this alternative includes one travel lane and one auxiliary/right turn lane eastbound and one travel lane westbound with parking on both sides of the street. From East Main Street to WIS 36, WIS 20/83 would be reconstructed as a two travel lane facility with parking on both sides of the roadway from East Main Street to River Road. The WIS 20/83 bridge over the Fox River would be replaced to accommodate the wider roadway that is needed for bicycle accommodations and an eastbound to southbound right turn lane. This alternative would provide a long term solution to improving the pavement surface, addresses drainage concerns, provides bicycle and pedestrian facilities along the entire corridor, and addresses intersection capacity deficiencies.

When future traffic volumes warrant and/or the Level of Service deteriorates to below "C", the section of roadway from Buena Park Road to South First Street can be converted from a two travel lane facility to a four travel lane facility by revising pavement marking and without further widening. This future scenario is discussed in more detail in the Description of Proposed Action below.

3. Description of Proposed Action

Under the preferred alternative, WIS 20/83 would be reconstructed as a two through lane facility and would include pedestrian and on-street bicycle accommodations for the project length. A multi-use path is proposed on the south side of WIS 20/83 from Buena Park Road to just west of Center Street, and sidewalks are proposed for the remainder of the project on both sides of the roadway. The WIS 20/83 bridge over the Fox River would be replaced. See Exhibit 4 –Proposed Typical Sections and Exhibit 5 – Preliminary Plan View Layouts and NEPA Limits.

The section of WIS 20/83 on West Main Street from Buena Park Road to Jefferson Street would consist of a 12-foot wide travel lane and 8-foot wide shoulder/bicycle accommodation lane in each direction, separated by a 14-foot wide two way center left turn lane. Between Jefferson Street and South First Street, the eastbound direction would be reconstructed to include one 11-foot wide travel lane, one 14-foot wide auxiliary/right turn lane and bicycle accommodation, and a 10-foot wide parking lane. The westbound direction between Jefferson Street and South First Street would consist of one 11-foot wide travel lane, a 5-foot wide bicycle lane, and a 10-foot wide parking lane.

The section of WIS 20/83 from East Main Street to River Road would consist of one 11-foot wide travel lane, a 5-foot wide bicycle lane, and an 8-foot wide parking lane in each direction. Between River Road and WIS 36, one 12-foot wide travel lane and a 4-foot wide bicycle lane would be provided in each direction. The existing WIS 20/83 bridge B-51-444 over the Fox River would be replaced with new bridge B-51-150 and would provide sufficient width to accommodate an additional future westbound travel lane including bicycle accommodations.

The section of WIS 20/83 from Rivermoor Drive to just west of Center Street would be realigned to create separation between the crest vertical curve and horizontal curve to better meet driver expectations for the alignment of WIS 20/83 and to move the horizontal curve away from the intersections of Rivermoor Drive and Racine Street so that these intersections would tie into WIS 20/83 along a tangent section of roadway.

The proposed roadway would be urban in nature with curb and gutter and storm sewer for drainage. Some limited ditching behind the proposed sidewalks would be required to accommodate offsite drainage from surrounding areas.

The Village of Waterford also requested to have the section of East Main Street (Local Street) from Second Street to Milwaukee Street reconstructed as part of this project as the existing pavement is in poor condition. Reconstruction of this section of East Main Street would be funded 100% by the Village of Waterford. East Main Street would be reconstructed with one 11-foot wide travel lane, a 5-foot wide bicycle lane, and an 8-foot wide parking lane in each direction. Sidewalks would be replaced in this section as well. Environmental impacts for the reconstruction of East Main Street were reviewed concurrently with the WIS 20/83 project and are included in this document.

Speed limits would remain the same under this project. A speed study was requested by a Waterford resident for WIS 20/83 just east of Buena Park Road in the vicinity of the elementary and middle schools to determine if there is a need to reduce the posted speed from 35 to 25 mph. The speed study concluded that the existing speed limit of 35 mph should remain.

Right of way acquisition would be anticipated throughout the WIS 20/83 project corridor to accommodate the intersection and geometric improvements that would address traffic demand and capacity issues; and for the expansion of bicycle and pedestrian accommodations.

Through traffic would be detoured via County W (Buena Park Road) to County D to WIS 20/83 south of the Village of Waterford through the Village of Rochester. Construction of WIS 20/83 would be staged from Jefferson Street to Milwaukee Street, including the WIS 20/83 bridge over the Fox River, to maintain traffic access to the designated downtown Waterford business district. See Exhibit 6– Detour Route.

Future Expansion Accommodation: Buena Park Road to South First Street

Because the traffic study indicated that a four-lane facility would most likely not be needed until the latter half of the 20-year design period (between the years 2028 and 2033) for the segment of roadway between Buena Park Road and South First Street, the Village of Waterford requested that WisDOT consider providing two travel lanes until traffic volumes warrant in order to preserve parking in the downtown area (westbound from Jefferson Street to South First Street), promote a more pedestrian-friendly environment and to provide designated bicycle lanes from Buena Park Road to downtown (South First Street). The preferred alternative can be converted to four travel lanes by revising pavement marking and without further widening when future traffic volumes and/or Level of Service warrant.

The future roadway configuration that could accommodate expansion within the preferred alternative pavement width would consist of one 12-foot wide travel lane and one 15-foot wide travel lane/bicycle accommodation in each

direction from Buena Park Road to Jefferson Street. From Jefferson Street to South First Street sufficient pavement width is proposed under the preferred alternative to accommodate one 11-foot wide travel lane and one 14-foot wide travel lane/bicycle accommodation for westbound traffic. The lane configurations for eastbound traffic would remain the same and consist of one 11-foot wide travel lane, one 14-foot wide auxiliary/right turn lane and bicycle accommodation, and a 10-foot wide parking lane.

Additional analysis was conducted to assess the feasibility of fewer travel lanes to achieve the Village's goals while still providing a long term solution to operational issues on WIS 20/83. The ability to reduce travel lanes is controlled by queues along WIS 20/83 at both Jefferson Street and the Evergreen Elementary School/Fox Middle School driveway.

The Jefferson Street intersection requires two eastbound and two westbound through lanes to accommodate the Design Year 2038 traffic volumes. Providing fewer travel lanes would result in westbound traffic backing up into the cross walk at the River Street intersection in the Year 2038, which has heavy pedestrian crossing volumes. In the construction year (2018) and for 10 to 15 years thereafter, the Jefferson Street intersection can operate acceptably with a single westbound travel lane without operational or queue issues. Two eastbound travel lanes are recommended at all times at the Jefferson Street intersection, which would be implemented with the preferred alternative in the construction year.

Allowing the single westbound travel lane in the downtown area is feasible as an interim condition, which would allow the future westbound outside travel lane to be used for parking. The queues at the Jefferson Street intersection should be monitored regularly to ensure safe and efficient operations. When the westbound queues reach or approach the River Street crosswalk, or if safety problems occur, the future four-lane design should be implemented. Parking would be removed along the north side of WIS 20/83 between Jefferson Street and South First Street when the second westbound travel lane is needed. In addition, the Village of Waterford recognizes the need for enhanced parking in their downtown area and is currently studying the expansion of off-street parking.

The remaining intersections within the section from Buena Park Road to Jefferson Street (not including the Jefferson Street intersection) are all expected to operate with acceptable delays until 10-15 years after construction in 2018 with single eastbound and westbound travel lanes during the peak hours of 6:45 to 7:45 am and 3:30 to 4:30 pm. However, the existing queues for the eastbound right-turn and westbound left-turn movements at the Evergreen School and Fox River School shared driveway (entering the site) are currently long, and they are expected to remain long in the design year. The westbound left-turn queues are expected to extend within 25 feet of Rivermoor Road. The three-lane TWLTL under the preferred alternative from Buena Park Road to Jefferson Street would provide the ability to store the left-turn queue of vehicles. Removing left turning vehicles from the travel lane may also reduce crashes at intersections in this section.

The level of service in the Buena Park to Jefferson Street section of WIS 20/83 is expected to operate at C or better under the three-lane TWLTL preferred alternative until 10 to 15 years after construction. Operations and safety within this segment would need to be monitored to determine when the ultimate four lane design should be implemented.

In summary, a single westbound travel lane throughout the project is expected to accommodate traffic for 10 to 15 years beyond construction. Two eastbound travel lanes between Jefferson Street and East Main Street/South First Street are required to accommodate construction year traffic and beyond. A single westbound travel lane is provided downtown, and a three-lane TWLTL is recommended for the western section of the project to accommodate queues at school driveways and intersections until the ultimate 4-lane configuration is necessary. See Exhibit 5 – Preliminary Plan View Layouts and NEPA limits.

4. Construction and Operational Energy Requirements

Energy consumption related to roadway construction includes energy required by raw materials and equipment to build and maintain the roadway. Operational energy is the direct consumption of fuel by vehicles using the roadway. Fuel usage is affected by vehicle type, roadway grade, speed, and congestion. The no-build alternative requires no construction energy except for periodic roadway maintenance, which would become more frequent in the future. Operation energy would remain high. Because the preferred alternative requires construction activity, more construction energy is used for excavation, filling, hauling, and pavement construction and material manufacturing than the no-build alternative. However, the operation energy required would decrease over time. The initial construction energy costs for the preferred alternative would be recovered over time due to long-term savings in operational energy costs and reduced future maintenance energy costs.

5. Land Use

The land adjacent to the project corridor is primarily a mix of residential, commercial and institutional uses. Commercial development includes restaurants, gas stations, small retail stores, and small, service based businesses. Two churches, four schools, two parks, a library, and a cemetery are also located adjacent to the corridor. Very limited open space and wetland areas are located adjacent to the project. See Exhibit 7 - Town of Waterford, Village of Waterford, and Village of Rochester Land Use Plans.

6. Planning and Zoning

The proposed action is in conformity with the current and future land use plans for the Village of Waterford and Town of Rochester in Racine County. The proposed WIS 20/83 project is in conformity with the Southeastern Wisconsin Regional Planning Commission's (SEWRPC's) Regional Transportation Plan for Southeastern Wisconsin: 2035. The proposed action is identified as No. 422 (Reconstruction of Main Street/South First Street (WIS 20) from Northwest Highway (WIS 83) to Milwaukee Avenue (WIS 36) in the Village of Waterford 2.1 Miles) of SEWRPC's 2013-2016 Transportation Improvement Plan. The proposed action has no effect on the expected type of development or land use in the immediate area. It does not prohibit or promote one type of land use over another.

7. Environmental Justice

How was information obtained about the presence of populations covered by EO 12898? <i>(check all that apply)</i>	
<input checked="" type="checkbox"/> Windshield Survey	<input type="checkbox"/> Official Plan
<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"/> Human Resources Agency Identify agency: Identify plan, approval authority and date of approval:	
<input type="checkbox"/> Other – Identify:	

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

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

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

Indicate whether or not individuals covered by Title VI have been identified. Title VI prohibits discrimination on the basis of race, color, or country of origin.

- a. No – Individuals covered by the above laws were not identified.
- b. Yes – Individuals covered by the above laws were identified.
 - Civil Rights issues were not identified.
 - Civil Rights issues were identified. Explain:

9. 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
3/27/2013	WisDOT	PIM	Waterford Public Library	60
8/26/2013	WisDOT	PIM	Waterford Public Library	45
8/19/2014	WisDOT	PIM	Waterford Public Library	56

B. Other methods:

Notifications for the public involvement meeting were included in the Absolutely Waterford newsletter.

Project involvement is available on the WisDOT website at:

<http://wisconsindot.gov/Pages/projects/by-region/se/wis2083/default.aspx>

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

Absolutely Waterford, a designated Wisconsin Main Street Program focusing on Waterford's downtown Heritage District, participated in the public involvement process. Concerns about the project brought forth by Absolutely Waterford are noted and addressed under item 10b below.

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

One additional public involvement meeting is planned to be held just prior to construction. The purpose of the final public involvement meeting will be to inform the public of the proposed staging concepts and property access strategies for construction.

BASIC SHEET 2 – PURPOSE AND NEED (continued)

10. Briefly summarize the results of public involvement.

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

Several key issues were raised by attendees at the public involvement meetings:

- Several people inquired if bicycle facilities would be included. They were told that there would be either designated bicycle lanes or shared parking/bicycle facilities depending on location within the project corridor.
- Several attendees wanted to know if sidewalks would be extended where none currently exist. They were informed that sidewalk would be added so that there is continuous sidewalk on each side of WIS 20/83 throughout the project corridor.
- Many people were concerned about loss of on-street parking in the downtown business district. They were told that there would be some loss of parking due to the addition of right-turn/auxiliary lanes at intersections and bump-outs; however, WisDOT has listened to their concerns and has addressed them to some extent by revising the preferred alternative to delay the capacity expansion until future traffic volumes and/or Level of Service warrant. The preferred alternative maximizes parking where feasible.
- Many attendees were curious about right of way impacts at their properties. Where impacts were known, they were explained to the attendees.
- Several people expressed concern about being able to turn onto WIS 20/83 from Rivermoor Drive. It was explained that by expanding to a 3 lane facility (2 travel lanes with a center two-way left turn lane), additional refuge would be provided between the two directions of travel that would allow for a safer two stage merge movement.
- Several attendees were concerned about pedestrian safety while crossing WIS 20/83. They were told that the design would include features to enhance pedestrian safety such as bump-outs at corners to shorten crossings, as well as flashing beacons at select crosswalk locations.
- Several attendees expressed concern about loss of business during construction. Traffic in the downtown business district would be staged during construction to maintain one lane in each direction to minimize impacts to adjacent businesses.
- Several attendees expressed concern about closing the bridge during construction. Staging options are under consideration for the bridge and it is likely that traffic would be maintained on the existing bridge during construction.
- Representatives of Absolutely Waterford expressed concern about several annual events that occur during the construction season. Project construction documents will include language regarding these events to minimize disruption.
- Attendees at the third public involvement meeting were generally receptive to the revised preferred alternative measures introduced at this meeting that include the three lane/TWLTL concept associated with the previously presented expansion alternative as well as the roadway realignment between Rivermoor Drive and Center Street. The three lane/TWLTL facility would provide additional parking downtown and bicycle accommodations from Buena Park Drive to Jefferson Street.

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

See responses included in discussion above.

11. 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, etc.)	Coordination Correspondence Attached	Coordination Initiation Date (m/d/yyyy)	Coordination Completion Date (m/d/yyyy)	Comments
Village of Waterford	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6/8/2011	Ongoing	See below.
Town of Waterford	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10/4/2011	Ongoing	See below.
Village of Rochester	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10/4/2011	Ongoing	See below.

Local officials meetings were held with the Village of Waterford, Town of Waterford, and Village of Rochester on March 12, 2013, August 6, 2013, and August 5, 2014. The project team attended an additional 13 meetings with the Village of Waterford’s Planning Commission and/or Village Board to discuss the project concepts and to develop context sensitive design solutions.

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

The Village of Waterford had the following concerns:

- *Will parking be lost on the East Main Street section?* - It was explained that some parking would be lost along the north side of East Main Street between South First Street and Second Street to accommodate a longer westbound left turn lane.
- The Village of Waterford Plan Commission expressed concern over the weaving maneuver that eastbound bicyclists are required to make with right turning vehicles at the East Main Street intersection with South First Street. They stated that this seems like a dangerous situation and asked if a special traffic signal design could be developed to eliminate this situation. – In response to the Village’s concern, the design has been updated to eliminate the potential weaving conflict by providing a shared travel and bicycle accommodation lane, which would allow bicyclists to travel in the through lane.
- *Can the sidewalk across the bridge be wider than 6-feet? This seems narrow if people walking in opposing directions pass each other.* – Because of the proximity of the buildings on the north side of East Main Street, the bridge can only be widened to the south. However, an 8-foot wide sidewalk would be provided on the south side of the bridge. A standard 6-foot wide sidewalk would be provided on the north side of the bridge. An even wider bridge would require fee acquisitions from River Bend Park in the southwest quadrant, which is a 6(f) property.
- *Who is responsible for paying for street lighting?* – It was stated that WisDOT would pay for standard, non-decorative street lighting. Any additional costs for decorative lighting (over and above the standard lighting costs) would be paid for by the Village (CSS eligible).
- *Will the Jefferson Street intersection be replaced as is or will improvements be made? The existing intersection does not seem to be accommodating to pedestrians.* – It was explained that the intersection would be improved; however, bump-outs are not an option at this location since there is no parking along this section of the project.
- *Can the location of the proposed traffic signal cabinet at the southwest quadrant of East Main Street and First Street be moved to the northeast side of the intersection to avoid the planned village park improvements?* In response to this question the requested location was reviewed. The response provided to the Village of Waterford noted that this cabinet location was not feasible because adjacent buildings would obstruct sight lines from the cabinet to the west approach to the intersection. Technical staff responsible for maintaining the signals and law enforcement need full sight lines down each leg of the intersection, especially when under manual signal control for special events and emergency situations.
- The Village of Waterford has requested that any construction operations between 10:00 p.m. and 6:00 a.m. be authorized by the Village Board. The WisDOT construction engineer will assure fulfillment of these measures during construction.

The Town of Waterford and the Village of Rochester had the following concerns:

- *Are sidewalks required?* It was explained that sidewalks are required under Trans75 unless an exception is sought and approved. The criteria for an exception is not met for this project.
- *Is lighting required?* It was explained that it is not required, and a local cost share would apply if lighting was requested. The Town of Waterford indicated that it would request lighting to be consistent with the Village of Waterford. The Village of Rochester indicated that they would not participate in lighting.

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

See responses included in discussion above.

D. Indicate any unresolved issues or ongoing discussions:

None

12. Public Hearing Requirement

- This document is an Environmental Assessment.
 - A Notice of Opportunity to Request a Public Hearing will be published.
 - A Public Hearing will be held.
- This document is a Type 2c Categorical Exclusion / Environmental Report.
 - A Public Hearing is NOT Required.

Note: If any of the following five boxes are checked, a Notice of Opportunity to Request a Public Hearing must be published or a Public Hearing must be held.

- A substantial amount of right-of-way **will** be acquired.
 - 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 significant social, economic, environmental effects.
 - The department has made a determination that a public hearing is in the public interest.
- A Notice of Opportunity to Request a Public Hearing will be published.
 - 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.

BASIC SHEET 3 – AGENCY AND TRIBAL COORDINATION

Agency	Coordination Required?	Correspondence Attached?	Comments
WisDOT			
Regional Real Estate Section	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Coordination is ongoing. Project effects and relocation assistance have been addressed. See the Conceptual Stage Relocation Plan attached as Exhibit 8.
Bureau of Aeronautics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Coordination is required. Project is located within 2 miles (3.22 km) of the Fox River Airport. See Exhibit 9 – Bureau of Aeronautics Correspondence.
Railroads and Harbors Section	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Coordination is not required because no railways or harbors are in or planned in the project area.
STATE AGENCY			
Natural Resources (DNR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached initial review letter dated July 31, 2014 and subsequent follow up email from the DNR on February 12, 2015 (Exhibit 10).
State Historic Preservation Office (SHPO)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The Section 106 Review form was submitted to WisDOT's Environmental Services Section on March 25, 2014 and was approved by SHPO on September 30, 2014, See Exhibit 11.
Agriculture (DATCP)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	An initial coordination letter was sent to DATCP on October 30, 2012. DATCP responded on August 5, 2014 indicating that an Agricultural Impact Statement will not be prepared for this project. See Exhibit 12, DATCP Correspondence.
Other	<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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Coordination is ongoing and a permit application for wetland filling will be completed in consultation with WisDOT and the DNR.
U.S. Fish and Wildlife Service (USFWS)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Coordination is not required because no Federally listed threatened or endangered species are anticipated to be encountered in the project corridor.
Natural Resources Conservation Service (NRCS)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The Farmland Conversion Impact Rating (Form AD-1006) for WIS 20/83 is below 60 total points in Part VI. Per FDM 5-5-5 no coordination with the NRCS is required.
U.S. National Park Service (NPS)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Coordination is not required because the project does not adversely impact Section 4(f) or 6(f) lands.
U.S. Coast Guard (USCG)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Coordination is not required because the project does not impact coastal or Great Lakes waters.
U.S. Environmental Protection Agency (EPA)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Coordination is not required due to the relatively simple nature of the project and there are no impacts to sensitive environmental resources.
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 is not required because the project does not adversely impact any historic resources.
Other (identify)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

SOVEREIGN NATIONS

American Indian Tribes	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Letters were sent in May 29, 2013 to the American Indian Tribes for Racine County. One response letter was received. No issues with the proposed activities were identified. See Exhibit 13, Native American Tribes Correspondence for letters sent to tribes, and responses received from tribes, and responses to the Forest County Potawatomi.
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BASIC SHEET 4 – ENVIRONMENTAL FACTORS MATRIX (check all that apply)

Factors	Adverse	Benefit	None Identified	Factor Sheet Attached	Effects
A. ECONOMIC FACTORS					
A-1 General Economics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	While there may be temporary disruption during construction, no effects on general economics are anticipated.
A-2 Business	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The area's businesses may benefit from the proposed action as a safer facility may encourage more travel. Short-term inconveniences in access would occur during construction.
A-3 Agriculture	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Strip fee right of way acquisition would reduce amount of farming acreage.
B. SOCIAL/CULTURAL FACTORS					
B-1 Community or Residential	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Under the proposed action, WIS 20/83 would be closed to through traffic during construction with a posted detour. However, Main Street between Jefferson Street and Milwaukee Street will be staged to provide access to businesses. This would result in short-term, adverse effects to nearby residences and businesses. After construction, road users would benefit from a safer, more efficient facility. Four residences would be relocated as a result of the realignment of one horizontal curve and widening on WIS 20/83.
B-2 Indirect Effects	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Through screening analysis using WisDOT's pre-screening for indirect effects procedure and FDM guidance on indirect effects, it is concluded that the factors of the project, its location and other conditions do not warrant further detailed analysis of the potential for indirect effects. See Exhibit 14. The project will not have the likelihood to result in significant indirect effects as defined by the National Environmental Policy Act (NEPA). This conclusion was based on the evaluation of 10 pre-screening factors including project design concepts and scope; project purpose and need; project type; facility function (current and planned); project location; improved travel times to an area; local land use and planning considerations; population and demographic considerations; rate of urbanization; and public/agency concerns. Therefore, further evaluation of indirect effects in a detailed analysis is not warranted. If changes are made to the project design and alternatives, this screening will be re-examined for sufficiency.
B-3 Cumulative Effects	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This project does not have the likelihood to result in significant cumulative effects.
B-4 Environmental Justice	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Review of US Census Data and a windshield survey along the project reveals no environmental justice concerns. No concerns for environmental justice have been expressed through three Public Involvement Meetings.
<i>For B-5 through B-7, if any of these resources are present on the project, contact your REC.</i>					
B-5 Historic Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The Section 106 Review form was submitted to WisDOT's Environmental Services Section on March 25, 2014 and was approved by SHPO on September 30, 2014, See Exhibit 11. It should be noted that during the course of the Section 106 process the East Main Street Downtown Commercial Historic District was determined eligible for inclusion in the National Register of Historic Places (NRHP). However, during the ongoing Section 106 consultation, WisDOT and SHPO were notified that on 1/3/2014 a fire burned and destroyed a contributing resource within this district at 201 East Main Street. As a result of the fire, and independent of the WisDOT undertaking, the structure was subsequently razed on order of the Village of Waterford for safety reasons. Consequently, due to the complete removal of this building, the District no longer retains enough integrity to remain eligible for the NRHP.
B-6 Archaeological/Burial Sites	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No properties affected. The Section 106 Review form was submitted to

					WisDOT's Environmental Services Section on March 25, 2014 and was approved by SHPO on September 30, 2014, See Exhibit 11.
B-7 Tribal Coordination /Consultation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Letters were sent to the American Indian Tribes for Racine County on May 29, 2013. One response letter was received. No issues with the proposed activities were identified. The Forest County Potawatomi requested any archival reviews, cultural resource investigation studies, and archaeological reports for the WIS 20/83 project. These reports were forwarded on July 30, 2013. See Exhibit 13 - Native American Tribes Correspondence.
B-8 Section 4(f) and 6(f) or Other Unique Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary grading/restoration would be required at River Bend Park and Ten Club Park. No fee acquisition or permanent limited easements would be required from either park. Temporary limited easements are required at both parks. Concurrence with the temporary impacts has been provided by the Village of Waterford. See Exhibit 15.
B-9 Aesthetics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There would be temporary adverse visual effects from equipment and material stockpiles during construction. The proposed action would create an updated and clean appearance to the project corridor after construction. WisDOT is working with the Village of Waterford to implement Community Sensitive Solutions (CSS) within the Heritage District as part of this project. CSS could include aesthetic and decorative improvements such as street lighting, park benches, planters, and stamped and colored concrete to resemble brick pavers, and bridge form liner use to name a few. Selections of items to include along the project are being evaluated by the Village of Waterford.
C. NATURAL RESOURCE FACTORS					
C-1 Wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.108 acres of wetlands would be disturbed by grading for roadbed widening and storm sewer replacements.
C-2 Rivers, Streams and Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Fox River crosses the proposed project. The WIS 20/83 bridge over the Fox River would be replaced as part of this project. In-stream work to replace piers for the new bridge is anticipated. No in-stream activity work would be done in the Fox River during the spawning time for fish, which is from March 15 to June 15 in any year.
C-3 Lakes or Other Open Water	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	There are no lakes or other areas of open water located adjacent to the project corridor.
C-4 Groundwater, Wells, and Springs	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	There are no known wells or springs and no expected impacts to the groundwater.
C-5 Upland Wildlife and Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No Upland Wildlife and Habitat within project corridor.
C-6 Coastal Zones	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The project is not located along or near a Coastal or Great Lakes water.
C-7 Threatened and Endangered Species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Impacts to Threatened and Endangered Species are not anticipated.
D. PHYSICAL FACTORS					
D-1 Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	An Air Quality Analysis was not required. See Factor Sheet D-1.
D-2 Construction Stage Sound Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Village of Waterford has requested that any construction operations between 10:00 pm and 6:00 am be authorized by the Village board.
D-3 Traffic Noise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A noise analysis was performed. No impacts are anticipated. See Exhibit 16.
D-4 Hazardous Substances or Contamination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	There is the potential for nine petroleum contaminated areas to be impacted by the proposed project. Phase 2 and 2.5 Investigations are pending and will be coordinated with the WDNR. Special provisions will be included in the construction documents to ensure that contaminated materials are properly handled and disposed.
D-5 Stormwater	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Catch basins are proposed to be used throughout the project length and vegetative swales will be used where feasible reduce total suspended solids in storm water runoff.
D-6 Erosion Control and Sediment Control	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Best Management Practices" would be utilized during construction to control runoff from the site.

ENVIRONMENTAL EVALUATION OF FACILITIES DEVELOPMENT ACTIONS (continued)

DT2094

BASIC SHEET 5 – 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). Additional agency or public involvement may change these estimates in the future.

Environmental Issues/Impacts	Unit of Measure	Alternatives/Sections		
		No Action	Resurface from Buena Park Road to South First Street, Reconstruct from East Main Street to WIS 36	Reconstruction (Preferred)
Project Length	Miles	0	1.86	1.86
Construction	Million \$	0	4.9	15.63
Real Estate	Million \$	0	0.2	0.97
TOTAL	Million \$	0	5.1	16.60
Wetland Area Converted to ROW	Acres	0	0	0
Upland Habitat Area Converted to ROW	Acres	0	0	0
Other Area Converted to ROW	Acres	0	0	4.84
Total Area Converted to ROW	Acres	0	0	4.84
Number of Farms Affected	Number	0	0	1
Total Area Required From Farm Operations	Acres	0	0	0.042 (Fee) 0.110 (Easement)
AIS Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N
Farmland Rating	Score	0	0	5
Total Buildings Required	Number	0	0	4
Housing Units Required	Number	0	0	4
Commercial Units Required	Number	0	0	0
Other Buildings or Structures Required	Number & Type	0	0	0
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
Historic Properties	Number	0	1	2
Archeological Sites	Number	0	0	0
Burial Site Protection (authorization required)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input 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
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
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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Total Wetlands Filled	Acres	0	0.108	0.108
Stream Crossings	Number	0	1	1
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
Design Year Noise Sensitive Receptors				
No Impact	Number	125	125	123
Impacted	Number	0	0	2
Contaminated Sites	Number	0	10	10

BASIC SHEET 6 – TRAFFIC SUMMARY MATRIX

	ALTERNATIVES/SECTIONS				
	West of Buena Park Road	Buena Park Road to Jefferson Street	Jefferson Street to South First Street	East Main Street to River Road	River Road to WIS 36
TRAFFIC VOLUMES					
Existing ADT Yr. 2011	7,800	10,400	13,900	6,800	7,000
Const. Yr. ADT Yr. 2018	8,500	11,200	15,000	7,400	7,600
Const. Plus 10 Yr. ADT Yr. 2028	9,500	12,500	16,500	8,200	8,500
Design Yr. ADT Yr. 2038	10,500	13,800	18,100	9,000	9,300
DHV Yr. 2038	1,019	1,339	1,756	873	902
TRAFFIC FACTORS					
K [<input type="checkbox"/> 30 / <input checked="" type="checkbox"/> 100 / <input type="checkbox"/> 200] (%)	9.7%	9.7%	9.7%	9.7%	9.7%
D (%)	59/41%	59/41%	59/41%	59/41%	59/41%
Design Year T (% of ADT)	14.2%	14.2%	14.2%	14.2%	14.2%
T (% of DHV)	12.2%	12.2%	12.2%	12.2%	12.2%
Level of Service 2038 No-Build 2038 Preferred Alt.	C C	D C	E C	C C	C C
SPEEDS					
Existing Posted	40	35 (Buena Park Rd. – 1,200 ft. east of Buena Park Rd.) 25 1,200 ft. east of Buena Park Rd. to Jefferson St.)	25	25	30
Future Posted	40	35 (Buena Park Rd. – 1,200 ft. east of Buena Park Rd.) 25 1,200 ft. east of Buena Park Rd. to Jefferson St.)	25	25	30
Design Year 2038 Project Design Speed	45	40 (Buena Park Rd. – 1,200 ft. east of Buena Park Rd.) 30 1,200 ft. east of Buena Park Rd. to Jefferson St.)	30	30	35
OTHER (specify)					
P (% of ADT)	9.3%	9.1%	9.5%	9.5%	9.2%
K ₈ (% OF ADT)	N/A	N/A	N/A	N/A	N/A
Other					

ADT = Average Daily Traffic

K [_{30/100/200}] : K₃₀ = Interstate, K₁₀₀ = Rural, K₂₀₀ = Urban, % = ADT in DHV

T = Trucks

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

DHV = Design Hourly Volume

D = % DHV in predominate direction of travel

P = % ADT in peak hour

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.

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

- No
 Yes – Explain or indicate where addressed.

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 PSE submittal package.

Factor Sheet	Comments
A-1 General Economics	Access to residences and businesses for local and emergency vehicles during construction would be provided and addressed in the project special provisions. The WisDOT construction engineer will assure fulfillment of these measures during construction.
A-2 Business	Access to businesses for local and emergency vehicles during construction would be provided and addressed in the project special provisions. Main Street between Jefferson Street and Milwaukee Street will be staged to provide access to downtown businesses. The WisDOT construction engineer will assure fulfillment of these measures during construction.
A-3 Agriculture	Access would be maintained to field entrances during construction. Normal erosion control measures would be taken. The WisDOT construction engineer will assure fulfillment of these measures during construction.
B-1 Community or Residential	Access to residences and businesses for local and emergency vehicles during construction would be provided and addressed in the project special provisions. The WisDOT construction engineer will assure fulfillment of these measures during construction.
B-2 Indirect Effects	No commitments needed.
B-3 Cumulative Effects	No commitments needed.
B-4 Environmental Justice	No commitments needed.
B-5 Historic Resources	Land disturbed behind the sidewalk for grading purposes is to be restored to its original condition. This will be addressed in the project special provisions and the WisDOT construction engineer will assure fulfillment of these measures during construction.
B-6 Archaeological Sites	<p>The following language will be added to the contract special provisions: WisDOT shall ensure an archaeologist is present to monitor project-related ground-disturbing activities adjacent to the cemetery site BRA-0022 Note: An archaeologist qualified to excavate human burial sites (per Wis. Stats. 157.70 (1) (i) and Wis. Admin Code § HS 2.04 (6) (a)) will oversee the monitoring activities.</p> <p>The WisDOT PM/Construction Engineer shall take measures to ensure that cemetery site BRA-00225 is not used for borrow or waste disposal and the site area should not be used for the staging of personnel, equipment and/or supplies</p> <p>Coordinate with WisDOT Environmental Services Section (Lynn Cloud (608) 266-0099) in regards to scheduling the on-site archaeologist. A two week advance notice of any ground disturbance is preferred to ensure availability of the archaeologist.</p> <p>No ground disturbing activities should occur beyond the currently proposed project area without prior permission from the WHS in the area near cemetery site: BRA-0022, per Wis. Stat. 157.70.</p> <p>The WisDOT construction engineer will assure fulfillment of these measures during construction.</p>
B-7 Tribal Coordination/Consultation	No commitments needed.
B-8 Section 4(f) and 6(f) or Other Unique Areas	No commitments needed.
B-9 Aesthetics	Community Sensitive Solutions (CSS) commitments will be included in the final plans.
C-1 Wetlands	No commitments needed.
C-2 Rivers, Streams and Floodplains	No in-stream activity work will be done in the Fox River during the spawning time for fish, which is from March 15 to June 15 in any year. An unobstructed passageway through the Fox River bridge construction area will be maintained at all times to allow for continuous fish movements. Any bridge demolition material that enters the water will be removed. The WisDOT construction engineer will assure fulfillment of these measures during construction.
C-3 Lakes or other Open Water	No commitments needed.
C-4 Groundwater, Wells and Springs	No commitments needed.
C-5 Upland Wildlife and Habitat	No commitments needed.
C-6 Coastal Zones	No commitments needed.

C-7 Threatened and Endangered Species	Project Special Provisions would state removal of the existing Fox River Bridge would not be allowed during May 15 to August 20, the swallow's nesting season, or if removal of the Fox River Bridge would be required during this period, the existing bridge would be netted prior to May 15 to prevent nesting activities from occurring. The WisDOT construction engineer will assure fulfillment of these measures during construction.
D-1 Air Quality	No commitments needed.
D-2 Construction Stage Sound Quality	The Village of Waterford has requested that any construction operations between 10:00 p.m. and 6:00 a.m. be authorized by the Village board. The WisDOT construction engineer will assure fulfillment of these measures during construction.
D-3 Traffic Noise	No commitments needed.
D-4 Hazardous Substances or Contamination	Project Special Provisions will address any unresolved contaminated areas. All known contaminated sites will be shown on the plan and profile sheets and noted in the Special Provisions. The following language will be included in the Special Provisions "Should contamination be encountered within the right-of-way either before or during construction, you must notify the appropriate person in the DNR Solid Waste Section prior to continued operations." Commitments to be fulfilled by the WisDOT Construction Engineer.
D-5 Storm Water	No commitments needed.
D-6 Erosion Control	No commitments needed.
E-Other FAA Coordination	<p>The project is located within two miles of the Fox River Airport. See Exhibit 9 – Bureau of Aeronautics Correspondence. The use of tall construction cranes for construction of the Wis20/83 bridge over the will require advance notice to the Federal Aviation Administration (FAA) in accordance with Code of Federal Regulations (CFR), Title 14, Part 77.9 to determine if any special coordination or mitigation would be needed with the public air transportation system.</p> <p>If the contractor plans to use any cranes or construction equipment taller than 25 ft above ground level (AGL) at the bridge, WisDOT should notify the FAA of their plans at least 45 days prior to starting work using the FAA's Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) website.</p> <p>The WisDOT construction engineer will assure fulfillment of these measures during construction.</p>

Factor Sheet A-1

Alternative Reconstruction	Total Length of Center Line of Existing Roadway 1.86 miles Length of This Alternative 1.86 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	There is one farm located at the southwest corner of the Buena Park intersection with WIS 20/83 (near the west limits of project). The farm field abuts WIS 20/83 for about 100 feet.
b. Retail business	There are several retail shops and bars/restaurants located throughout the project corridor, concentrated mostly in the center of the downtown area (Jefferson Street to Elizabeth Street and on East Main Street).
c. Wholesale business	None
d. Heavy industry	None
e. Light industry	None
f. Tourism	The Village of Waterford hosts several events each year including farmer's balloon rally and outdoor concert.
g. Recreation	Rivermoor Golf Club is located north of WIS 20/83, west of Rivermoor Road. River Bend Park is located on the southwest quadrant of WIS 20/83 and the Fox River. Ten Club Park is located on the southeast quadrant of WIS 20/83 and the Fox River. Whitford Park is located on N. River Road, just southwest of WIS 20/83.
h. Forestry	There are no known managed forests in the project area.
i.	N/A

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:

The improvements to WIS 20/83 have been proposed in response to poor roadway condition, inefficient traffic operations, and safety concerns at spot locations. The improvements would provide improved access to the project area by creating more efficient and safer traffic operations. It is anticipated that economic benefits from the project would outweigh losses from initial business interruption and that long term costs associated with crashes, roadway maintenance, and traffic congestion would be reduced. Failure to implement the proposed improvements would result in deteriorated traffic conditions at intersections, increased delays along WIS 20/83, and impedance of turning movements at driveways and side streets.

It is expected that the advantages would outweigh the disadvantages due to the relatively short duration of inconveniences during one construction season. While disadvantages would be realized during construction, advantages would be realized immediately following construction and until the design year of 2038 and possibly beyond.

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: _____
 - Decrease, describe: _____

Factor Sheet A-2

Alternative Reconstruction	Total Length of Center Line of Existing Roadway: 1.86 mi. Length of This Alternative: 1.86 mi.
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 business relocations are anticipated
- No - (Explain)

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

The land use adjacent to the project corridor is primarily residential with commercial business concentrated within the downtown area, from Jefferson Street to Elizabeth Street and on East Main Street. The commercial businesses consist of retail shops and bars/restaurants.

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

The primary mode of transportation along WIS 20/83 consists of 85.8% passenger vehicles and 14.2% trucks and buses. There is no mass transit within the project corridor. Bicyclists and pedestrians utilize the WIS 20/83 project corridor. Traffic within the project corridor consists of largely residents, commuters, and people utilizing local businesses and services.

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.

WIS 20/83 would be closed to through traffic and will remain open to local businesses and residences during construction. Main Street between Jefferson Street and Milwaukee Street will be staged to provide access to downtown businesses. While there may be some temporary disruption during construction, long-term adverse effects on businesses are not anticipated. Long-term, businesses that depend on the transportation facility would have an improved roadway for access.

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.

Business owners are concerned about the disruption to traffic and difficulties for customers and deliveries to access their businesses. Access to businesses (local traffic) would be maintained during construction. Short term adverse effects would include temporary disruptions to access during construction. Long-term, the existing businesses may benefit from the proposed action through a desire of the general public to use an improved facility. Business owners are concerned about the reduction in on-street parking. The Village of Waterford acknowledges the lack of existing on-street parking and is pursuing avenues to enhance off-street parking by expanding the use of public parking lots. WisDOT has listened to business owner concerns and has addressed them to some extent by revising the preferred alternative to delay the capacity expansion until future traffic volumes and/or Level of Service warrant. The preferred alternative maximizes parking where feasible.

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

Existing employees would benefit from improved travel conditions on the reconstructed roadway. Temporary disruptions to access would also adversely affect employees of the adjacent businesses. Access to businesses would be maintained during construction.

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

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

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

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

8. Is Special Relocation Assistance Needed?

- No
 Yes – Describe special relocation needs.

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

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

Not applicable as there would be no business relocations as part of this project.

10. Describe the business relocation potential in the community:

A. Total number of available business buildings in the community. _____

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).

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

Not applicable as there would be no business relocations as part of this project.

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:

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.

Not applicable as there would be no business relocations as part of this project.

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

No businesses would be relocated by the proposed action.

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:

WIS 20/83 would be closed to through traffic with Main Street between Jefferson Street and Milwaukee Street staged to provide access to downtown businesses, but emergency access would be provided at all times and the roadway would remain open to local businesses throughout construction. Access to properties would be maintained for local traffic and emergency vehicles.

Factor Sheet A-3

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Total acquisition interest, by type of agricultural land use:

Type of Land Acquired From Farm Operations	Type of Acquisition (acres)		Total Area Acquired (acres)
	Fee Simple	Easement	
Crop land and pasture	0	0.080	0.080
Woodland	0	0	0
Land of undetermined or other use (e.g., wetlands, yards, roads, etc.)	0.042	0.030	0.072
Totals	0.042	0.110	0.152

2. Indicate number of farm operations from which land will be acquired:

Acreage to be Acquired	Number of Farm Operations
Less than 1 acre	1
1 acre to 5 acres	0
More than 5 acres	0

3. Is land to be converted to highway use covered by the Farmland Protection Policy Act?

- No
 - The land was purchased prior to August 6, 1984 for the purpose of conversion.
 - The acquisition does not directly or indirectly convert farmland.
 - The land is clearly not farmland
 - The land is already in, or committed to urban use or water storage.
- Yes (This determination is made by the Natural Resources Conservation Service (NRCS) via the completion of the Farmland Impact Conversion Rating Form, NRCS Form AD-1006)
 - The land is prime farmland which is not already committed to urban development or water storage.
 - The land is unique farmland.
 - The land is farmland which is of statewide or local importance as determined by the appropriate state or local government agency.

4. Has the Farmland Impact Conversion Rating Form (AD-1006) been submitted to NRCS?

- No - Explain.
Per FDM 5-5-5 no notification to the NRCS is required if the Site Assessment Criteria Score (Part VI of the form) is less than 60 points for this project alternative. Date Form AD-1006 completed: October 12, 2012.
- Yes
 - The Site Assessment Criteria Score (Part VI of the form) is less than 60 points for this project alternative. Date Form AD-1006 completed. _____
 - The Site Assessment Criteria Score is 60 points or greater. Date Form AD-1006 completed. _____

5. Is an Agricultural Impact Statement (AIS) Required?

- No
 - Eminent Domain will not be used for this acquisition
 - The project is a "Town Highway" project
 - The acquisition is less than 1 acre
 - The acquisition is 1-5 acres and DATCP chooses not to do an AIS.
 - Other. Describe _____
- Yes
 - Eminent Domain may be used for this acquisition.
 - The project is not a "Town Highway" project

- The acquisition is 1-5 acres and DATCP chooses to do an AIS.
- The acquisition is greater than 5 acres

6. Is an Agricultural Impact Notice (AIN) Required?

- No, the project is not a State Trunk Highway Project - AIN not required but complete questions 7-16.
- Yes, the project is a State Trunk Highway Project - AIN may be required.

Is the land acquired "non-significant"?

- Yes - (All must be checked) An AIN is not required but complete questions 7-16.

- Less than 1 acre in size
- Results in no severances
- Does not significantly alter or restrict access
- Does not involve moving or demolishing any improvements necessary to the operation of the farm
- Does not involve a high value crop

- No

Acquisition 1 to 5 acres - **AIN required**. Complete Pages 1 and 2, Form DT1999, (Pages 1 and 2, Figure 1, Procedure 21-25-30.) Acquisition over 5 acres - **AIN required**. Complete Pages 1, 3 and 4, Form DT1999. (Pages 1, 3 and 4, Figure 1, Procedure 21-25-30)

If an AIN is completed, do not complete the following questions 7-16.

See Exhibit 12 - Department of Agriculture, Trade & Consumer Protection Correspondence

7. Identify and describe effects to farm operations because of land lost due to the project:

- Does Not Apply.
- Applies – Discuss.

The minor area of farmland to be acquired should have no effect on farm operations.

8. Describe changes in access to farm operations caused by the proposed action:

- Does Not Apply.
- Applies – Discuss.

9. Indicate whether a farm operation will be severed because of the project and describe the severance (include area of original farm and size of any remnant parcels):

- Does Not Apply. – No severances anticipated.
- Applies – Discuss.

10. Identify and describe effects generated by the acquisition or relocation of farm operation buildings, structures or improvements (e.g., barns, silos, stock watering ponds, irrigation wells, etc.). Address the location, type, condition and importance to the farm operation as appropriate:

- Does Not Apply. – No farm operation buildings, structures or improvements impacted.
- Applies – Discuss.

11. Describe effects caused by the elimination or relocation of a cattle/equipment pass or crossing. Attach plans, sketches, or other graphics as needed to clearly illustrate existing and proposed location of any cattle/equipment pass or crossing:

- Does Not Apply. – No cattle/equipment passes impacted.
- Replacement of an existing cattle/equipment pass or crossing is not planned. Explain.
- Cattle/equipment pass or crossing will be replaced.
- Replacement will occur at same location.
- Cattle/equipment pass or crossing will be relocated. Describe.

12. Describe the effects generated by the obliteration of the old roadway:

- Does Not Apply.
- Applies – Discuss.

13. Identify and describe any proposed changes in land use or indirect development that will affect farm operations and are related to the development of this project:

- Does Not Apply. – No changes in land use anticipated due to this project.
- Applies – Discuss.

14. Describe any other project-related effects identified by a farm operator or owner that may be adverse, beneficial

or controversial:

- No effects indicated by farm operator or owner.
- Applies – Discuss.

15. Indicate whether minority or low-income population farm owners, operators, or workers will be affected by the proposal: (Include migrant workers, if appropriate.)

- No
- Applies – Discuss.

16. Describe measures to minimize adverse effects or enhance benefits to agricultural operations:

Due to the minor area of farmland impacted by the project adjacent to the existing right of way, no adverse effects would be anticipated and no measures to minimize effects would be proposed.

COMMUNITY OR RESIDENTIAL EVALUATION

Factor Sheet B-1

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Give a brief description of the community or neighborhood affected by the proposed action:

Name of Community/Neighborhood Village of Waterford		
Incorporated <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Total Population 5,368 (2010 Census)		
Demographic Characteristics		
	Census Year 2010	% of Population
	White	97.0
	African American	0.4
	Asian	0.7
	American Indian & Alaska Native	0.2
	Native Hawaiian & Pacific Islands	0.0
	Other	0.6
	Owner Occupied Housing	73.1

Name of Community/Neighborhood Town of Waterford		
Incorporated <input type="checkbox"/> Yes <input type="checkbox"/> No		
Total Population 6,344 (2010 Census)		
Demographic Characteristics		
	Census Year 2010	% of Population
	White	98.0
	African American	0.2
	Asian	0.5
	American Indian & Alaska Native	0.2
	Native Hawaiian & Pacific Islands	0.0
	Other	0.3
	Owner Occupied Housing	91.9

Name of Community/Neighborhood Village of Rochester Incorporated <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Total Population 3,682 (2010 Census)		
Demographic Characteristics		
	Census Year 2010	% of Population
	White	97.8
	African American	0.2
	Asian	0.5
	American Indian & Alaska Native	0.3
	Native Hawaiian & Pacific Islands	0.1
	Other	0.5
	Owner Occupied Housing	83.1

2. Identify and discuss existing modes of transportation and their importance within the community or Neighborhood:

The primary mode of transportation along WIS 20/83 consists of 85.8% passenger vehicles for commuting to work, schools, and to local or nearby businesses. Bicyclists and pedestrians also utilize the WIS 20/83 project corridor. The large percentage of passenger vehicle use for traveling to/from work, schools, and to local and nearby businesses and churches stresses the importance of providing a safe, efficient, and well maintained roadway system for these communities.

3. Identify and discuss the probable changes resulting from the proposed action to the existing modes of transportation and their function within the community or neighborhood:

The proposed action would not be expected to change the existing modes of transportation. The addition of bicycle accommodations and sidewalk may cause a small increase in the number of bicycle and pedestrian commuters. The area is mostly developed and the way people commute is not expected to change considerably within the project area.

4. Briefly discuss the proposed action's direct and indirect effect(s) on existing and planned land use in the community or neighborhood:

The proposed action is not expected to change the existing or planned land use within the area.

5. Address any changes to emergency or other public services during and after construction of the proposed project:

It is anticipated that the roadway would be closed to through traffic during construction with Main Street between Jefferson Street and Milwaukee Street staged to provide access to downtown businesses. Local access to residences, businesses, and schools would be maintained during this time. It is anticipated that the bridge over the Fox River would have a minimum of one lane open at all times during construction. While temporary inconveniences may occur during construction, no interruption to vital emergency or public services would be expected. After construction, access to adjacent properties and side streets would remain the same as prior to construction for emergency vehicles and other public services.

6. Describe any physical or access changes that will result. This could include effects on lot frontages, side slopes or driveways (steeper or flatter), sidewalks, reduced terraces, tree removals, vision corners, etc.:

The proposed alternative would replace sidewalk where it already exists and add sidewalk to connect pedestrian facilities where they are currently lacking. The existing shared-use path along the schools near the west end of the project corridor is non-continuous and would be replaced with a continuous shared-use path along WIS 20/83. The existing rural section at the west end of the project corridor would be reconstructed to an urban section with curb and gutter. WIS 20/83 from Buena Park Road to South First Street would be widened to accommodate the proposed lane configuration. Terraces will remain approximately the same width, but would be moved further out from the road centerline in the wider roadway area. Existing trees would be removed along this area. Ditches would be improved and widened along the south side of WIS 20/83 from Augusta Road to Rivermoor Road. The intersections of WIS 20/83 with Rivermoor Road, Rivermoor Drive, and Racine Street would be reconstructed to correct the skew angle and create a

closer to 90-degree intersection.

7. Indicate whether a community/neighborhood facility will be affected by the proposed action and indicate what effect(s) this will have on the community/neighborhood:

The proposed action is expected to have a minor temporary effect on the four schools within the project limits during construction. School buses, commuting students, and the parents of students attending Fox River Middle School, Evergreen Elementary School, Waterford Union High School, and St. Thomas Aquinas School may need to adjust their routes to these schools when the school year overlaps with construction work.

The proposed action may also have a minor temporary effect during construction on people attending St. Thomas Aquinas Church or wanting to visit the Waterford Public Library.

8. Identify and discuss factors that residents have indicated to be important or controversial:

- Many residents see a need for improved/additional bicycle and pedestrian accommodations to increase safety for those users both along and across WIS 20/83.
- There is concern about sight distance not being adequate for the roadway, both at vertical curves along the corridor and at intersections/driveways.
- Residents in the project area would like to see the WIS 20/83 bridge over the Fox River remain open during construction.
- Business owners are concerned about the lack of parking spaces along WIS 20/83.

9. List any Community Sensitive Design considerations, such as design considerations and potential mitigation measures.

Bicycle accommodations would be constructed along the entire length of the project corridor. Existing sidewalk would be replaced or added where there is currently no sidewalk to ensure continuity of pedestrian facilities throughout the project corridor. Aesthetic design elements would be implemented with this project, possibly including decorative street lights, park benches, trash/recycling receptacles, stamped and colored concrete, and bridge form liners.

10. Indicate the number and type of any residential buildings that will be acquired because of the proposed action. If either item a) or b) is checked, items 11 through 18 do not need to be addressed or included in the environmental document. If item c) is checked, complete items 11 through 18 and attach the Conceptual Stage Relocation Plan to the environmental document:

- a. None identified.
- b. No occupied residential building will be acquired as a result of this project. Provide number and description of non-occupied buildings to be acquired.
- c. Occupied residential building(s) will be acquired. Provide number and description of buildings, e.g., single family homes, apartment buildings, condominiums, duplexes, etc.

Three occupied single family homes and one unoccupied single family home would be acquired.

11. Anticipated number of households that will be relocated from the occupied residential buildings identified in item 10c, above:

Total Number of Households to be Relocated. 3 occupied single family homes

(Note that this number may be greater than the number shown in 10c) above because an occupied apartment building may have many households.)

a. Number by Ownership

Number of Households Living in Owner Occupied Building	Number of Households Living in Rented Quarters
3	

b. Number of households to be relocated that have.

1 Bedroom 0	2 Bedroom 0	3 Bedroom 1	4 or More Bedrooms 3
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c. Number of relocated households by type and price range of dwelling.

Number of Single Family Dwelling 4	Price Range \$171,500 - \$183,000
Number of Multi-Family Dwellings 0	Price Range N/A
Number of Apartment 0	Price Range N/A

12. Describe the relocation potential in the community:

a. Number of Available Dwellings (within the Village of Waterford) Price Range \$160,000 - \$195,000)

1 Bedroom 0	2 Bedrooms 0	3 Bedrooms 4	4 or More Bedrooms 1
----------------	-----------------	-----------------	-------------------------

b. Number of Available and Comparable Dwellings by Location (Price Range \$160,000 - \$195,000)

5 homes within Waterford (1 miles)
1 homes within Rochester (2 miles)
5 homes within Burlington (8 miles)
1 homes within Caledonia (18 miles)

c. Number of Available and Comparable Dwellings by Type and Price. (Include dwellings in price ranges comparable to those being dislocated, if any.)

Single Family Dwellings	Price Range
Waterford (5 homes)	\$160,000 - \$195,000
Rochester (1 homes)	\$169,900
Burlington (5 homes)	\$161,000 - \$184,900
Caledonia (1 homes)	\$165,000
Multi-Family Dwellings	Price Range
N/A	N/A
Apartments – 4 Bedroom	Price Range
Waterford (1 home)	\$910
West Allis (1 home)	\$870
Waukesha (1 home)	\$925
Milwaukee (1 home)	\$970
Wauwatosa (1 home)	\$1,275
Delafield (1 home)	\$1,345
Oak Creek (1 home)	\$975

13. Identify all the sources of information used to obtain the data in item 12:

- WisDOT Real Estate Conceptual Stage Relocation Plan
- Multiple Listing Service (MLS)
- Newspaper Listing(s)
Milwaukee Journal Sentinel
- Other – Identify Internet Real Estate Sites
ForRent.com
rent.com
housesandapartmentsforrent.com

14. Indicate the number of households to be relocated that have the following special characteristics:

- None identified.
 Yes - 4 total households to be relocated. Complete table below

Special Characteristics	Number of Households with Individuals with Special Characteristics
Elderly	0
Disabled	0
Low income	0
Minority	0
Household of large family (5 or more)	0
Not Known	0
No special characteristics	4

15. Describe how relocation assistance will be provided in compliance with the WisDOT Relocation Manual or FHWA regulation 49 CFR Part 24:

Residential 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 required to relocate from their residence. Some available benefits include relocation advisory services, reimbursement of moving expenses, replacement housing payments, and down payment assistance. In compliance with State law, no person would be displaced unless a comparable replacement dwelling would be provided. Federal law also requires that decent, safe, and sanitary replacement dwelling must be made available before any residential displacement can occur.

Compensation is available to all displaced persons without discrimination. Before initiating property acquisition activities, property owners would 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 would be inspected by one or more professional appraisers. The property owner would 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. Based on the appraisal(s) made, the value of the property would be determined, and that amount offered to the owner.

Identify other relocation assistance requirements not identified above.

16. Identify any difficulties or unusual conditions for relocating households displaced by the proposed action:

It is anticipated that the proposed action would relocate a residential property that also serves as a home business. The property owner builds and sells wooden lawn furniture at his house.

17. Indicate whether Special Relocation Assistance Service will be needed. Describe any special services or housing programs needed to remedy identified difficulties or unusual conditions noted in item #14 above:

- None identified
 Yes - Describe services that will be required

18. Describe any additional measures that will be used to minimize adverse effects or provide benefits to those relocated, those remaining, or to community facilities affected:

Coordination has begun with the households that would be relocated to ensure they understand the process and to minimize adverse effects to the household.

Access to businesses and properties on the project would be maintained throughout construction for local traffic.

HISTORIC RESOURCES EVALUATION

Factor Sheet B-5

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

Section 106 Form or other documentation, with all necessary approvals, must be attached to the Environmental Document for all projects.

1. Parties contacted:

Parties Contacted	Date Contacted	Comments Received		
		No	Yes	Check if Attached
Racine Heritage Museum	March 6, 2012	X		<input type="checkbox"/>
Racine Heritage Museum	November 6, 2012	X		<input type="checkbox"/>

2. Property Name: Charles H. & Louise B. Noll House

3. Location: 315 East Main Street

4. Use: Residence

5. Property type:

- Bridge
- Building
- Historic District
- Other: _____

6. Property Designations:

- National Historic Landmark (NHL)
- National Register of Historic Places (NRHP)
- State Register of Historic Places
- Local Registry
- Tribal Registry

7. A Determination of Eligibility (DOE) has been prepared:

- No - Property is already on NRHP or NHL.
- Yes - DOE prepared.
- Other: _____

8. Describe the significance of the structures and/or buildings:

The Charles H. and Louise B. Noll House was evaluated under Criteria A, B and C. No evidence was found to substantiate potential eligibility under Criterion A: History. With regard to Criterion B, Charles H. Noll was a successful businessman in Waterford who was involved primarily with a general store and secondarily with a bank. The store and bank were started by his father, Louis A. Noll. Upon his father's death, Charles primarily operated the general store, while his brother Louis L. concentrated on the bank (building extant, albeit heavily modernized). Charles operated the Noll store until his death in 1921. Given that the Noll family enterprise was founded by the father, Louis A. Noll, combined with the relatively short independent tenure of Charles H. Noll and fragmentation of overall family business responsibility with brother, Louis L. Noll, the activities of Charles H. Noll do meet the criteria necessary for listing under Criterion B: Significant Persons. With regard to Criterion C: Architecture, the subject house is an excellent and largely intact example of Period Dutch Colonial Revival architecture within the City of Waterford.

9. In compliance with the requirements of Section 106, of the National Historic Preservation Act, the proposed project's effects on the historic property, (e.g., structure or building) have been evaluated in the following report, a copy of which is:

- In the project file, or
- Attached to this document:
 - Documentation for determination of no historic properties affected (Reported on the Section 106 Review Form). See Exhibit 11.
 - Documentation for determination of no adverse or conditional no adverse effect to historic properties.
 - Documentation for Consultation about adverse effect(s). A Memorandum of Agreement has been completed.
 - No. Consultation about effects is continuing.
 - Yes, a copy of the MOA is attached to this document. Summarize MOA stipulations below:

10. Do FHWA requirements for Section 4(f) apply to the project's use of the historic property?

- No
 - Project is not federally funded.
 - No right-of-way or Permanent Limited Easements will be acquired from the property and the project will not substantially impair the characteristics that qualify the property for the NRHP.
 - Right-of-way will be acquired from the NRHP property but a *de minimus* finding has been proposed.
 - Other – Explain:
- Yes – Complete Factor Sheet B-8, Section 4(f) and 6(f) or other Unique Areas.

HISTORIC RESOURCES EVALUATION

Factor Sheet B-5

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

Section 106 Form or other documentation, with all necessary approvals, must be attached to the Environmental Document for all projects.

1. Parties contacted:

Parties Contacted	Date Contacted	Comments Received		
		No	Yes	Check if Attached
Racine Heritage Museum	March 6, 2012	X		<input type="checkbox"/>
Racine Heritage Museum	November 6, 2012	X		<input type="checkbox"/>

2. Property Name: St. Thomas Aquinas Roman Catholic Church

3. Location: 305 South First Street

4. Use: Religious Facility

5. Property type:

- Bridge
- Building
- Historic District
- Other: _____

6. Property Designations:

- National Historic Landmark (NHL)
- National Register of Historic Places (NRHP)
- State Register of Historic Places
- Local Registry
- Tribal Registry

7. A Determination of Eligibility (DOE) has been prepared:

- No - Property is already on NRHP or NHL.
- Yes - DOE prepared.
- Other: _____

9. Describe the significance of the structures and/or buildings:

The St. Thomas Aquinas Roman Catholic Church and Complex were evaluated under Criteria A (History), B (Significant Persons), and C (Architecture) with respect to Criterion Considerations A (Religious Properties) and G (<50 years old). No evidence was found to substantiate any potential under Criterion A: History or Criterion B: Significant Persons with respect to Criterion Consideration A: Religious Properties. Meanwhile, the facility as whole with its 1882 former church, 1941 school with 1960 addition, as well as its 1954 rectory required that it be evaluated under Criterion C: Architecture as an example of a church complex. An evaluation of the present layout (and use) of buildings, inclusion of large modern structures and loss of important earlier buildings on the property reveal that the subject complex does not display a cohesive mix of buildings that combine to provide for a full sense of the complex's development at this time. The present appearance of the complex does not rise to the level under Criterion Consideration G (50-year rule) and, as a result, once the primary building of the complex – the current church – reaches fifty-years of age (2057), the complex could be reevaluated for the National Register. The St. Thomas Aquinas Roman Catholic Church complex is not recommended as potentially eligible for the National Register under Criterion. However, the former 1882 Gothic Revival-style church is recommended on an individual basis as potentially eligible under Criterion C as an exceptional example of the Gothic Revival style of architecture due to its outstanding stone detail and construction.

9. In compliance with the requirements of Section 106, of the National Historic Preservation Act, the proposed project's effects on the historic property, (e.g., structure or building) have been evaluated in the following report, a copy of which is:

- In the project file, or
- Attached to this document:
 - Documentation for determination of no historic properties affected (Reported on the Section 106 Review Form).
 - Documentation for determination of no adverse or conditional no adverse effect to historic properties. See Exhibit 11.
 - Documentation for Consultation about adverse effect(s). A Memorandum of Agreement has been completed.
 - No. Consultation about effects is continuing.
 - Yes, a copy of the MOA is attached to this document. Summarize MOA stipulations below:

10. Do FHWA requirements for Section 4(f) apply to the project's use of the historic property?

- No
 - Project is not federally funded.
 - No right-of-way or Permanent Limited Easements will be acquired from the property and the project will not substantially impair the characteristics that qualify the property for the NRHP.
 - Right-of-way will be acquired from the NRHP property but a *de minimus* finding has been proposed.
 - Other – Explain:
- Yes – Complete Factor Sheet B-8, Section 4(f) and 6(f) or other Unique Areas.

SECTION 4(f) AND 6(f) OR OTHER UNIQUE AREAS

Factor Sheet B-8

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Property Name:

River Bend Park

2. Location:

Village of Waterford, Section 35, T-4-N, R-19-E (southwest quadrant of WIS 20/83 and the Fox River)

3. Ownership or Administration:

Village of Waterford

4. Type of Resource:

- Public Park.
- Recreational lands.
- Ice Age National Scenic Trail.
- NRCS Wetland Reserve Program.
- Wildlife Refuge.
- Waterfowl Refuge.
- Historic/Archaeological Site eligible for the National Register of Historic Places (NRHP).
- Other – Identify:

5. Do FHWA requirements for section 4(f) apply to the project's use of the property?

- No - Check all that apply:
 - Project is not federally funded.
 - No land will be acquired in fee or PLE and the alternative will not affect the use.
 - Property is not on or eligible for the NRHP.
 - Property is on or eligible for the NRHP however includes a de minimus effect finding.
 - Interstate Highway System Exemption.
 - Other - Explain:

A temporary limited occupancy (TLE) of the Section 4(f) resource will be required. The officials with jurisdiction over the Section 4(f) resource have agreed that the Temporary Occupancy of Land Section 4(f) exception applies to the resource. See Exhibit 15 - Impact to Section 4(f) Property Correspondence for a copy of the written agreement.

- Yes - Check all that apply:
 - Indicate which of the Programmatic/Negative Declaration 4(f) Evaluation(s) applies.
 - Historic Bridge.
 - Park minor involvement.
 - Historic site minor involvement.
 - Independent bikeway or walkway.
 - Great River Road.
 - Net Benefit to Section 4(f) Property. Explain: _____
 - Full 4(f) evaluation approved on _____.

6. Was special funding used to acquire the land or to make improvements on the property?

- No - Special funding was not used for the acquisition of this property.
- Yes:
 - s.6(f) LWCF (Formerly LAWCON).
 - Dingell-Johnson (D/J funds).
 - Pittman-Robertson (P/R funds).
 - Other – Describe:

7. Describe the significance of the property:

River Bend Park is located on the southwest corner of WIS 20/83 and the Fox River. This 0.30 acre park was created on the site of a former auto center. River Bend Park includes park benches, decorative lighting and landscaping along a short concrete sidewalk that extends from WIS 20/83 down to the Fox River shoreline.

8. Describe the proposed alternative's effects on this property:

- a. Describe any effects on or uses of land from the property. For other areas, include or attach statements from officials having jurisdiction over the property which discusses the alternative's effects on the property: **(A map, sketch, plan, or other graphic which clearly illustrates use of the property and the project's use and effects on the property must be included.)**

The existing concrete sidewalk along the roadway would be replaced in its current location at the right-of-way line along River Bend Park. A temporary limited easement (TLE) would be required to perform minor grading along the back of the sidewalk to replace a small section of concrete sidewalk in the park, and to construct the bridge abutment walls for the WIS 20/83 structure over the Fox River. See Exhibit 5 – Preliminary Plan View Layouts and NEPA limits.

- b. Discuss the following alternatives and describe whether they are feasible and prudent and why:
1. Do nothing alternative.

The purpose of the project is to address the poor roadway condition, inefficient traffic operations, and safety concerns. The do nothing alternative would not address the needs of the project and is therefore not feasible.

2. Improvement without using the 4(f) lands.

River Bend Park is located within a narrow urban section of WIS 20/83 with no room to shift the roadway away from the park. The proposed improvements would replace the existing facilities without causing a long term impact along the park. Only minor, temporary impacts would be expected at River Bend Park. This alternative is not feasible since completely avoiding River Bend Park is not possible given the needs of the project to reconstruct the roadway and replace the bridge over the Fox River.

3. Alternatives on new location.

Alternatives to reassign WIS 20/83 along a new route would not substantially reduce the amount of traffic along the current WIS 20/83 (Main Street) through the Village of Waterford. The existing deteriorated pavement would still require replacement, making this alternative not feasible to address the project needs.

9. Indicate which measures will be used to minimize adverse effects, mitigate for unavoidable adverse effects or enhance beneficial effects:

- Replacement of lands used with lands of reasonably equivalent usefulness and location, and of at least comparable value.
- The Small Conversion Policy for Lands Subject to Section 6(f) will be used.
- Replacement of facilities impacted by the project including sidewalks, paths, lights, trees, and other facilities.
- Restoration and landscaping of disturbed areas.
- Incorporation of design features and habitat features where necessary to reduce or minimize impacts to the section 4(f) property.
- Payment of the fair market value of the land and improvement taken.
- Improvements to the remaining 4(f) site equal to the fair market value of the land and improvements taken.
- Such additional or alternative mitigation measures determined necessary based on consultation with officials having jurisdiction. The additional or alternative mitigation measures are listed or summarized below:

- Property is a historic property or an archeological site. The conditions or mitigation stipulations are listed or summarized below:

- Other – Describe:

10. Briefly summarize the results of coordination with other agencies that were consulted about the project and its effects on the property:

A letter was sent to the Village of Waterford describing the proposed impacts to River Bend Park. The officials with jurisdiction over the Section 4(f) resource have agreed that the Temporary Occupancy of Land Section 4(f) exception applies to the resource. See Exhibit 15 – Impact to Section 4(f) Property Correspondence for a copy of the written agreement.

SECTION 4(f) AND 6(f) OR OTHER UNIQUE AREAS

Factor Sheet B-8

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

11. Property Name:

Ten Club Park

12. Location:

Village of Waterford, Section 35, T-4-N, R-19-E (located west of WIS 20/83, just south of East Main Street)

13. Ownership or Administration:

Village of Waterford

14. Type of Resource:

- Public Park.
- Recreational lands.
- Ice Age National Scenic Trail.
- NRCS Wetland Reserve Program.
- Wildlife Refuge.
- Waterfowl Refuge.
- Historic/Archaeological Site eligible for the National Register of Historic Places (NRHP).
- Other – Identify:

15. Do FHWA requirements for section 4(f) apply to the project's use of the property?

- No - Check all that apply:
 - Project is not federally funded.
 - No land will be acquired in fee or PLE and the alternative will not affect the use.
 - Property is not on or eligible for the NRHP.
 - Property is on or eligible for the NRHP however includes a de minimus effect finding.
 - Interstate Highway System Exemption.
 - Other - Explain:

A temporary limited occupancy (TLE) of the Section 4(f) resource will be required. The officials with jurisdiction over the Section 4(f) resource have agreed that the Temporary Occupancy of Land Section 4(f) exception applies to the resource. See Exhibit 15 - Impact to Section 4(f) Property Correspondence for a copy of the written agreement.

- Yes - Check all that apply:
 - Indicate which of the Programmatic/Negative Declaration 4(f) Evaluation(s) applies.
 - Historic Bridge.
 - Park minor involvement.
 - Historic site minor involvement.
 - Independent bikeway or walkway.
 - Great River Road.
 - Net Benefit to Section 4(f) Property. Explain: _____
 - Full 4(f) evaluation approved on _____.

16. Was special funding used to acquire the land or to make improvements on the property?

- No - Special funding was not used for the acquisition of this property.
- Yes:
 - s.6(f) LWCF (Formerly LAWCON).
 - Dingell-Johnson (D/J funds).
 - Pittman-Robertson (P/R funds).
 - Other – Describe:

17. Describe the significance of the property:

Ten Club Park is named after The Ten Club. This organization was formed for philanthropic activities to better Waterford. It was called Ten Club because its charter membership consisted of ten Waterford businessmen.

The 0.48 acre Ten Club Park is located on the former site of the Louis Noll store which was destroyed by a devastating fire on July 2, 1898. The land was deeded to the Village by the Ten Club in 1919 for the benefit of the community. The gazebo was built in 1920. The Village removed the gazebo in 2014.

The ten original members of the club are Walter Best, Clint Ellis, Albert Glueck, Fred Johnson, Will Kinney, Edward Kortendick, L.F. Kortendick, Edward Malone, E.H. Miller, and Eugene Patrick.

18. Describe the proposed alternative's effects on this property:

- a. Describe any effects on or uses of land from the property. For other areas, include or attach statements from officials having jurisdiction over the property which discusses the alternative's effects on the property: **(A map, sketch, plan, or other graphic which clearly illustrates use of the property and the project's use and effects on the property must be included.)**

The existing concrete sidewalk along the roadway would be replaced in its current location at the right-of-way line along Ten Club Park. A temporary limited easement (TLE) would be required to perform minor grading along the back of sidewalk and to replace a small section of concrete sidewalk in the park. See Exhibit 5 – Preliminary Plan View Layouts and NEPA Limits.

- b. Discuss the following alternatives and describe whether they are feasible and prudent and why:
1. Do nothing alternative.

The purpose of the project is to address the poor roadway condition, inefficient traffic operations, and safety concerns. The do nothing alternative would not address the needs of the project and is therefore not feasible.

2. Improvement without using the 4(f) lands.

Ten Club Park is located within a narrow urban section of WIS 20/83 with no room to shift the roadway away from the park. The proposed improvements would replace the existing facilities without causing a long term impact along the park. Only minor, temporary impacts would be expected at Ten Club Park. This alternative is not feasible since completely avoiding Ten Club Park is not possible given the needs of the project to reconstruct the roadway.

3. Alternatives on new location.

Alternatives to reassign WIS 20/83 along a new route would not substantially reduce the amount of traffic along the current WIS 20/83 (Main Street) through the Village of Waterford. The existing deteriorated pavement would still require replacement, making this alternative not feasible to address the project needs.

19. Indicate which measures will be used to minimize adverse effects, mitigate for unavoidable adverse effects or enhance beneficial effects:

- Replacement of lands used with lands of reasonably equivalent usefulness and location, and of at least comparable value.
- The Small Conversion Policy for Lands Subject to Section 6(f) will be used.
- Replacement of facilities impacted by the project including sidewalks, paths, lights, trees, and other facilities.
- Restoration and landscaping of disturbed areas.
- Incorporation of design features and habitat features where necessary to reduce or minimize impacts to the section 4(f) property.
- Payment of the fair market value of the land and improvement taken.
- Improvements to the remaining 4(f) site equal to the fair market value of the land and improvements taken.
- Such additional or alternative mitigation measures determined necessary based on consultation with officials having jurisdiction. The additional or alternative mitigation measures are listed or summarized below:

- Property is a historic property or an archeological site. The conditions or mitigation stipulations are listed or summarized below:

- Other – Describe:

20. Briefly summarize the results of coordination with other agencies that were consulted about the project and its effects on the property:

A letter was sent to the Village of Waterford describing the proposed impacts to Ten Club Park. The officials with jurisdiction over the Section 4(f) resource have agreed that the Temporary Occupancy of Land Section 4(f) exception applies to the resource. See Exhibit 15 – Impact to Section 4(f) Property Correspondence for a copy of the written agreement.

Factor Sheet B-9

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Landscape Characteristics:

a. Identify and briefly describe the visual character of the landscape:

The landscape encompassing the WIS 20/83 project area is characterized by gently rolling terrain. Land use in the area is mostly developed with primarily residential and commercial uses.

b. Indicate the visual quality of the view-shed and identify landscape elements which would be visually sensitive:

The existing WIS 20/83 deteriorated pavement does not provide for an aesthetically pleasing environment. Grass areas with mature trees line the residential areas while the denser downtown area is lined with commercial properties making up the Village of Waterford's Heritage District.

2. User/viewer Characteristics:

a. Identify and discuss the viewers who will have a view of the improved transportation facility:

Viewers of the improved facility include adjacent residents, employees, and patrons of the abutting businesses, schools, parks, and churches.

b. Identify and discuss users of the transportation facility who will have a view from the facility:

Viewers from the improved facility include those commuting to and from work, school, and the local businesses on a daily basis.

3. Effects:

a. Describe whether and how the project would affect the visual character of the landscape:

The visual character along the existing rural section of the project corridor would be changed to add curb and gutter. Sidewalk would be added in locations where there is currently no sidewalk. WIS 20/83 from the west project limits to Jefferson Street would be widened to accommodate the proposed lane configuration. Pavement, sidewalk, and asphalt shared-use path would be replaced, improving the aesthetics of the roadway. WIS 20/83 would be widened at Rivermoor Road to accommodate pedestrian refuge islands. Curb bump-outs would be constructed in downtown areas with parking to reduce pedestrian crossing distances. WisDOT is working with the Village of Waterford to implement Community Sensitive Solutions (CSS) within the Heritage District as part of this project. CSS could include aesthetic and decorative improvements such as street lighting, park benches, planters, stamped and colored concrete to resemble brick pavers, and bridge form liners to name a few. Selections of items to include along the project are being evaluated by the Village.

b. Indicate the effects the project would have on the viewer groups:

Both viewers of the facility and from the facility would notice the improved pavement and the addition of curb and gutter and sidewalk where it currently does not exist. The WIS 20/83 corridor from the west project limits to South First Street would have two travel lanes, a center two way left turn lane, and shoulder/bicycle lanes, compared to only 2 existing travel lanes. Rectangular Rapid Flashing Beacons (RRFB) would be added with the marked crosswalks at the WIS 20/83 intersections with Rivermoor Road and River Street to heighten driver awareness of pedestrians attempting to safely cross WIS 20/83. Trees would be removed along the project. Retaining walls would be replaced and added along the project. Sight distances would be improved for motorists within the project corridor.

4. Mitigation:

a. Have aesthetic commitments been made?

- No
- Yes - Discuss: Funding has been provided for CSS items to be included in the proposed project.

WETLANDS EVALUATION

Factor Sheet C-1

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Describe Wetlands:

	Wetland 1		Wetland 2		Wetland 3	
Name (If known)	W1		W2		W3	
Location County	Racine		Racine		Racine	
Location (Section-Township-Range)	Sec 35 T-4-N, R19-E		Sec 35 T-4-N, R19-E		Sec 35 T-4-N, R19-E	
Location Map	See Exhibit 5		See Exhibit 5		See Exhibit 5	
Wetland Type(s) ¹	Shrub Carr (SS)		Wet Meadow (M)		Riparian Wetland (RPF)	
Total Wetland Loss	Acres 0.008		Acres 0.018		Acres 0.082	
Wetland is: (Check all that apply) ²	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 5-year floodplain	X		X			X
• If adjacent or contiguous, identify stream, lake or water body by Section-Township-Range	N/A		N/A		Fox River	

¹Use wetland types as specified in the "WisDOT Wetland Mitigation Banking Technical Guideline, Table 3-C"

²If 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?

No

Yes:

Advanced Identification Program (ADID) Wetlands: **Fox (Illinois) River Primary Environmental Corridor (Wetland 3)**

The U.S. Environmental Protection Agency (USEPA), in cooperation with the U.S. Army Corps of Engineers, implemented an Advanced Identification Program (ADID) to identify wetlands that are generally suitable or not suitable for discharge of fill material. ADID wetlands are only found within the Southeast Wisconsin Regional Planning Commission (SEWRPC) metropolitan planning boundaries. Within the project area, ADID wetlands are those mapped wetlands that occur within the boundaries of the primary environmental corridor adopted in 1985.

In southeastern Wisconsin, advanced identification of such wetlands was undertaken in consultation with SEWRPC and the DNR to redirect development outside of primary environmental corridors. In Wisconsin, however, ADID wetlands are part of a special category of wetlands to be protected, "wetlands in areas of special natural resource interest" (NR 103.04, Wis. Admin. Code); fill is justifiable when there is no feasible alternative. Identification of Primary Environmental Corridors is ongoing by SEWRPC; Regulatory Agencies continue to expand ADID wetland status to include all designated Primary Environmental Corridors post-1985 to present.

Other – Describe: _____

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

The proposed roadway reconstruction, bridge reconstruction, intersection improvements, and pipe culvert replacements would require excavation and fill within wetland areas.

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

Songbirds (brown wrens, cardinals, gold finches, robins, owls, etc.), small mammals, gray squirrels, chipmunks, opossums, woodchucks, raccoons, rabbits, foxes, as well as frogs, toads, snakes, etc.

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 Impact Evaluation.

Factor Sheet D-5, Stormwater Impact 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 0.108

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

Provisional GP -- **Regional GP**

Provisional LOP

Programmatic GP

Expiration date of 404 Permit, if known _____

8. 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.

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)

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

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.:

A lower level of improvement would not be feasible as it would not address the purpose and need of the project. Reconstruction of the roadway on the existing alignment would create unavoidable impacts to wetlands.

Reconstruction on a new alignment would not be prudent due to added costs and environmental impacts so avoiding the impacts to wetlands is not feasible.

2. Indicate the total area of wetlands avoided:
Acres: N/A

B. Minimize the amount of wetlands affected:

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

Due to site constraints, wetlands present on both sides of the roadway, and the need to provide a safe travel way, total wetland avoidance would not be feasible. Minimization efforts would include 3:1 side slopes outside the clear zone compared to the typical 4:1. Other minimization techniques would include excavating and disposing of marsh material in non-wetlands and maintaining natural drainage where feasible.

2. Indicate the total area of wetlands saved through minimization:
Acres: 0.001

10. Compensation for Unavoidable Wetland Loss:

According to Section 401 (b) (1), of the Clean Water Act, unavoidable wetland losses must be mitigated on-site, if possible. If no on-site opportunities exist, near/off-site wetland compensation sites must be considered. If neither exists, the losses may be debited to an existing wetland mitigation bank site. Compensation ratios are based on WisDOT Wetland Mitigation Banking Technical Guideline. **Mitigation will occur at the Jacobson Bank in Walworth Co.**

	Type	Acre(s) Loss	Ratio	Compensation Type and Acreage			
				On-site	Near/off site	Consolidation Site	Bank site
RPF(N)	Riparian wetland (wooded)	0.082	2:1				0.164
RPF(D)	Degraded riparian wetland (wooded)	---	---	---	---	---	---
RPE(N)	Riparian wetland (emergent)	---	---	---	---	---	---
RPE(D)	Degraded riparian wetland (emergent)	---	---	---	---	---	---
M(N)	Wet and sedge meadows, wet prairie, vernal pools, fens	---	---	---	---	---	---
M(D)	Degraded meadow	0.018	1.5				0.027
SM	Shallow marsh	---	---	---	---	---	---
DM	Deep marsh	---	---	---	---	---	---
AB(N)	Aquatic bed	---	---	---	---	---	---
AB(D)	Degraded aquatic bed	---	---	---	---	---	---
SS	Shrub Swamp, shrub carr, alder thicket	0.008	1.7				0.014
WS(N)	Wooded swamp	---	---	---	---	---	---
WS(D)	Degraded wooded swamp	---	---	---	---	---	---
Bog	Open and forested bogs	---	---	---	---	---	---

D = Degraded

N = Non-degraded

*Impacts to wetlands and mitigation are currently being coordinated with WisDOT

11. If on-site compensation is proposed, describe how a search for a compensation site was conducted:

No on-site compensation is proposed.

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

Coordination with the Corps of Engineers is ongoing.

Factor Sheet C-2

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Stream Name: Fox 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)

Approximately 375 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: 6"
- C. Vegetation in Stream
 - Absent
 - Present - If known describe:
- D. Identify Aquatic Species Present:
River Redhorse (*Moxostoma carinatum*), State Threatened species – see Factor Sheet C-7
- 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: PCBs and total phosphorous

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: Project Special Provisions would state removal of the existing Fox River Bridge would not be allowed during May 15 to August 20, the swallow's nesting season, or if removal of the Fox River Bridge would be required during this period, the existing bridge would be netted prior to May 15 to prevent nesting activities from occurring.

8. Describe land adjacent to stream:

The land immediately adjacent to the Fox River near the project corridor consists of public parks, commercial properties, and a public library with residential properties upstream and downstream of the project.

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

There are no known dischargers or receivers near the project.

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 existing 3-span bridge structure over the Fox River would be removed and replaced with a 2-span structure. In water disturbances would include removal of the existing piers, construction of one new pier, and grading around the new abutments with riprap.

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:

No additional backwater would be anticipated to be created by the proposed construction actions. The proposed activities would be in compliance with NR 116.

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

Not required as there is no anticipated change in upstream water surface elevations.

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:

The existing floodplain limits within the area of WIS 20/83, consisting of wetlands, open spaces, and residential properties, are not expected to change with the proposed improvements. The proposed action would not be expected to impact the current use of the floodplain.

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:

Minimal to no impacts would be expected to water quality within the floodplain or plant, animal, and fish inhabiting this water way due to this proposed action due to erosion control measures that would be utilized during and after construction. No in-water work would be allowed to occur between March 15 and June 15 per WDNR requirements. An unobstructed passageway through the Fox River bridge construction area will be maintained at all times to allow for continuous fish movements. Any bridge demolition material that enters the water will be removed.

16. Are measures proposed to enhance beneficial effects?

- No
- Yes. Describe: _____

THREATENED AND ENDANGERED SPECIES EVALUATION

Wisconsin Department of Transportation

Factor Sheet C-7

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Are there any known threatened or endangered species in the vicinity of the project?

- None identified
 Yes - Identify the species and indicate its status on Federal or State lists:

Species Common Name	Species Scientific Name	Federal Status	State Status	Affected by Project? Y/N
Plants				
Kitten Tails	Besseyia bullii	N/A	Threatened	N
Animals				
River Redhorse (fish)	Moxostoma Carinatum	N/A	Threatened	To be determined

3. Explain How a Species Is or Is Not Affected by the Action:

- Species Not Affected:

River Redhorse (fish) – No impact expected as there is no in-stream work would be allowed during the period from March 15 to June 15 to protect endemic fish populations during spawning activities. An unobstructed passageway through the construction area would be maintained at all times to allow for continuous fish movement.

- Species Affected:

1. Describe Coordination:

U.S. Fish & Wildlife Service:

- Has Section 7 coordination been completed?
 No – **No Federally listed endangered species are affected.**
 Yes - Describe mitigation required to protect the federally listed endangered species:

WDNR

- Has coordination with DNR been completed?
 No
 Yes - Describe mitigation required to protect the state-listed species:

Contract special provisions will prohibit in-stream work during the period from March 15 to June 15 to protect endemic fish populations during spawning activities and provide an unobstructed passageway through the construction area would be maintained at all times to allow for continuous fish movement. DNR had no concerns regarding Kitten Tails.

Factor Sheet D-1

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Ozone

A. Is the project located in a county which is designated non-attainment or maintenance for ozone?

- No
- Yes – If Yes, one of the following boxes must be checked:
 - This project is included in the approved Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP) endorsed by the region’s Metropolitan Planning Organization (MPO). The TIP was found to conform by the Federal Highway Administration and the Federal Transit Administration. Provide RTP Name, TIP name, MPO name, TIP number and conformity finding date(s):

RTP Name 2035 Regional Transportation Plan for Southeastern Wisconsin	TIP Name 2013-2016 Transportation Improvement Program for Southeastern Wisconsin
MPO Name Southeastern Wisconsin Regional Planning Commission	TIP Number 422
 - This project is located outside of a Metropolitan Planning Organization’s boundaries and has received a positive conformity determination per the rural conformity section of the WisDOT/WDNR Memorandum of Agreement regarding determination of conformity. Provide conformity finding date.
 - This project is located outside of a Metropolitan Planning Organization’s boundaries and is exempt from conformity requirements per 40 CFR 93.126
 - This project has been determined to be Not Regionally Significant
 - Other, describe:

2. Carbon Monoxide:

A. Is this project exempt from air quality analysis under Wisconsin Administrative Code – NR 411?

- No – NR 411 exemptions do not apply.
- Yes – NR 411 exemption(s) apply – Identify exemption(s) and explain why project is exempt.

WIS 20/83:

- The modified road section located in a metropolitan county has an increase in peak hour volume from the anticipated traffic volumes within 10 years after construction of less than 1200 motor vehicles per hour. [NR411.04(b) (2)]
- The maximum shift in the nearest roadway edge for one or more of the intersection approach legs is more than 12 feet, and each new road section has no more than two approach lanes, not including exclusive turning lanes, and any potential receptor is **not** located at more than 25 feet from the nearest proposed roadway edge, and the peak hour traffic volume from the anticipated traffic volumes within 10 years after construction on each approach is less than 1800 motor vehicles per hour. [NR411.04(b) (5) (b)]

EPA and FHWA guidance provide criteria for determining whether a project is a project of local air quality concern for PM2.5. Based on that guidance, the only defining criteria that could make this a Project of Local Air Quality Concern for PM2.5 is; “New or expanded highway projects that have a significant number of or significant increase in diesel vehicles.” EPA and FHWA’s guidance states that “facilities with greater than 125,000 AADT and 8% or more of such AADT is diesel traffic” serve as the example of a “significant number”. The project design year AADT for this project ranges from 9,000 to 18,100, the diesel truck percentage is 14.2% and the percentage of diesel trucks as a percentage of the total vehicle mix is not expected to increase significantly as a result of the project, therefore this project IS NOT a Project of Local Air Quality Concern for PM2.5. This is consistent with WisDOT’s interim screening process for project level conformity as discussed at the April 9, 2015 Transportation Conformity Workgroup meeting.

CONSTRUCTION STAGE SOUND QUALITY EVALUATION

Wisconsin Department of Transportation

Factor Sheet D-2

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
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:

The Waterford Public Library, four schools, a church, and residences are considered to be noise sensitive areas within the project's area of effect. The estimated number of persons potentially affected by construction noise is approximately 2,000.

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 noise generated by construction equipment will vary greatly, depending on equipment type/model/make, duration of operation and specific type of work effort. However, typical noise levels may occur in the 67 to 107 dBA range at a distance of 50 feet.

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.
- 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:

The Village of Waterford has requested that construction operations occurring between 10:00 p.m. and 6:00 a.m. be authorized by the Village Board.

CONSTRUCTION EQUIPMENT	SOUND LEVEL (dBA) AT 15m (50 feet)					
	60	70	80	90	100	110
EQUIPMENT POWERED BY INTERNAL COMBUSTION ENGINES						
Earth Moving						
Compactors (Rollers)		██████████				
Front Loaders		██████████	██████████			
Backhoes		██████████	██████████	██████████		
Tractors		██████████	██████████	██████████		
Scrapers, Graders		██████████	██████████			
Pavers			██████████			
Trucks			██████████	██████████		
Materials Handling						
Concrete Mixers		██████████	██████████			
Concrete Pumps			██████████			
Cranes (Movable)		██████████	██████████			
Cranes (Derrick)			██████████			
Stationary						
Pumps	██████████					
Generators		██████████				
Compressors		██████████	██████████			
Impact Equipment						
Pneumatic Wrenches			██████████			
Jack Hammers and Rock Drills		██████████	██████████			
Impact Pile Drivers (Peaks)				██████████		
Other						
Vibrator		██████████				
Saws		██████████				

Construction Equipment Sound Levels

Source: U.S. Report to the President and Congress on Noise, February, 1972

Factor Sheet D-3

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
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 Impact Evaluation.
- Yes – Complete Factor Sheet D-2, Construction Stage Sound Quality Impact Evaluation, and the rest of this sheet.

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 16). A receptor location map must be included with this document.

The noise analysis followed FDM procedure 23-20-10 and 23-25-10. TNM Version 2.5 was used to model the existing and future sound levels.

4. Sensitive Receptors

Identify sensitive receptors, e.g., schools, libraries, hospitals, residences, etc. potentially affected by traffic sound: (See attached receptor location map – Exhibit 16)

Sensitive receptors not including residential areas include:

Waterford Veterans Memorial
Beck Drive, Rochester, WI 53185

Schools:

Waterford Graded School District
819 West Main Street, Waterford, WI 53185

Evergreen Elementary School
817 West Main Street, Waterford, WI 53185

Waterford Union High School
100 Field Drive, Waterford, WI 53185

St Thomas Aquinas Parish School
302 South Second Street, Waterford, WI 53185

Library

Waterford Library
101 N. River Street, Waterford, WI 53185

Parks:

Seven Waters Trail
Beck Drive, Rochester, WI 53185

River Bend Park
West Main Street, Waterford, WI 53185

Ten Club Park
South First Street, Waterford, WI 53185

Rivermoor Golf Club
30802 Waterford Drive, Waterford, WI 53185

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 shall be notified of predicted sound levels for land use planning purposes. **A COPY OF THIS WRITTEN NOTIFICATION SHALL BE INCLUDED WITH THE FINAL ENVIRONMENTAL DOCUMENT.**
- 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:

The locations where the sound level is within 1 dBA of the NAC are the St. Thomas Aquinas Cemetery and the Waterford Veterans Memorial.

St. Thomas Aquinas Cemetery

The existing (2011) sound level is 65 dBA and the expected (2038) sound level is 66 dBA. The NAC is 67 dBA. The right-of-way for the cemetery is 33 feet from the centerline of WIS 20/83 with headstones located at 36 feet. The impact of adding sound abatement measures could potentially disturb grave sites due to the restricted right of way. The 1 dBA increase in sound should have minimal impacts to the cemetery.

Waterford Veterans Memorial

The existing (2011) sound level is 66 dBA and the expected (2038) sound level is 67 dBA. The NAC is 67 dBA. The right-of-way for the memorial is 35 feet from the centerline of WIS 20/83 with memorial is located at 45 feet. The 1 dBA increase in sound should have minimal impacts to the memorial.

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 Abatement Criteria (Col. e minus Col. d)	Impact ³ or No Impact
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Residential -308	144	4	67	59	58	1.1	-7.9	N
Residential -313	129	1	67	62	59	2.4	-5.4	N
Retail/Office -316	275	0	72	58	55	2.1	-14.5	N
Residential -318	132	24	67	59	57	1.9	-8.2	N
Residential -323	250	8	67	52	50	2.0	-14.6	N
School - 326	365	0	67	52	50	2.1	-15.1	N
Park - 328	226	0	67	56	53	2.3	-11.5	N
School - 334	438	0	67	49	46	2.6	-18.3	N
Residential -336	157	5	67	56	43	12.7	-11.1	N
Athletic Fields	161	0	67	58	55	2.9	-8.7	N
Residential -342	133	4	67	58	56	1.6	-9.3	N
Residential -343*	117	2	67	NA	57	NA	NA	NA
Residential -347*	110	2	67	NA	54	NA	NA	NA
Residential -348	134	4	67	59	56	2.3	-8.4	N
School - 352	340	0	67	52	49	2.7	-15.5	N
Residential -353	107	3	67	59	57	2.3	-8.0	N
Church - 355	88	0	67	57	55	2.3	-10.2	N
Restaurant/Bar - 356	101	0	72	59	58	1.7	-12.6	N
Residential -356	84	3	67	63	61	2.1	-3.9	N
Restaurant /Bar - 357	89	0	72	60	59	1.6	-11.7	N
Retail/Office -358	65	0	72	66	65	1.2	-5.9	N
Residential -359	91	1	67	66	64	1.6	-1.3	N
Funeral Home	85	0	67	64	62	1.5	-3.2	N
Retail/Office -360	84	0	72	64	62	2.0	-7.8	N
Retail/Office -360	86	0	72	63	61	1.7	-9.2	N
Retail/Office -361	132	0	72	59	57	1.7	-13.3	N
Restaurant/Bar - 362	58	0	72	66	63	2.6	-6.2	N
Restaurant/Bar - 362	79	0	72	60	57	2.6	-12.3	N
Retail/Office -362	146	0	72	63	61	2.1	-8.7	N
Retail/Office -363	87	0	72	64	62	2.3	-7.8	N
Library	125	0	67	62	59	3.1	-5.1	N
Park - 364	87	0	67	66	63	2.4	-1.2	N
Restaurant /Bar - 367	27	0	72	66	66	-0.7	-6.3	N
Park - 368	94	0	67	62	60	1.9	-5.2	N
Residential -368	199	20	67	56	54	1.6	-11.4	N
Restaurant/Bar - 370	60	0	72	61	60	1.3	-10.8	N
Residential -371	130	8	67	57	56	1.4	-9.9	N
Residential -371	87	6	67	58	56	1.3	-9.5	N
Church - 373	45	0	67	58	57	1.2	-9.2	N
Residential -373	338	14	67	50	49	1.5	-16.7	N
School - 374	164	0	67	53	52	1.4	-13.9	N
Church - 376	41	0	67	65	64	1.2	-2.1	N

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} (dBA)			Impact Evaluation		
			Noise Abatement Criteria ² (NAC)	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 Abatement Criteria (Col. e minus Col. d)	Impact ³ or No Impact
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Auditorium	173	0	67	53	52	1.3	-13.8	N
Park - 377	203	0	67	54	52	1.2	-13.4	N
Retail/Office - 379	329	0	72	51	50	1.3	-21.0	N
Residential - 380	101	5	67	59	57	1.2	-8.4	N
Residential - 381	82	1	67	58	57	1.2	-9.0	N
Park - 386	279	0	67	52	51	1.2	-15.1	N
Cemetery	48	0	67	66	65	1.2	-0.9	I
Memorial	39	0	67	67	66	1.0	0.1	I
Park - 397	58	0	67	65	64	0.8	-1.8	N
Restaurant/Bar - 397	125	0	72	60	59	0.7	-11.9	N
Residential - 399	89	24	67	63	62	0.6	-4.1	N
Retail/Office - 400	76	0	72	63	63	0.5	-8.6	N
Restaurant/Bar - 402	110	0	72	62	61	0.3	-10.4	N
Retail/Office - MSR	82	0	72	56	56	0.7	-15.8	N
Retail/Office - MSL	73	0	72	59	56	2.6	-13.3	N

¹Use whole numbers only.

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

* relocations (N/A in Impact or No Impact column)

HAZARDOUS SUBSTANCES OR CONTAMINATION EVALUATION

Wisconsin Department of Transportation

Factor Sheet D-4

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
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
1	Vacant property	Spills	No further investigation	N
2	Gas station	UST, EDR Historic Auto Station	No further investigation	N
3	School	BRRTS, UST	No further investigation	N
4	Former school	LUST, UST	No further investigation	N
5	Former gas station	LUST, UST	Phase 2.5	Y
6	Gas station	LUST, Spills, UST	Phase 2.5	Y
7	Former gas station	Petroleum	Phase 2	Y
8	Restaurant	UST	No further investigation	N
9	Commercial	BRRTS, UST	No further investigation	N
10	Former bus company	LUST, UST	Phase 2.5	Y
11	Commercial/Residential	Petroleum	Phase 2	Y
12	Auto parts retail	BRRTS, UST, EDR Historic Auto Station	Phase 2	Y
13	Former gas station	Petroleum	Phase 2	Y
14	Automotive shop	LUST, UST, EDR Historic Auto Station	Phase 2.5	Y
15	Residence	UST	No further investigation	N
16	Commercial	UST	Phase 2	Y

Attach additional sheets, if necessary
 Additional comments: _____

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

- No
 Yes - How many:
 Why were they not reviewed?

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

Phase 2 and 2.5 investigations are ongoing.

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)

Phase 2 and 2.5 investigations are ongoing. These investigations will be completed by WisDOT SE Region prior to PS&E.

5. Describe proposed action to avoid hazardous materials contamination:

Due to the nature of the proposed improvements, reconstruction and widening on existing alignment, it may not be possible to avoid potential contamination sites if they are discovered during 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):

Having completed a Phase 1 investigation for the improvement under consideration, the Region has determined that further investigation of up to 9 sites is merited. Those investigations are in the process of being scheduled. The DNR and possibly affected parties will be notified of the results. The Region will work with all concerned to ensure that the disposition of any petroleum contamination is resolved to the satisfaction of the WDNR, WisDOT ESS, and FHWA before acquisition of any questionable site, and before advertising the project for letting.

For the potential for PCB's in the Fox River sediment, appropriate language will be included in the contract special provisions in the form of a Notice to Contractor and coordination with WDNR will be ongoing during construction.

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

There is no known contamination on any parcel that would be completely acquired. All of the sites listed in Item 1 above would require temporary limited easements construction for grading purposes. Sites 5, 6, 13, and 14 are proposed to have minor fee acquisitions. These 4 sites have been identified as having the potential for and will be tested for contamination by WisDOT prior to construction activities.

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

No - Explain

Yes:

Were regulated ACMs identified?

No

Yes:

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

Factor Sheet D-5

Alternative Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
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 (Fox River)
 - Wetland
 - Lake
 - Endangered species habitat
 - Other – Describe

During construction, erosion control strategies would include measures to minimize soil erosion such as seeding exposed slopes, silt fences, erosion bales, erosion mats, and inlet protection. These measures would provide protection for existing wetland and stream areas. In addition, storm water management techniques would include discharging runoff water into flat, grass-lined ditches and swales to slow the water and settle out contaminants before entering adjacent wetlands and streams. A Statewide Wetland Finding has been coordinated with DNR and found to be applicable for the wetlands within the project limits.

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.

<input type="checkbox"/> Areas of groundwater discharge	<input type="checkbox"/> Areas of groundwater recharge
<input type="checkbox"/> Stream relocations	<input type="checkbox"/> Overland flow/runoff
<input type="checkbox"/> Long or steep cut or fill slopes	<input type="checkbox"/> High velocity flows
<input type="checkbox"/> Cold water stream	<input checked="" type="checkbox"/> Impaired waterway (Fox River)
<input checked="" type="checkbox"/> Large quantity flows	<input type="checkbox"/> Exceptional/outstanding resource waters
<input type="checkbox"/> Increased backwater	
- Other - Describe any unique, innovative, or atypical stormwater management measures to be used to manage additional or special circumstances. _____

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

Storm water management techniques would include discharging runoff water into flat, grass lined ditches and using catch basins to aid in eliminating total suspended solids before the water enters adjacent streams or wetlands.

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

Storm water management would be carried out in accordance with TRANS 401-Construction Site Erosion Control and Storm Water Management Procedures. Storm water management techniques would include discharging runoff into flat, grass lined ditches and using catch basins to aid in eliminating total suspended solids before runoff enters adjacent streams or wetlands.

5. Identify the stormwater management measures to be utilized.

- | | |
|---|---|
| <input checked="" type="checkbox"/> Swale treatment (parallel to flow)
Trans 401.106(10) | <input checked="" 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 type="checkbox"/> Detention/retention basins – Trans 401.106(6)(3) |
| <input type="checkbox"/> Constructed storm water wetlands | <input type="checkbox"/> Distancing outfalls from waterway edge |
| <input type="checkbox"/> Buffer areas – Trans 401.106(6) | <input type="checkbox"/> Infiltration – Trans 401.106(5) |
| Describe - _____ | <input type="checkbox"/> Other
_____ |

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
 Yes - Coordination is in process.

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

- No
 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 Reconstruction	Total Length of Center Line of Existing Roadway : 1.86 Length of This Alternative: 1.86
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.

Existing Slopes – Longitudinal slopes are relatively flat from 0.0 to 4.75 percent. Perpendicular slopes within the existing urban sections are generally flat to as steep as 25 percent in the area of wetlands. The existing ditches in the rural section have slopes as steep as 33 percent.

Proposed Slopes – Longitudinal slopes would remain relatively the same, with the minimum slope being 0.3 percent. Perpendicular slopes would generally remain the same between relatively flat and 25 percent. The existing rural section would be reconstructed to an urban section; however, there would still be ditches with 33 percent slopes in some areas.

Soil Types – Soils throughout the project area consist of loams and silt loams from the Aztalan, Casco, Fox, Hebron, Navan, Plano, and Warsaw series soil types. In general, soils in the project area consist mainly of silty clay lacustrine soils to the east of the Fox River. To the west of the Fox River, soils consist mainly of sandy, gravelly outwash deposits.

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: For the Fox River bridge construction, the DNR recommends the use of steel sheet pile and enhanced turbidity barrier for in-water construction due to the high and fluctuating flows.

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

The erosion control plan would include the appropriate items, per construction area, to protect the soil from washing into the adjacent wetland and stream areas during construction. The erosion control measures would minimize the amount of land exposed per stage, use temporary seeding and silt fence early on to protect working areas, use ditch checks and erosion mat on the steeper slopes, turbidity barrier along stream crossings, storm water runoff would be directed along the existing vegetative swales as practical, rip rap would be used at the ends of culvert pipes and would provide for permanent restoration of disturbed areas when each stage is complete.

Erosion control measures would be implemented according to the requirements outlined in the WisDOT Facilities Development Manual. The contractor would be responsible for developing an ECIP 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

The Erosion Control Plan would be coordinated through the WisDOT-WisDNR liaison process and TRANS 401 during the final design phase of the project. The contractor would be required to prepare an Erosion Control Implementation Plan (ECIP), which identifies timing and staging of the project's erosion control measures. The ECIP would be submitted to the WisDNR and to WisDOT 14 days prior to the preconstruction conference per TRANS 401.08(1) and must be approved by WisDOT before implementation.

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 checked="" 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 type="checkbox"/> Soil stabilizer | <input type="checkbox"/> Dewatering – Describe method |
| <input checked="" type="checkbox"/> Inlet protection | <input type="checkbox"/> Silt screen |
| <input checked="" 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 _____ | |

Project I.D. 2550-12-00
Main Street/South First Street
Buena Park Road to Milwaukee Avenue (WIS 36)
WIS 20/83
Racine County

ENVIRONMENTAL REPORT EXHIBITS

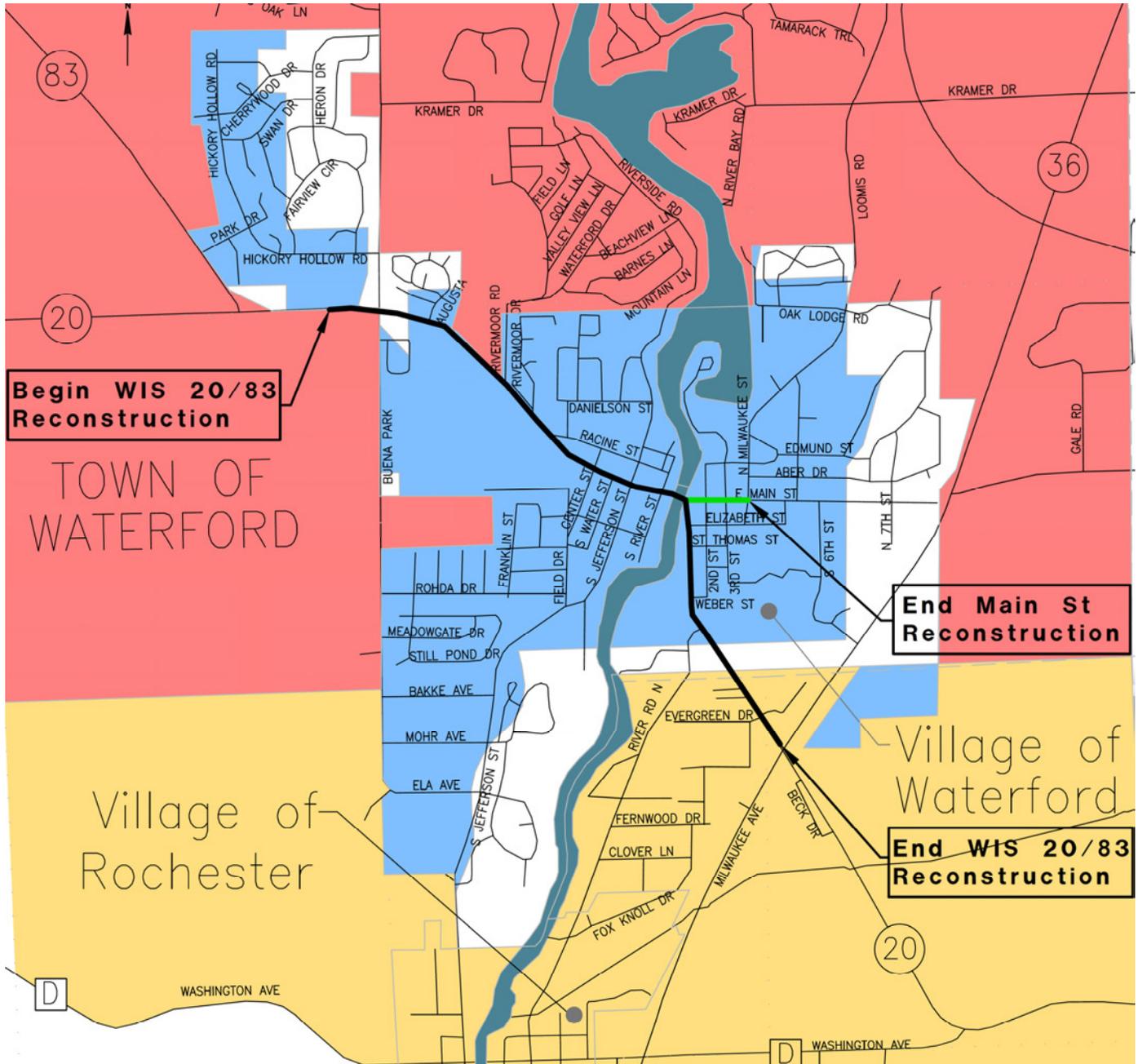
1. Project Location Maps
2. Project Overview
3. Existing Typical Sections
4. Proposed Typical Sections
5. Preliminary Plan View Layouts & NEPA Limits
6. Detour Route
7. Town of Waterford, Village of Waterford, and Village of Rochester Land Use Plans
8. Conceptual Stage Relocation Plan
9. Bureau of Aeronautics Correspondence
10. Wisconsin Department of Natural Resources Correspondence
11. State Historic Preservation Office Section 106 Documentation
12. Department of Agriculture, Trade & Consumer Protection Correspondence
13. Native American Tribes Correspondence
14. Indirect Effects Pre-Screening Worksheet
15. Impact to Section 4(f) Property Correspondence
16. Traffic Noise Analysis Memo and Receptor Map

Exhibit 1

Project Location Maps

Project Location Map

WIS 20/83 Reconstruction Buena Park Road to Milwaukee Ave. (WIS 36)



PROJECT LOCATION MAP

ID 2250-12-00

WIS 2083

BUENA PARK ROAD TO MILWAUKEE AVENUE (WIS 36)
RACINE COUNTY

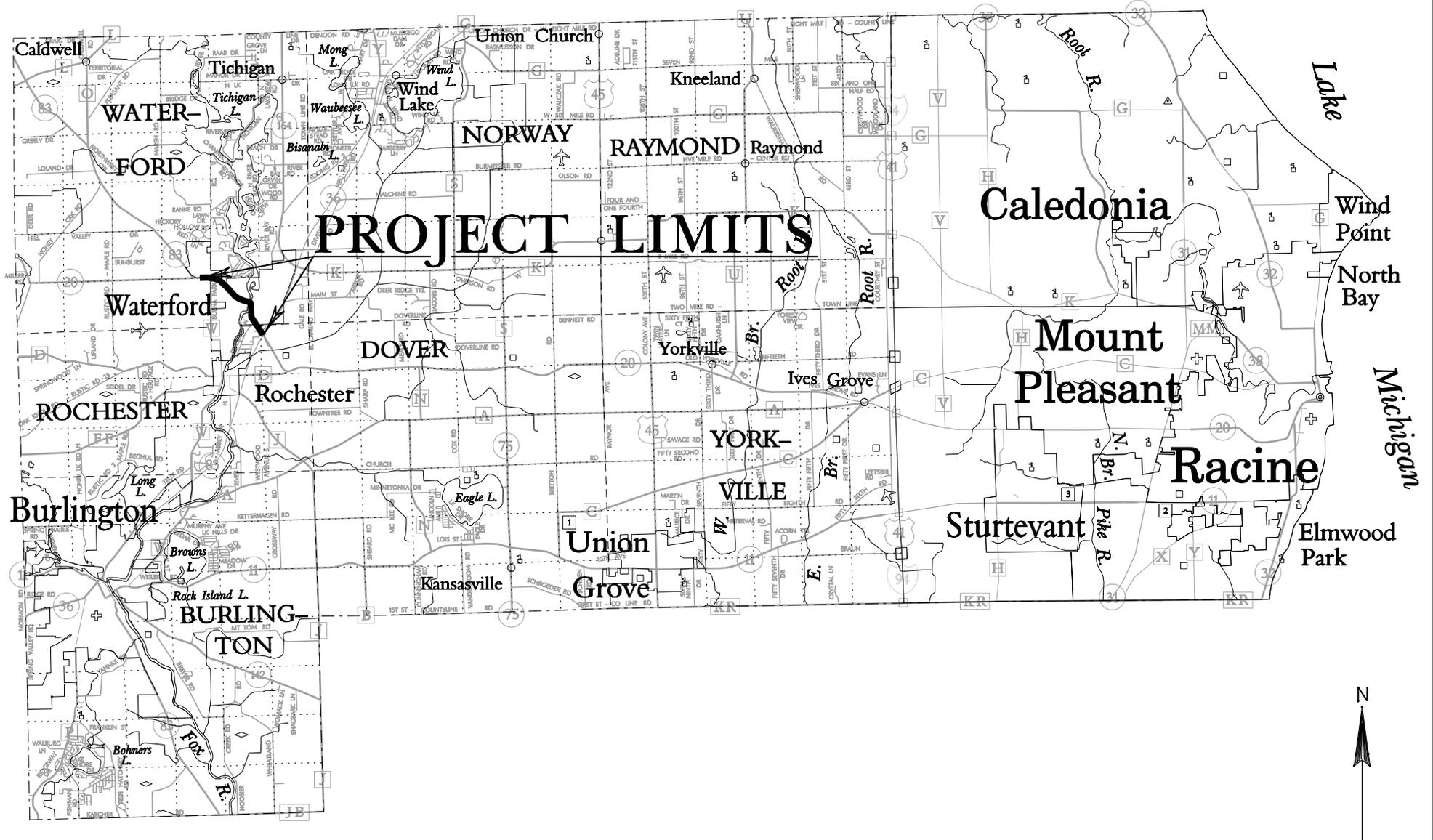
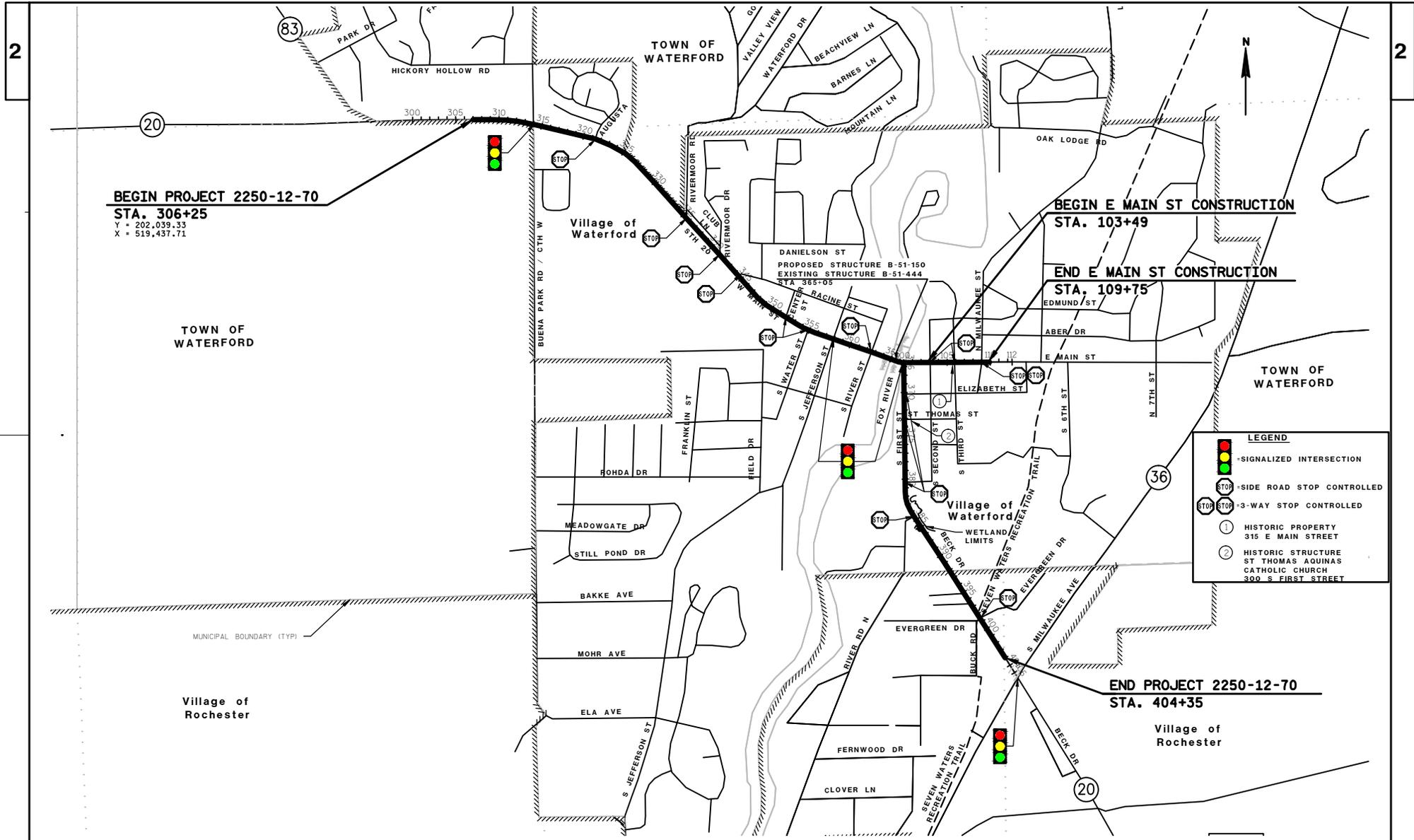


Exhibit 2

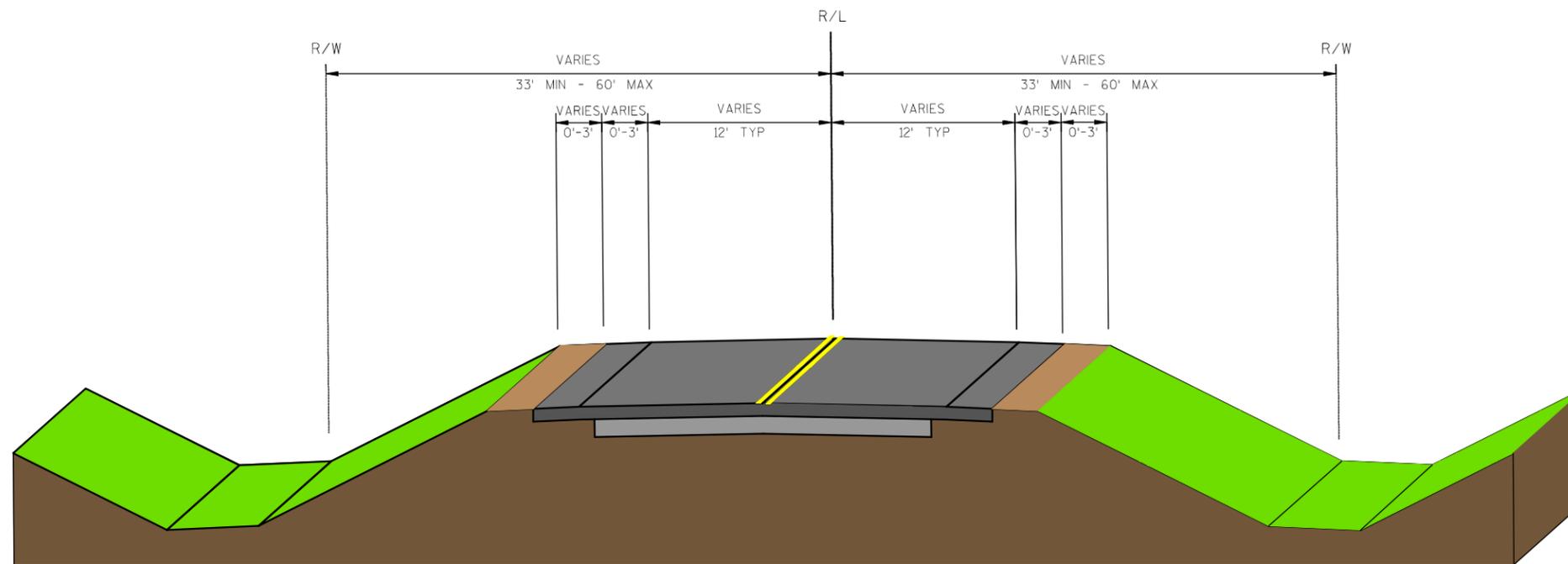
Project Overview



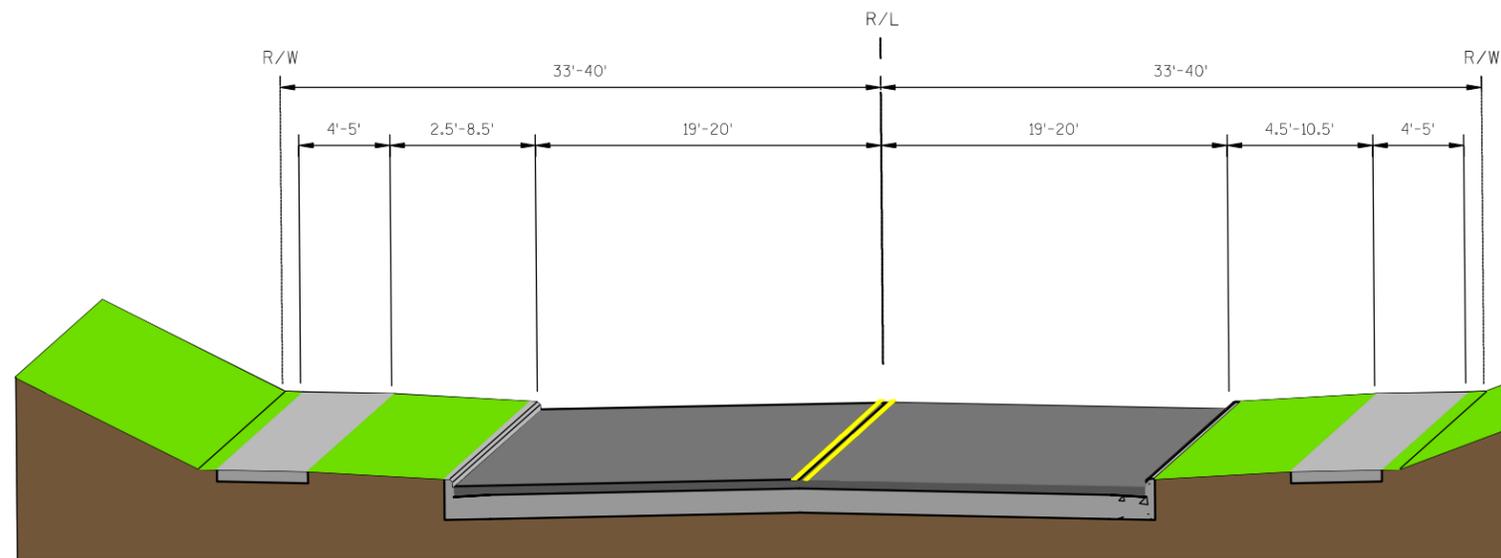
PROJECT NO: 2250-12-70 HWY: STH 20 COUNTY: RACINE PROJECT OVERVIEW SHEET ----- **E**

Exhibit 3

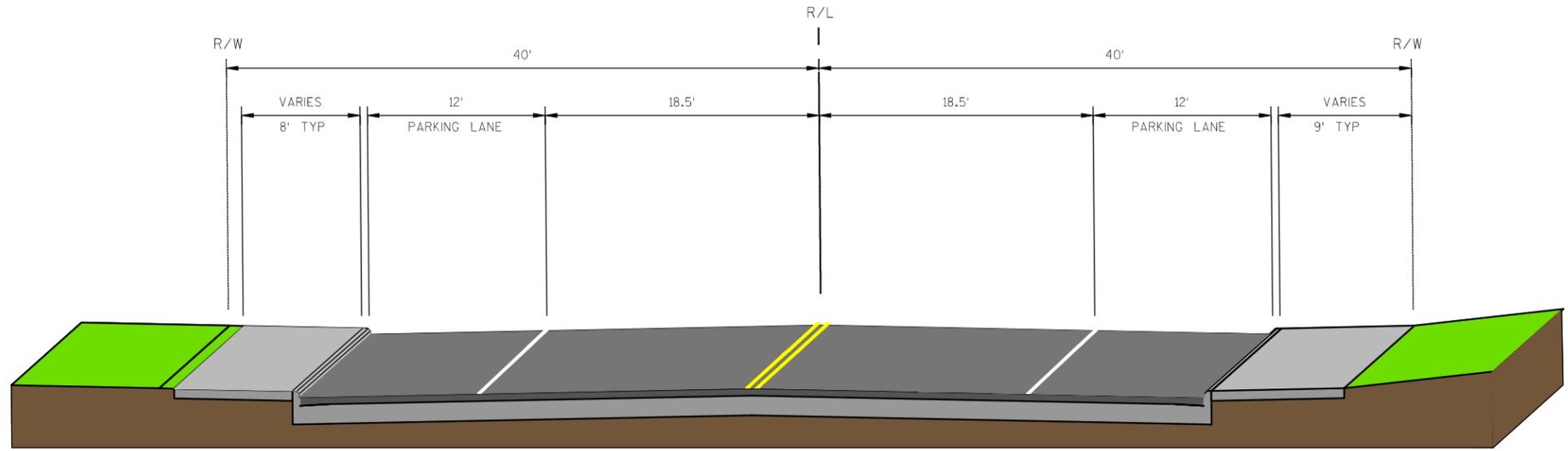
Existing Typical Sections



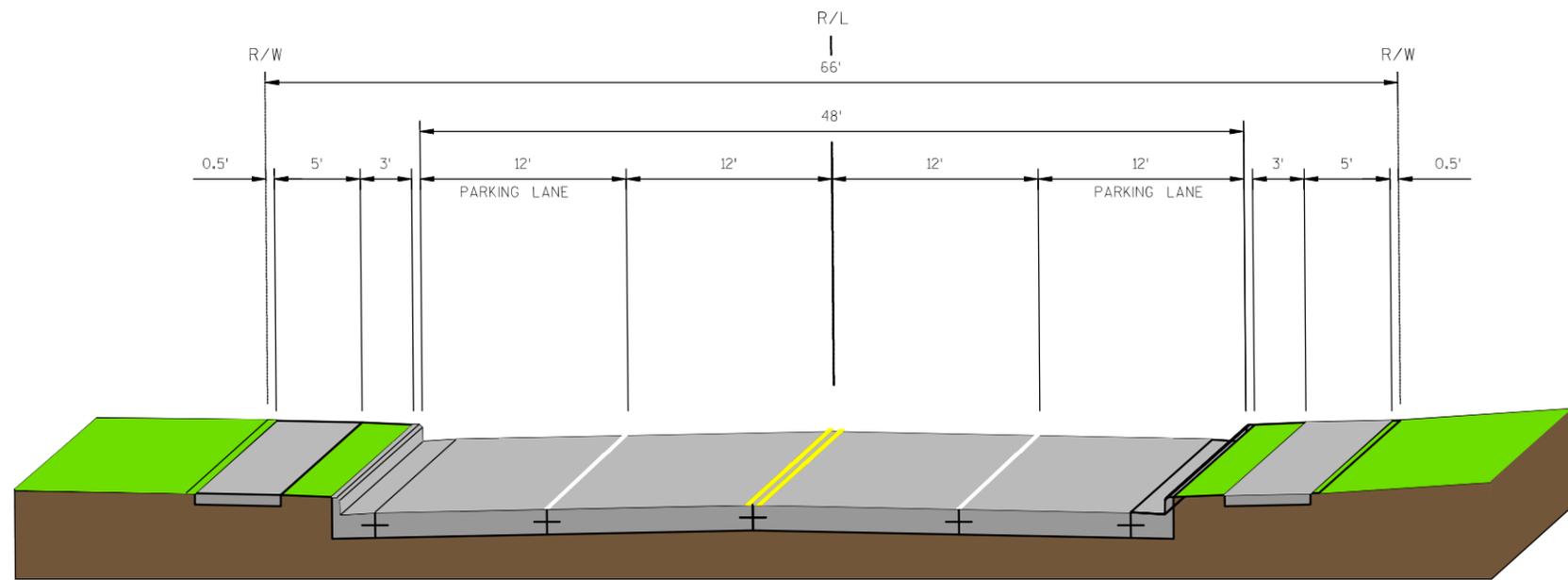
EXISTING TYPICAL SECTION
WIS 20/83 (W MAIN ST)
 BUENA PARK ROAD TO RIVERMOOR DRIVE



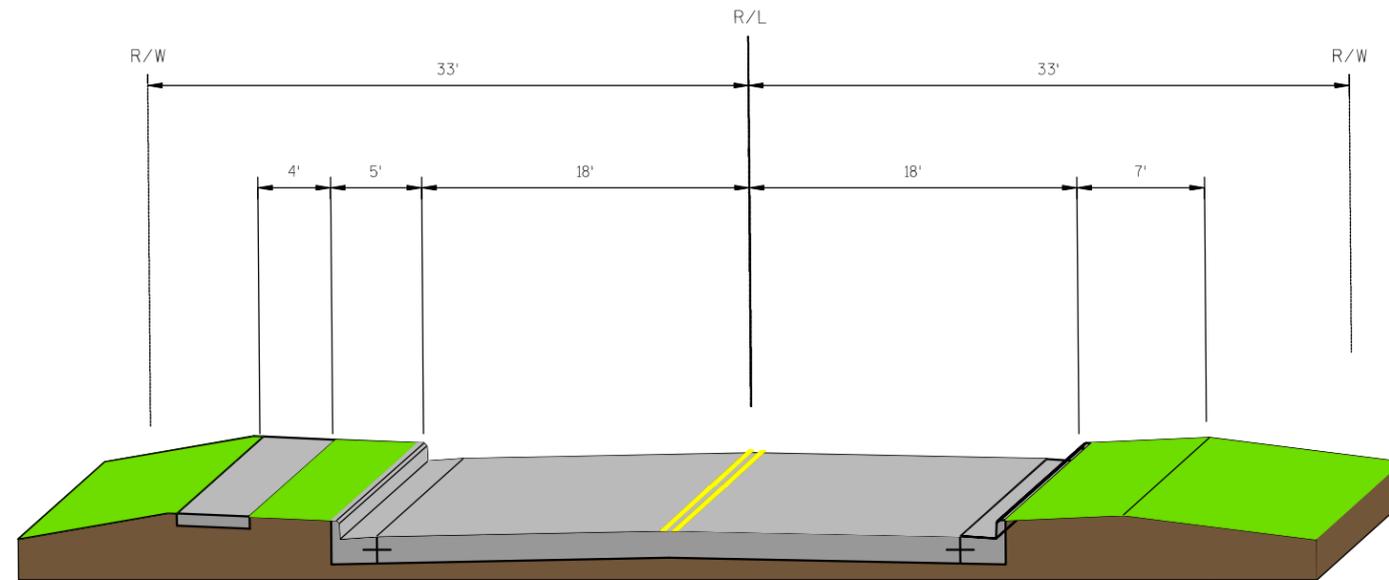
EXISTING TYPICAL SECTION
WIS 20/83 (W MAIN ST)
 RIVERMOOR DRIVE TO JEFFERSON STREET



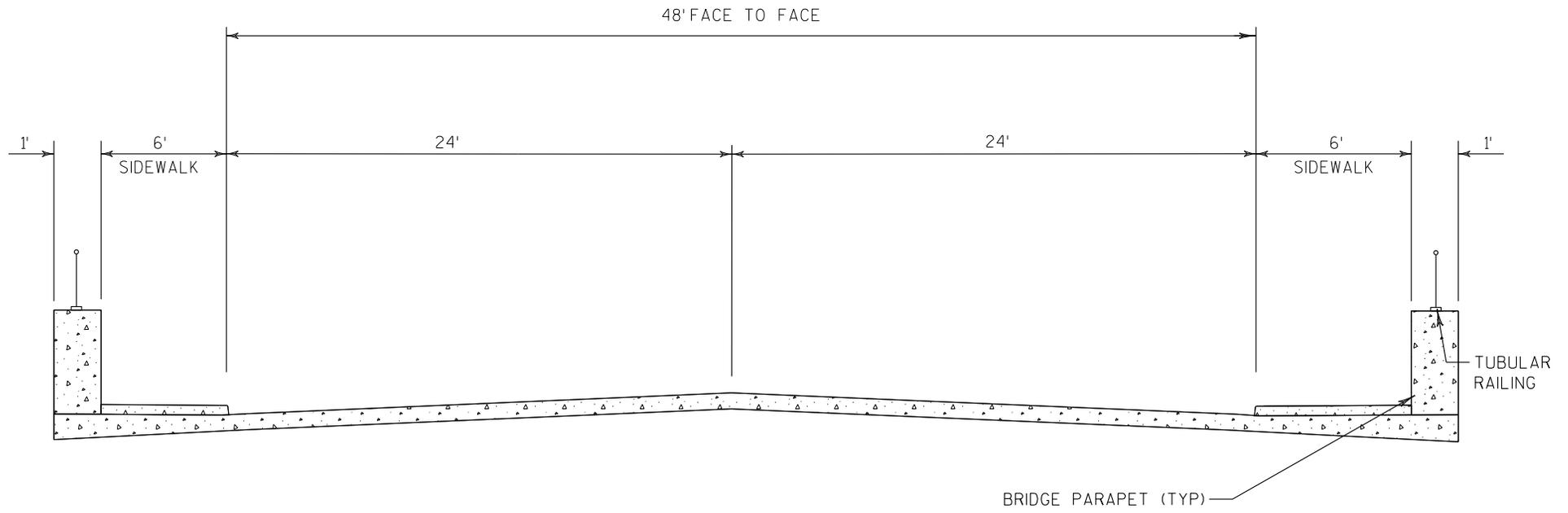
EXISTING TYPICAL SECTION
WIS 20/83 (W MAIN ST)
 JEFFERSON STREET TO SOUTH FIRST STREET



EXISTING TYPICAL SECTION
WIS 20/83 (FIRST STREET)
 E MAIN STREET TO RIVER ROAD
E MAIN STREET
 SOUTH FIRST STREET TO MILWAUKEE STREET



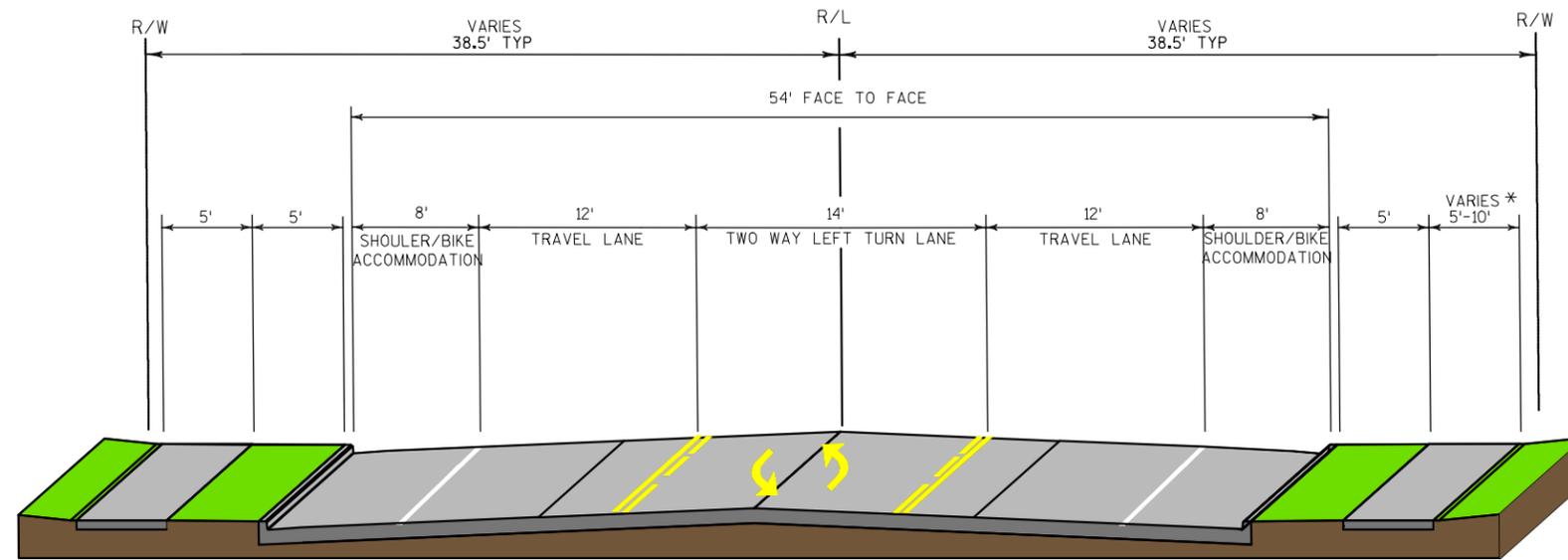
EXISTING TYPICAL SECTION
WIS 20/83 (BECK DRIVE)
RIVER ROAD TO WIS 36



EXISTING TYPICAL SECTION
STH 20/83 - BRIDGE OVER THE FOX RIVER

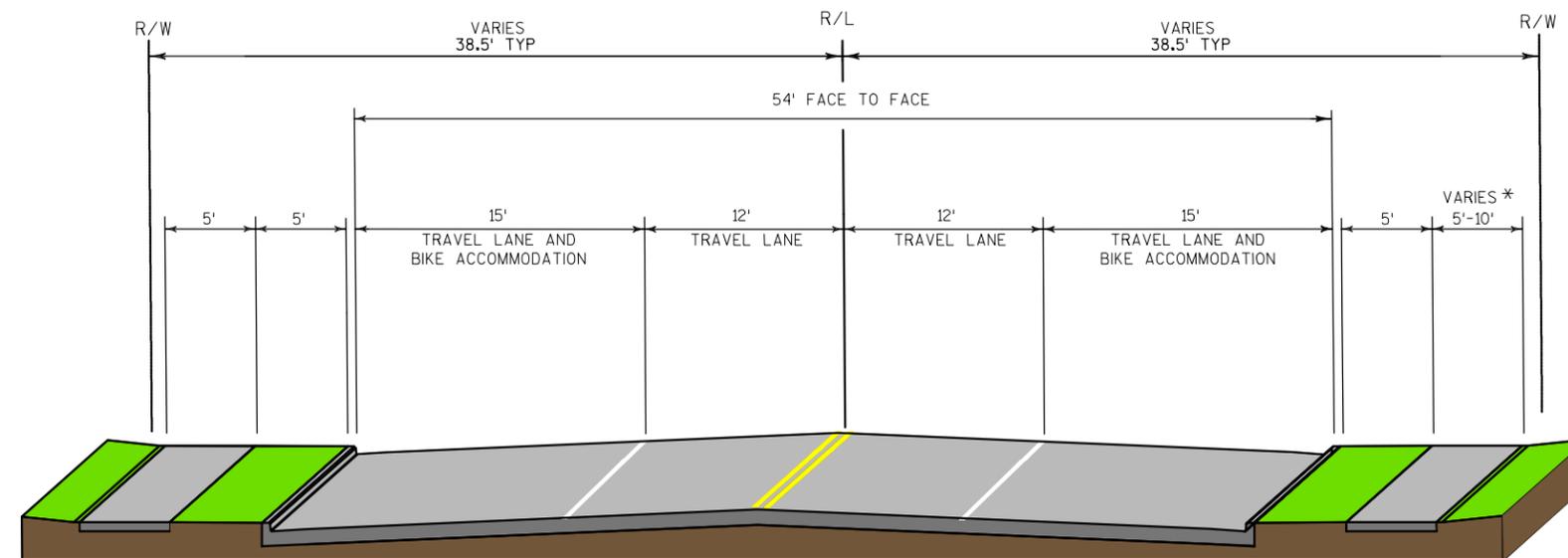
Exhibit 4

Proposed Typical Sections

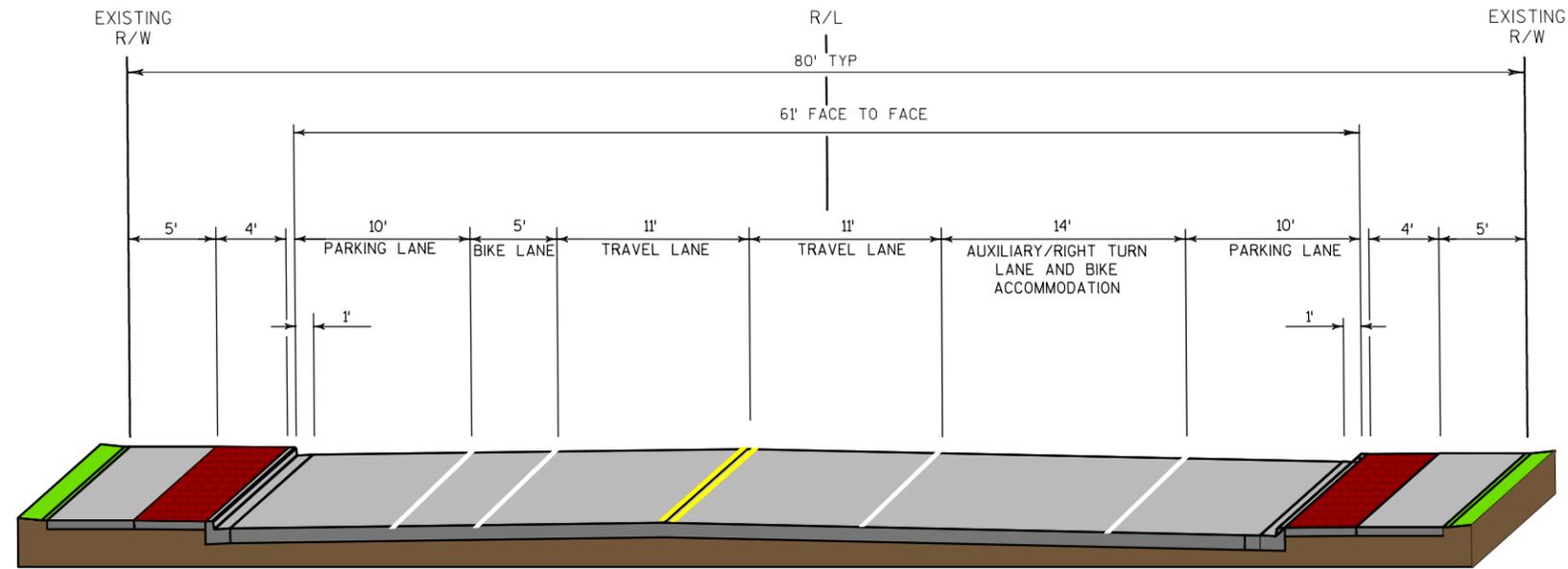


PROPOSED TYPICAL SECTION
WIS 20/83 RECONSTRUCTION - 2-LANE WITH TWO WAY LEFT TURN LANE (TWLTL)
MAIN STREET
BUENA PARK ROAD TO JEFFERSON STREET

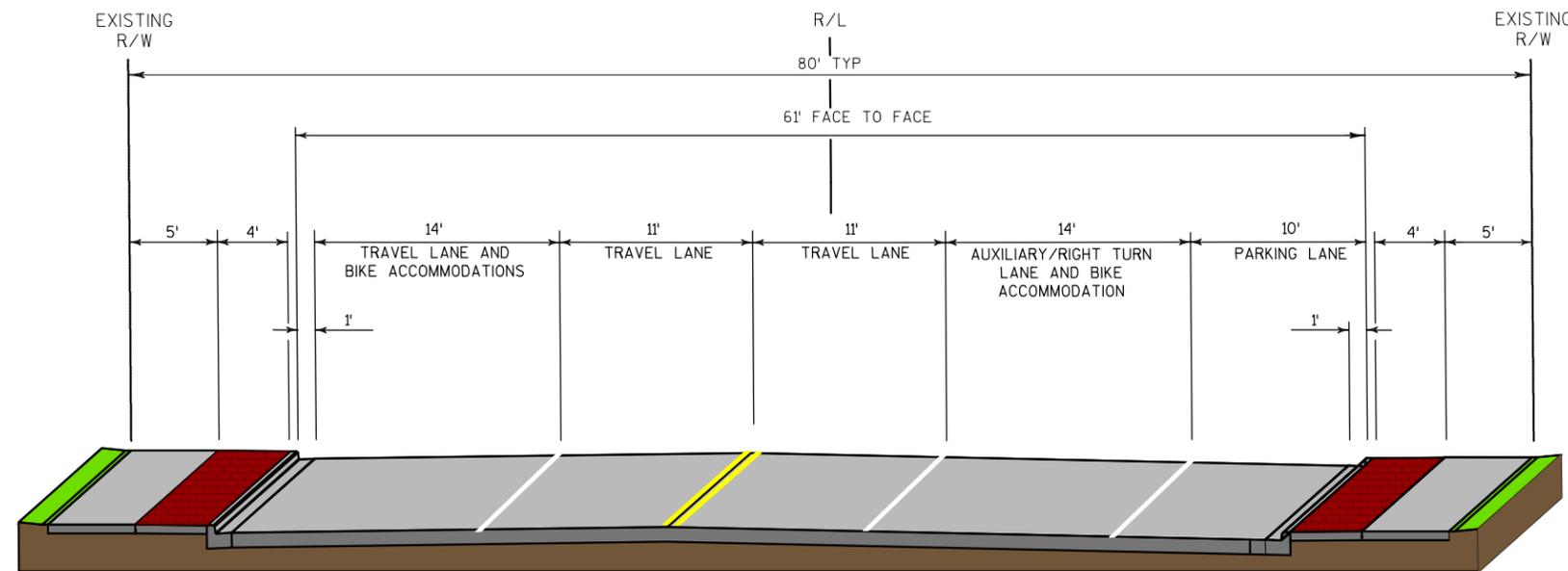
* 10' MULTI-PURPOSE PATH FROM BUENA PARK ROAD TO JUST WEST OF CENTER STREET



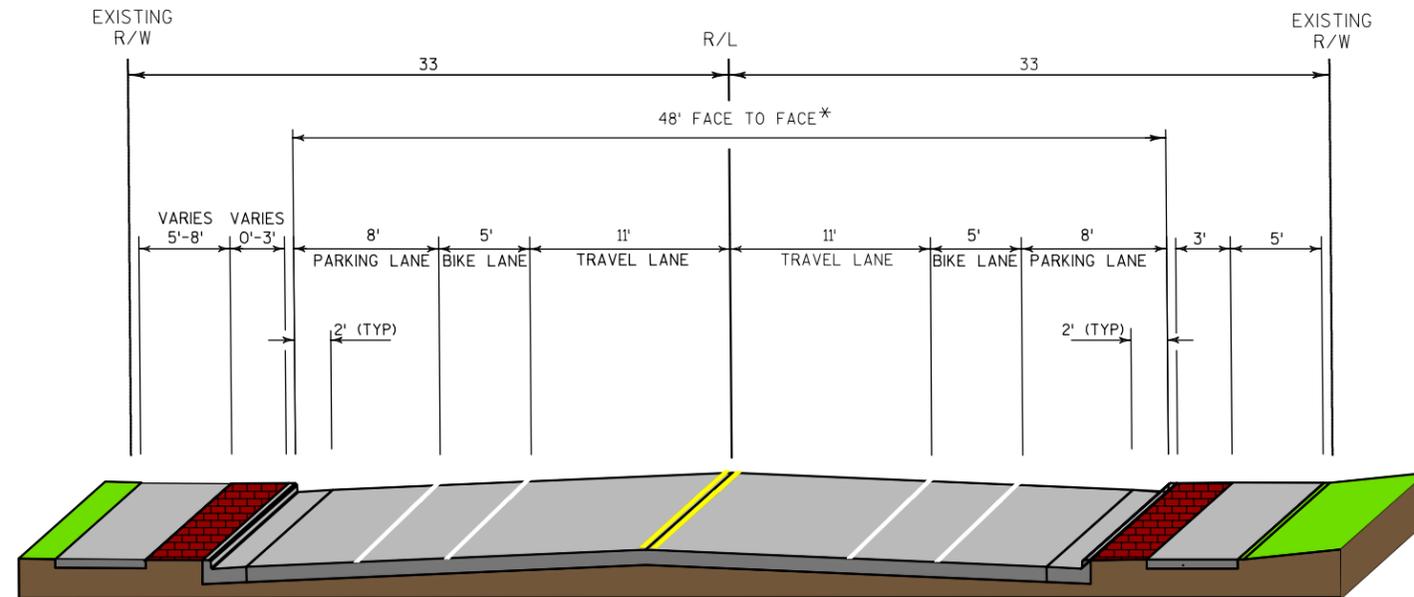
PROPOSED TYPICAL SECTION
WIS 20/83 FUTURE LANE CONFIGURATION - 4-LANE UNDIVIDED, NO PARKING
MAIN STREET
BUENA PARK ROAD TO JEFFERSON STREET



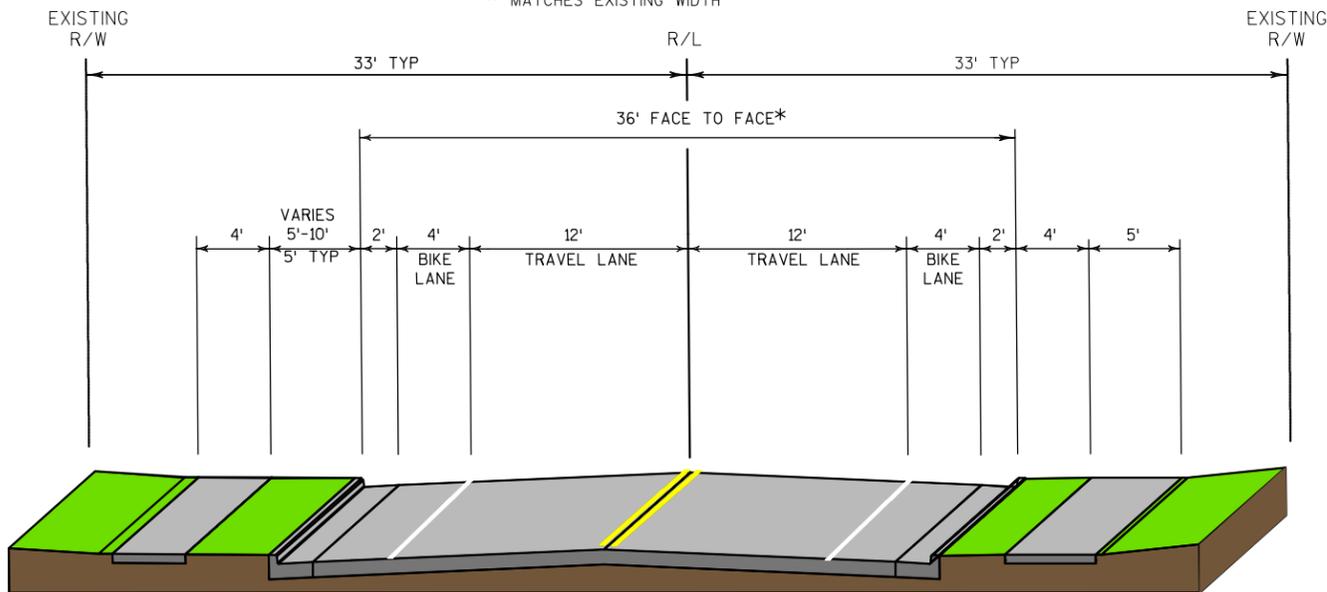
PROPOSED TYPICAL SECTION
WIS 20/83 RECONSTRUCTION - 3-LANE UNDIVIDED, PARKING BOTH SIDES
MAIN STREET
 JEFFERSON STREET TO SOUTH FIRST STREET



PROPOSED TYPICAL SECTION
WIS 20/83 FUTURE LANE CONFIGURATION - 4-LANE UNDIVIDED, PARKING ONE SIDE
MAIN STREET
 JEFFERSON STREET TO SOUTH FIRST STREET

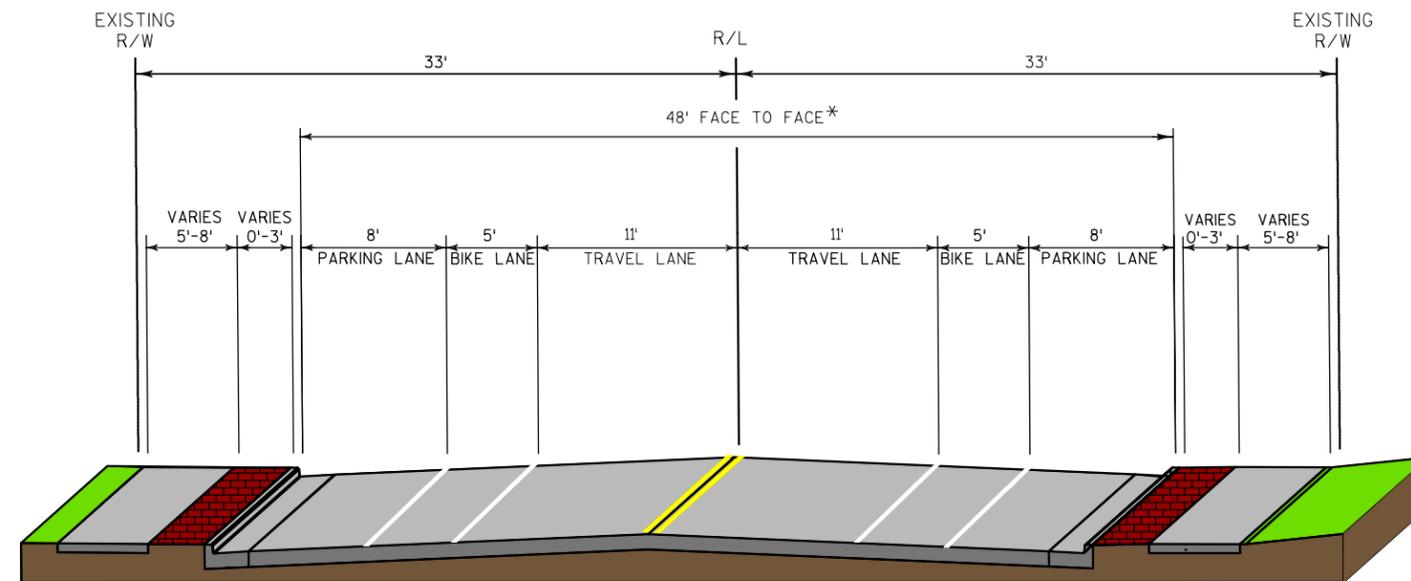


PROPOSED TYPICAL SECTION
WIS 20/83 RECONSTRUCTION - 2-LANE UNDIVIDED, PARKING BOTH SIDES
1ST STREET
E. MAIN STREET TO RIVER ROAD
FACING SOUTH
 * MATCHES EXISTING WIDTH



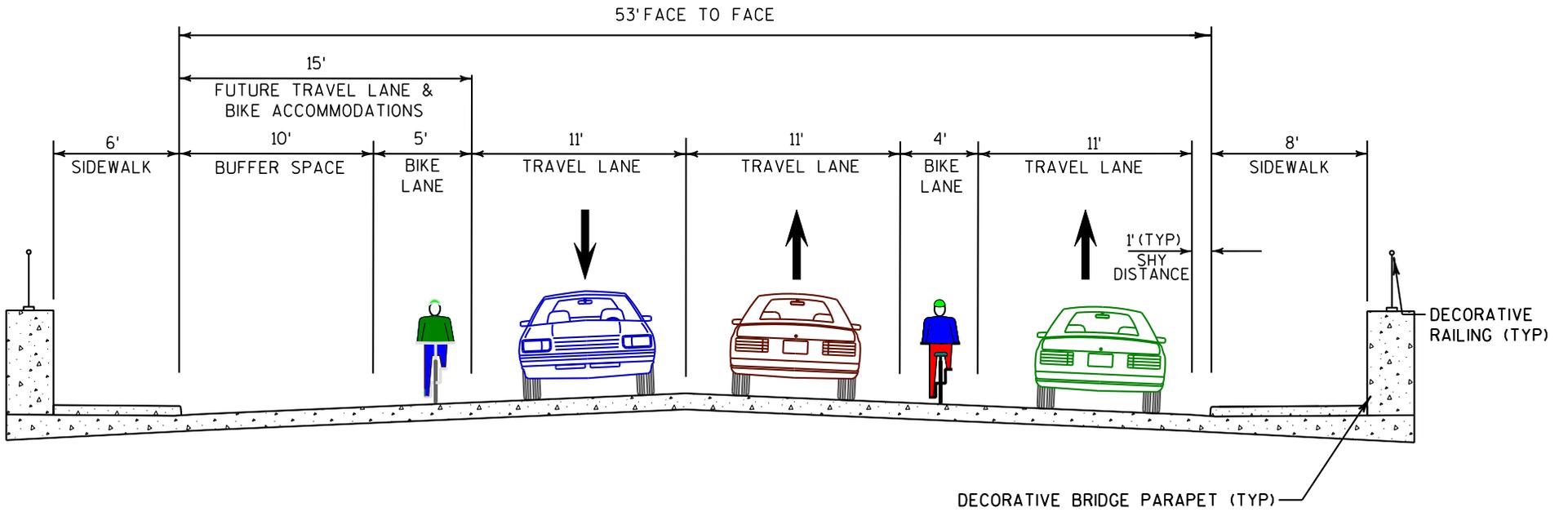
PROPOSED TYPICAL SECTION
WIS 20/83 RECONSTRUCTION - 2-LANE UNDIVIDED, NO PARKING
BECK DRIVE
RIVER ROAD TO WIS 36
FACING SOUTH
 * MATCHES EXISTING WIDTH

ID 2250-12-00



PROPOSED TYPICAL SECTION
E MAIN STREET RECONSTRUCTION - 2-LANE UNDIVIDED, PARKING BOTH SIDES
SOUTH FIRST STREET TO N MILWAUKEE STREET
FACING EAST

* MATCHES EXISTING WIDTH



**PROPOSED TYPICAL SECTION
 STH 20/83 - BRIDGE OVER THE FOX RIVER**

Exhibit 5

Preliminary Plan View Layouts & NEPA Limits

LEGEND

-  PROPOSED PAVEMENT OR SIDEWALK
-  PROPOSED CURB & GUTTER
-  PROPOSED RIGHT OF WAY
-  EXISTING RIGHT OF WAY
-  EXISTING PROPERTY LINE
-  TEMPORARY LIMITED EASEMENT
-  GRADING LIMITS
-  2011 AVERAGE DAILY TRAFFIC
2038 AVERAGE DAILY TRAFFIC
-  WETLAND
-  MUNICIPALITY LIMITS
-  RELOCATION
-  DITCH FLOW LINE
-  NEPA LIMITS



BEGIN PROJECT

FHB INVESTMENTS LLC

WIS 20/83

GRADE FOR FUTURE PATH BY OTHERS

7.800
10.500

VILLAGE OF WATERFORD

PEOPLES BANK
4103 MAIN ST

KRUSE
31232
HIGH DR

WEBSTER
31218
HIGH DR

PERSON
31206
HIGH DR

KETTERHAGEN
TRUST
31132
HIGH DR

STALBAUM
31126
HIGH DR

LEWIS TRUST

HILTON
4020
BUENA PARK RD

BUENA PARK RD / CTH W

FAIRVIEW STATION
ASSOCIATION I

VILLAGE OF WATERFORD

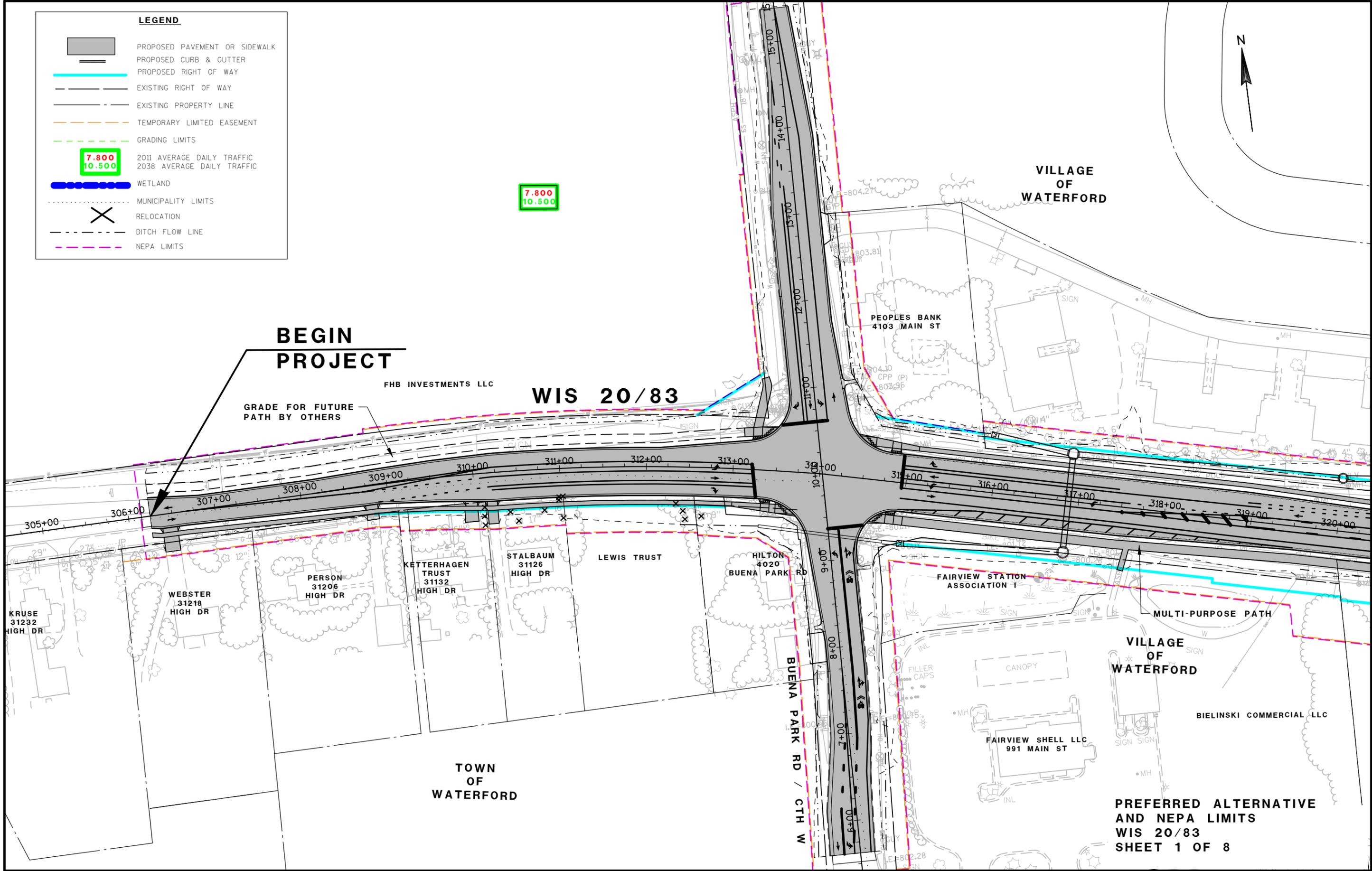
MULTI-PURPOSE PATH

BIELINSKI COMMERCIAL LLC

FAIRVIEW SHELL LLC
991 MAIN ST

TOWN OF WATERFORD

PREFERRED ALTERNATIVE
AND NEPA LIMITS
WIS 20/83
SHEET 1 OF 8



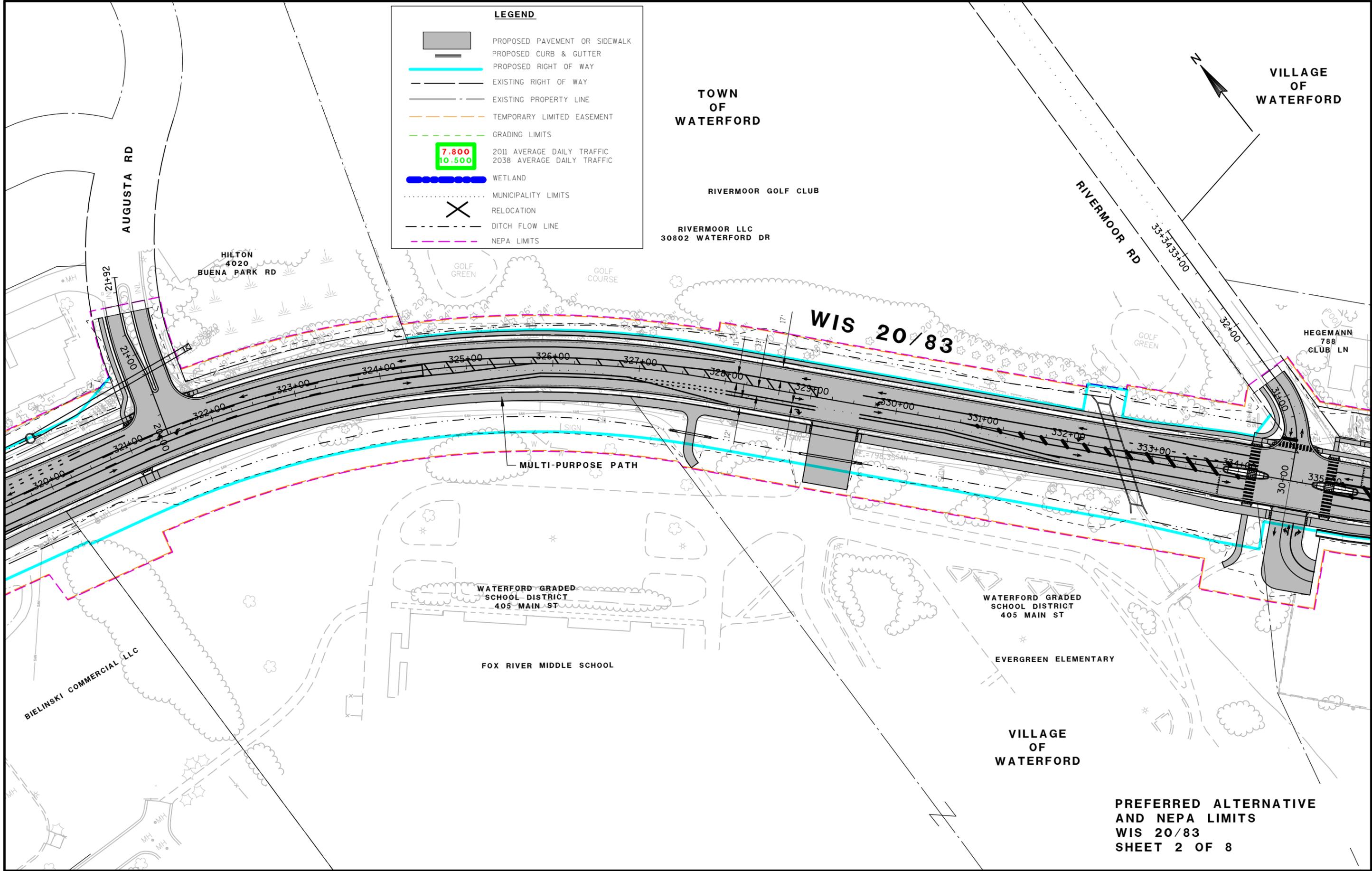
LEGEND	
	PROPOSED PAVEMENT OR SIDEWALK
	PROPOSED CURB & GUTTER
	PROPOSED RIGHT OF WAY
	EXISTING RIGHT OF WAY
	EXISTING PROPERTY LINE
	TEMPORARY LIMITED EASEMENT
	GRADING LIMITS
	2011 AVERAGE DAILY TRAFFIC 2038 AVERAGE DAILY TRAFFIC
	WETLAND
	MUNICIPALITY LIMITS
	RELOCATION
	DITCH FLOW LINE
	NEPA LIMITS

TOWN OF WATERFORD

RIVERMOOR GOLF CLUB

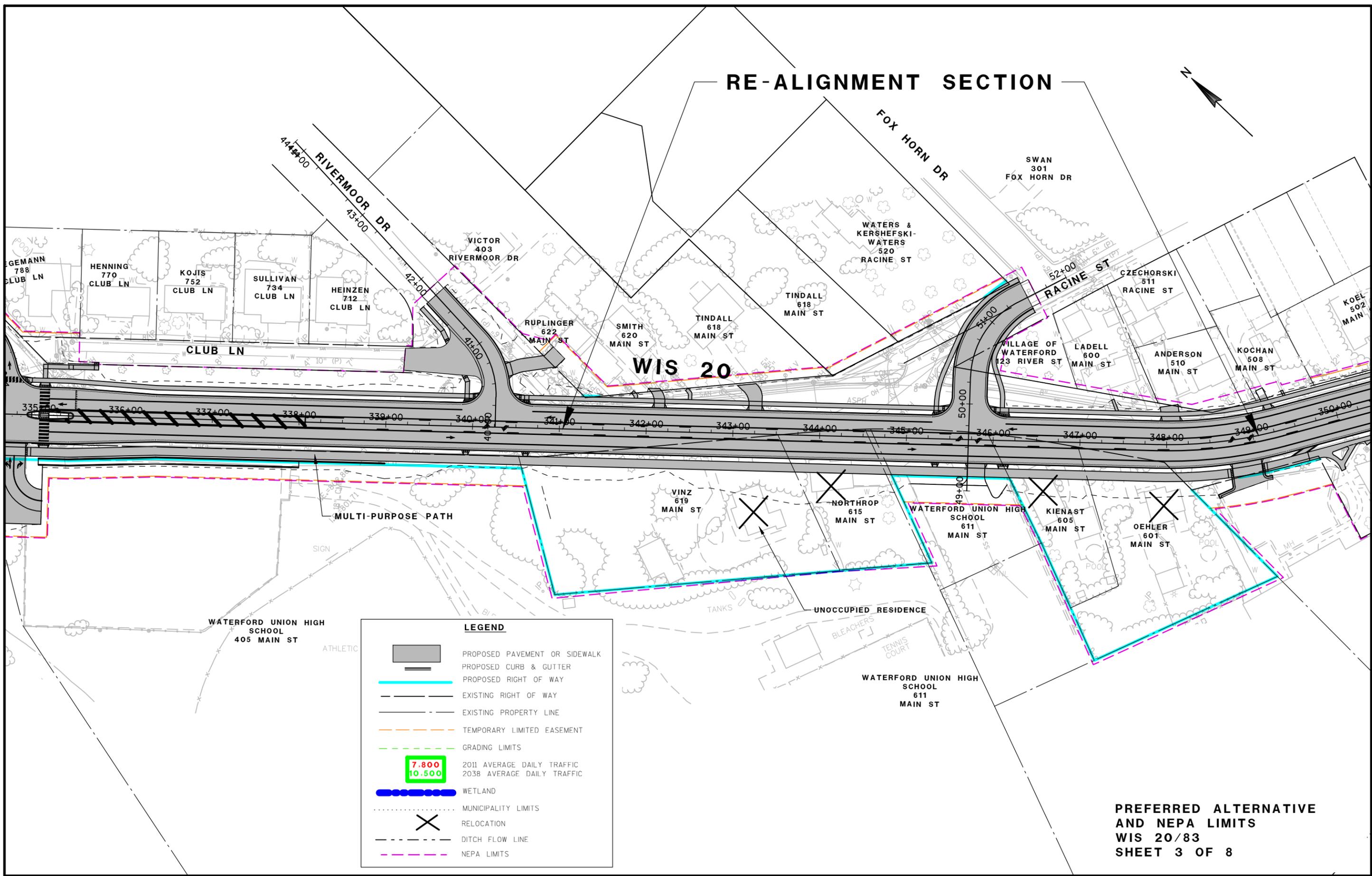
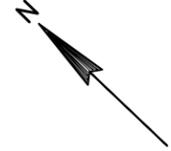
RIVERMOOR LLC
30802 WATERFORD DR

VILLAGE OF WATERFORD



**PREFERRED ALTERNATIVE
AND NEPA LIMITS
WIS 20/83
SHEET 2 OF 8**

RE-ALIGNMENT SECTION



LEGEND

-  PROPOSED PAVEMENT OR SIDEWALK
-  PROPOSED CURB & GUTTER
-  PROPOSED RIGHT OF WAY
-  EXISTING RIGHT OF WAY
-  EXISTING PROPERTY LINE
-  TEMPORARY LIMITED EASEMENT
-  GRADING LIMITS
-  2011 AVERAGE DAILY TRAFFIC
2038 AVERAGE DAILY TRAFFIC
-  WETLAND
-  MUNICIPALITY LIMITS
-  RELOCATION
-  DITCH FLOW LINE
-  NEPA LIMITS

**PREFERRED ALTERNATIVE
AND NEPA LIMITS
WIS 20/83
SHEET 3 OF 8**

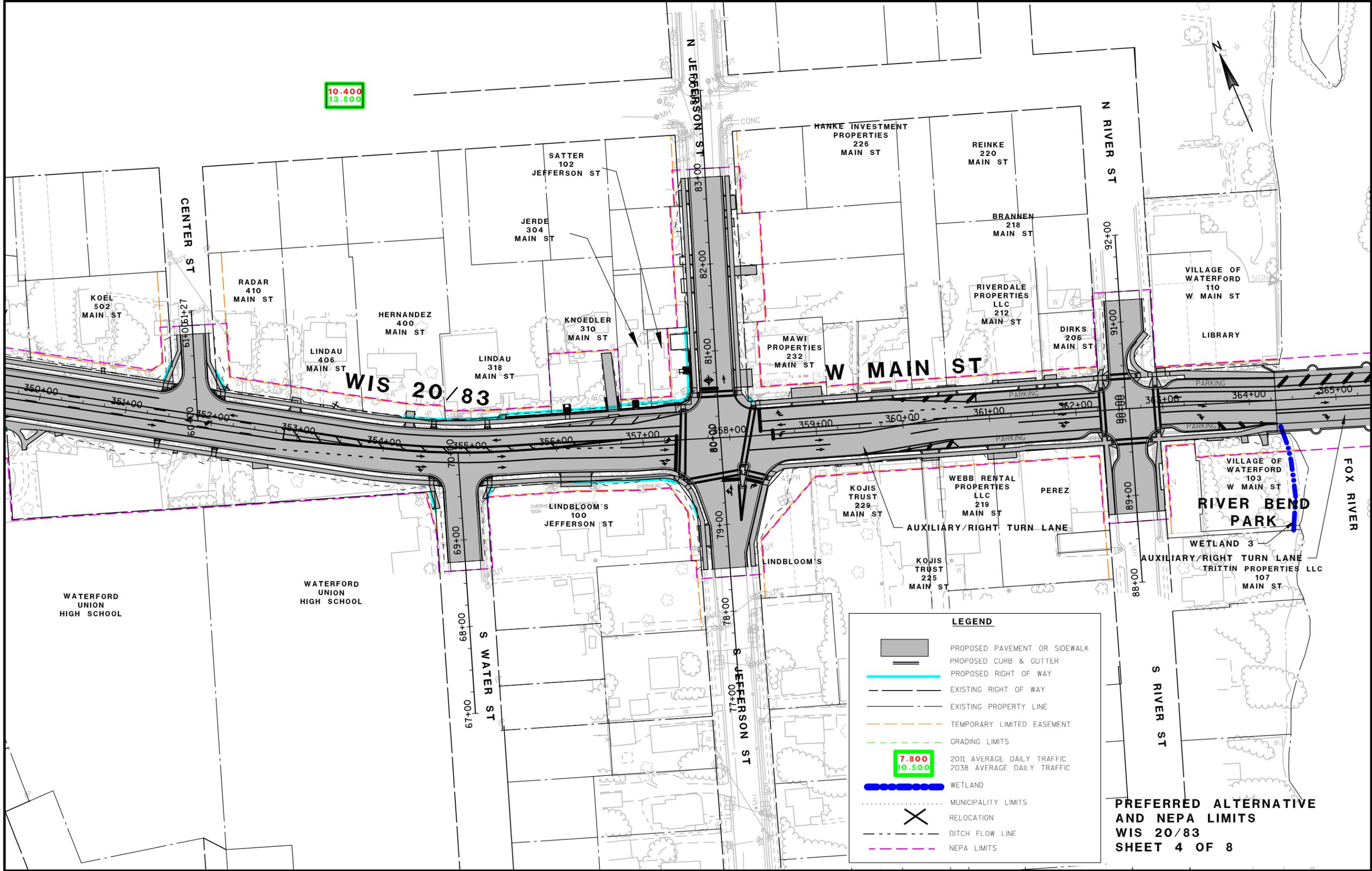
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WIS 20/83

LEGEND

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- PROPOSED CURB & GUTTER
- PROPOSED RIGHT OF WAY
- EXISTING RIGHT OF WAY
- EXISTING PROPERTY LINE
- TEMPORARY LIMITED EASEMENT
- GRADING LIMITS
- 2011 AVERAGE DAILY TRAFFIC
2038 AVERAGE DAILY TRAFFIC
- WETLAND
- MUNICIPALITY LIMITS
- RELOCATION
- DITCH FLOW LINE
- NEPA LIMITS

PREFERRED ALTERNATIVE
AND NEPA LIMITS
WIS 20/83
SHEET 4 OF 8





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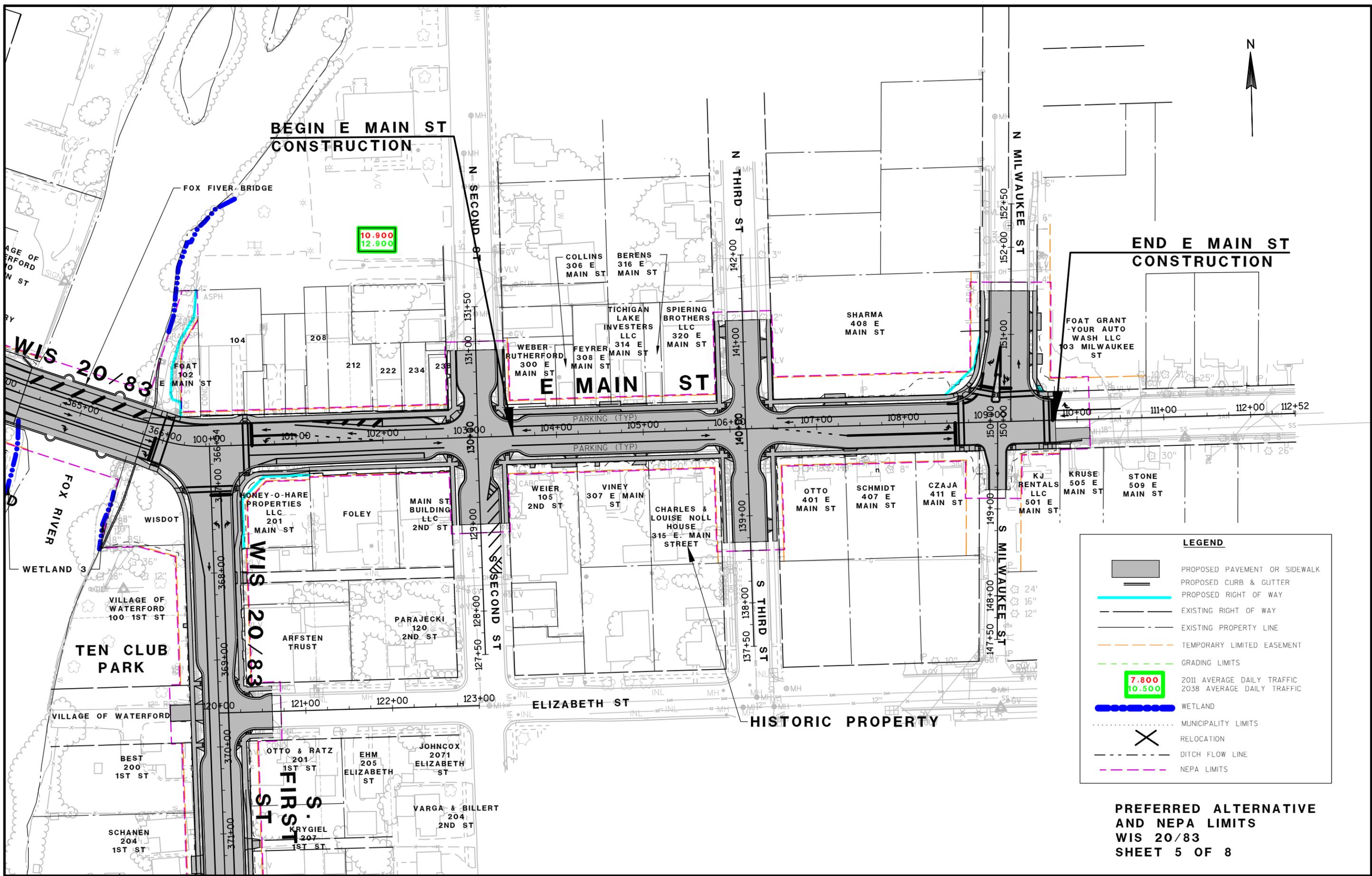
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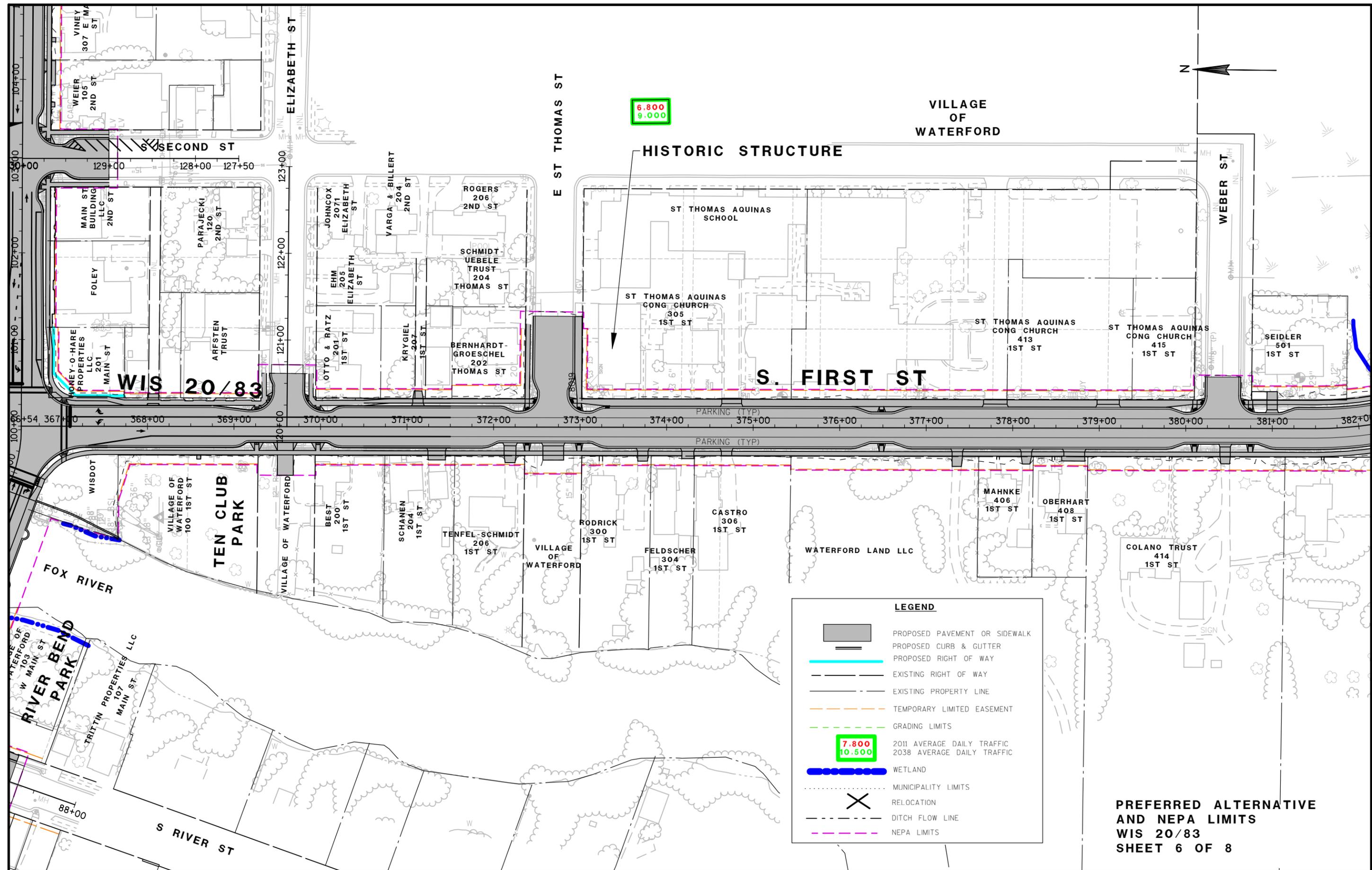
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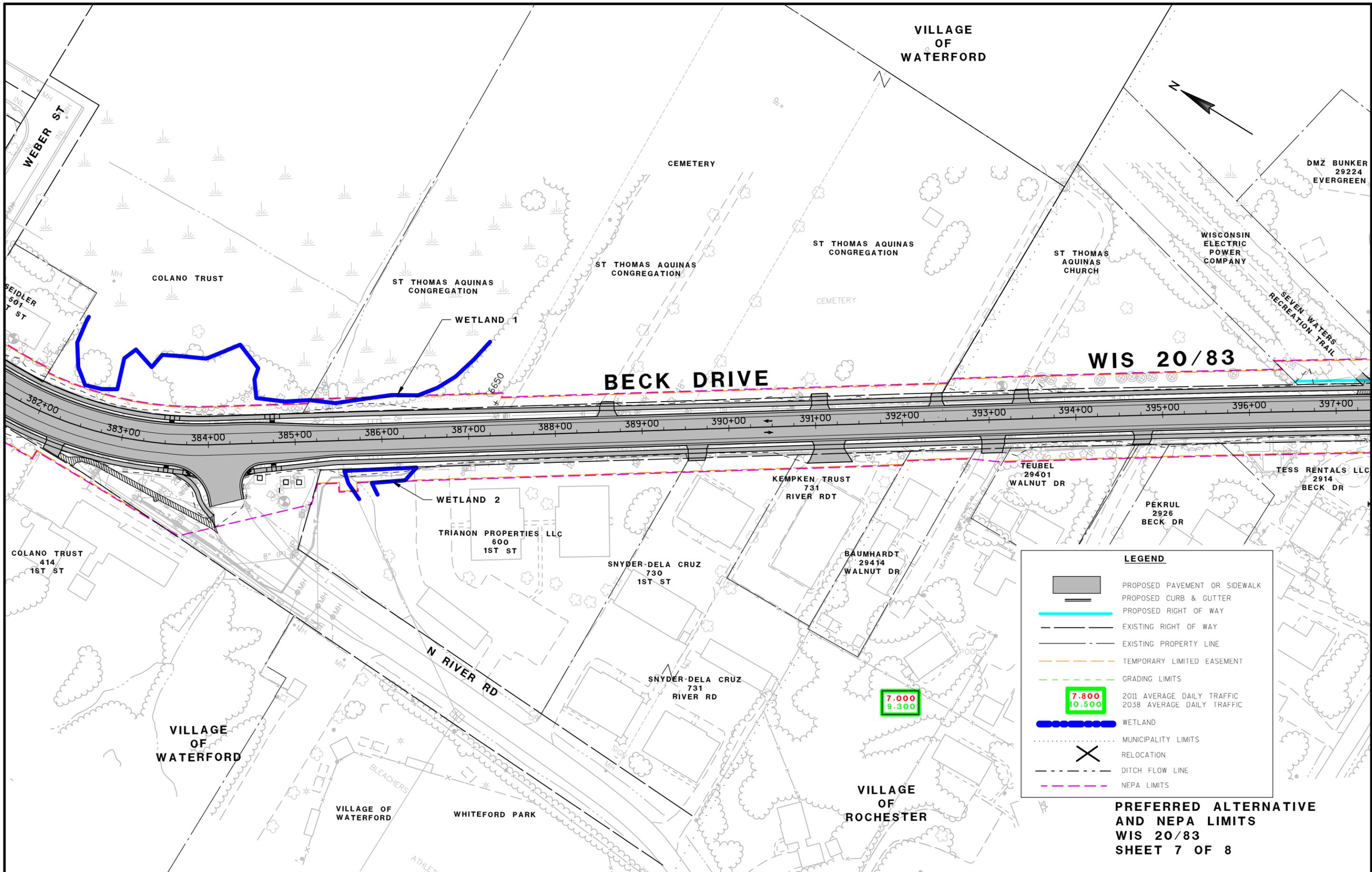
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- RELOCATION
- DITCH FLOW LINE
- NEPA LIMITS

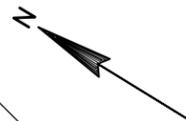
**PREFERRED ALTERNATIVE
AND NEPA LIMITS
WIS 20/83
SHEET 5 OF 8**







VILLAGE OF WATERFORD



DMZ BUNKER
29224
EVERGREEN

WISCONSIN
ELECTRIC
POWER
COMPANY

SEVEN WATERS
RECREATION TRAIL

ST THOMAS
AQUINAS
CHURCH

ST THOMAS AQUINAS
CONGREGATION

ST THOMAS AQUINAS
CONGREGATION

ST THOMAS AQUINAS
CONGREGATION

COLANO TRUST

BECK DRIVE

WIS 20/83

WEBER ST

SEIDLER
501
ST

382+00 383+00 384+00 385+00 386+00 387+00 388+00 389+00 390+00 391+00 392+00 393+00 394+00 395+00 396+00 397+00

COLANO TRUST
414
1ST ST

WETLAND 2
TRIANON PROPERTIES LLC
600
1ST ST

SNYDER-DELA CRUZ
730
1ST ST

KEMPKEN TRUST
731
RIVER RD

BAUMHARDT
29414
WALNUT DR

TEUBEL
29401
WALNUT DR

PEKRUL
2926
BECK DR

TESS RENTALS LLC
2914
BECK DR

VILLAGE OF WATERFORD

N RIVER RD

SNYDER-DELA CRUZ
731
RIVER RD

7.000
9.300

VILLAGE OF ROCHESTER

VILLAGE OF WATERFORD

WHITEFORD PARK

LEGEND

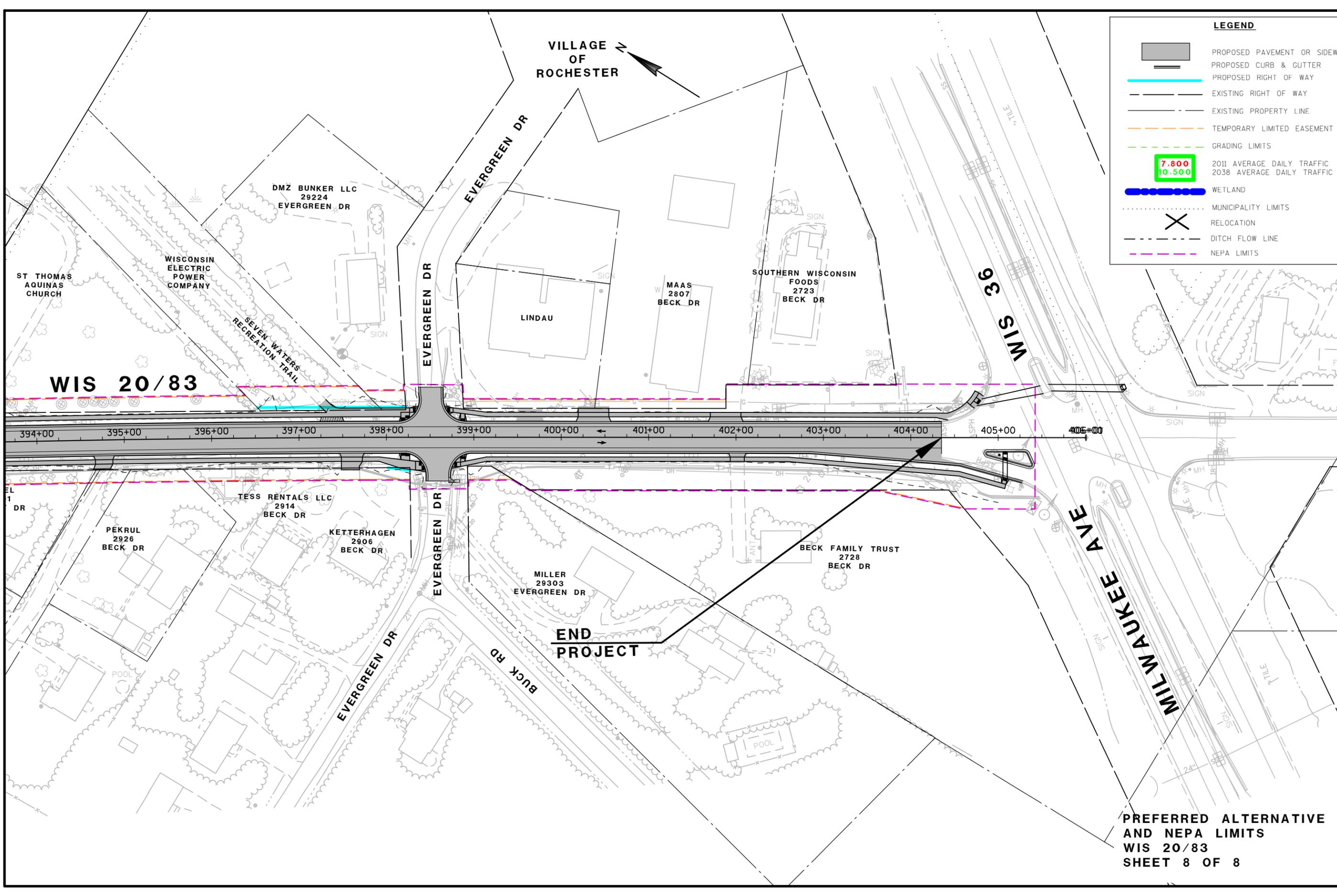
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-  EXISTING PROPERTY LINE
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-  GRADING LIMITS
-  2011 AVERAGE DAILY TRAFFIC
2038 AVERAGE DAILY TRAFFIC
-  WETLAND
-  MUNICIPALITY LIMITS
-  RELOCATION
-  DITCH FLOW LINE
-  NEPA LIMITS

**PREFERRED ALTERNATIVE
AND NEPA LIMITS
WIS 20/83
SHEET 7 OF 8**

VILLAGE OF ROCHESTER

LEGEND

-  PROPOSED PAVEMENT OR SIDEWALK
-  PROPOSED CURB & GUTTER
-  PROPOSED RIGHT OF WAY
-  EXISTING RIGHT OF WAY
-  EXISTING PROPERTY LINE
-  TEMPORARY LIMITED EASEMENT
-  GRADING LIMITS
-  2011 AVERAGE DAILY TRAFFIC
2038 AVERAGE DAILY TRAFFIC
-  WETLAND
-  MUNICIPALITY LIMITS
-  RELOCATION
-  DITCH FLOW LINE
-  NEPA LIMITS



WIS 20/83

END PROJECT

PREFERRED ALTERNATIVE AND NEPA LIMITS
WIS 20/83
SHEET 8 OF 8

Exhibit 6

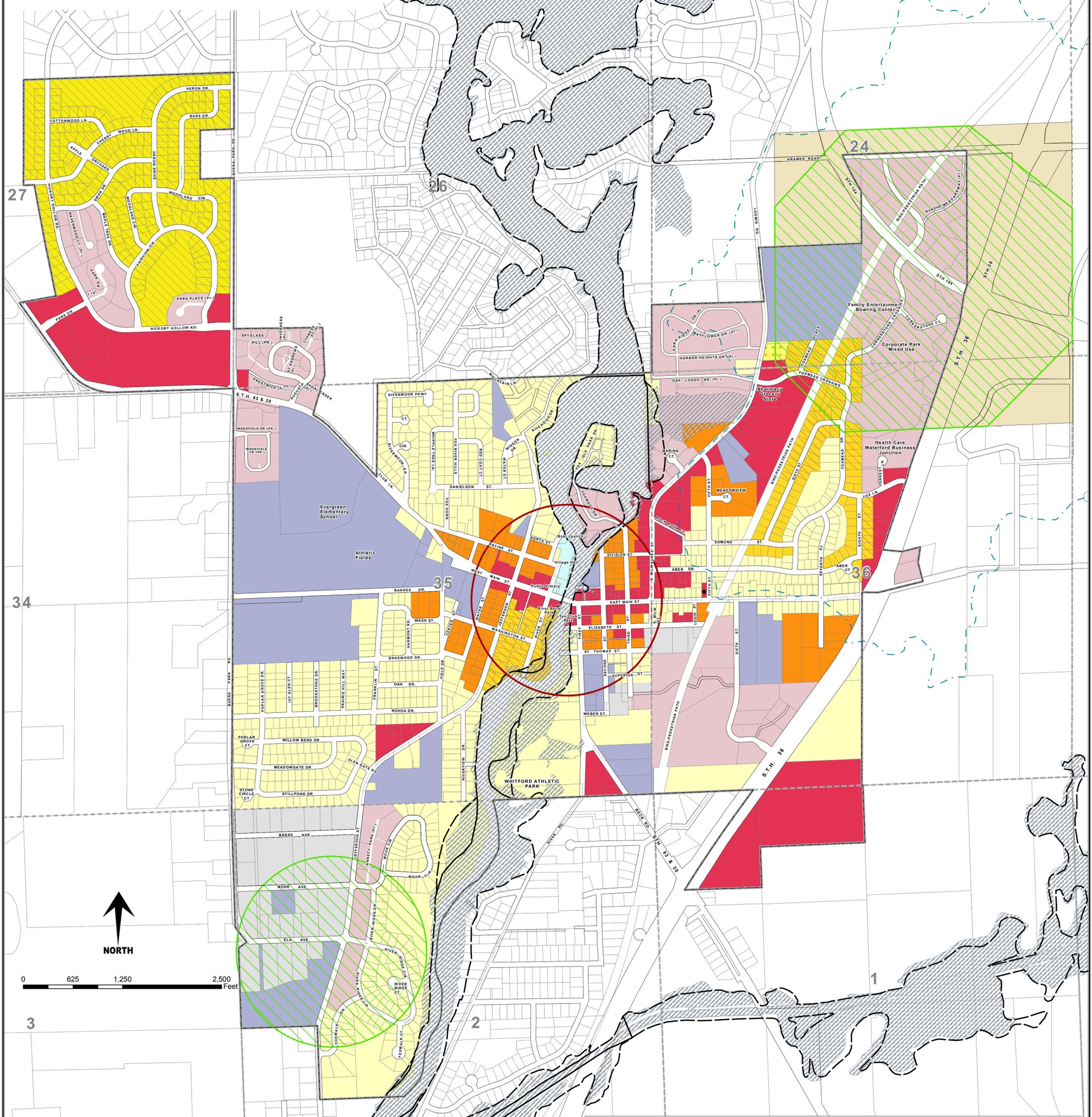
Detour Route

Exhibit 7

**Town of Waterford, Village of Waterford,
and Village of Rochester Land Use Plans**

ZONING MAP

VILLAGE OF WATERFORD, WISCONSIN
2011



Legend			
	Village Limits		Section Lines
	Parcels		FEMA Effective Floodplain
	Conditional Use		Future Floodplain
	ETZ		Farmland Drainage Boundary
	Heritage Overlay District		Wellhead Protection Area Overlay District

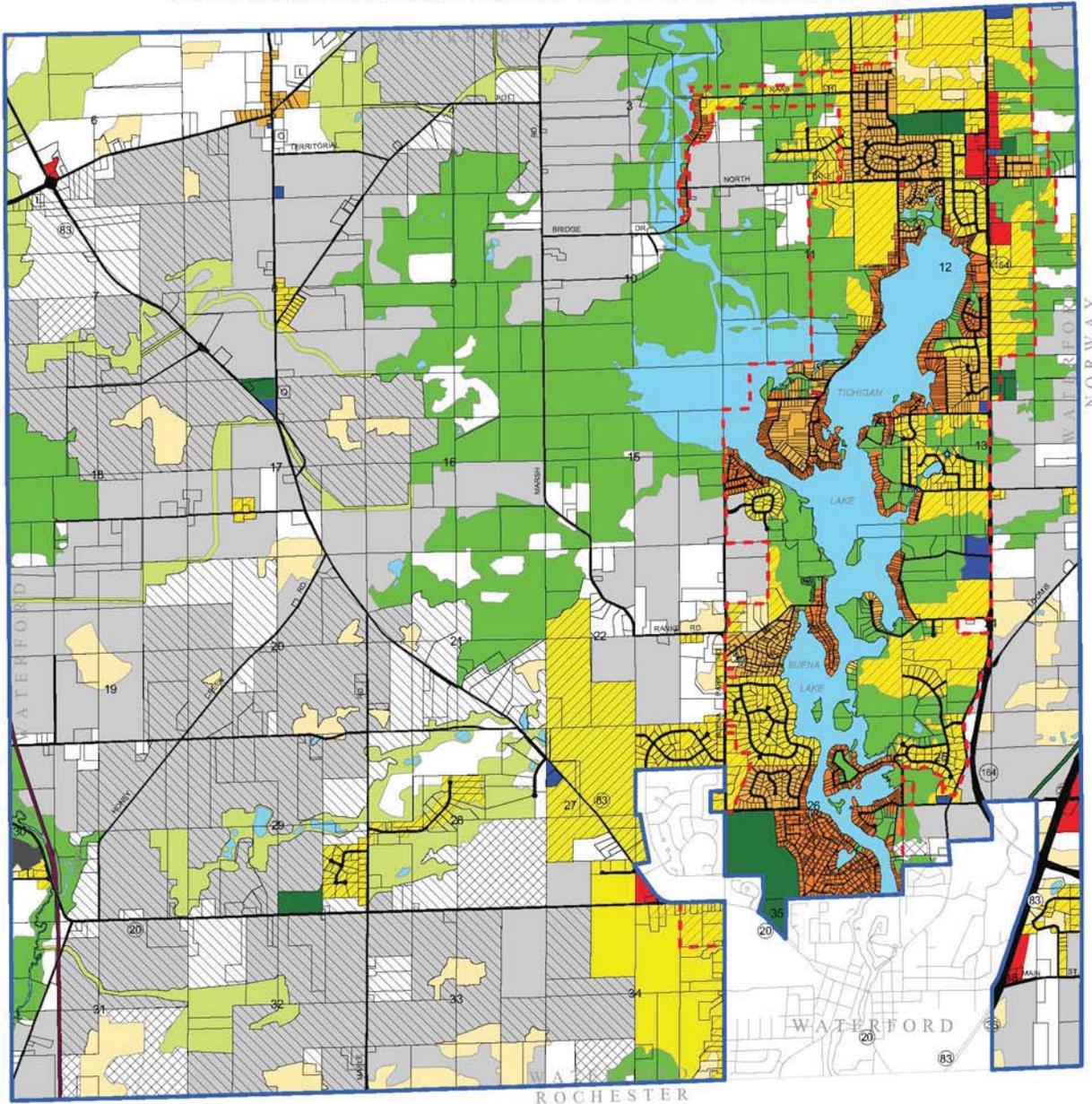
Zoning Districts			
	Single - Family Residence District		Business and Commercial District
	Single - Family Residence District A		Industrial District
	Single - Family Residence District B		Institutional District
	Two - Family Residence District		Municipal Campus District
	Two - Family Residence District B		Planned Community Development District
	Multiple Family Residence District		

Base map data is from Racine County GIS Dept. 2010. Floodplain layers are from FEMA and SEWRPC.

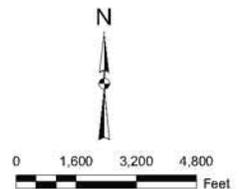


Map 16

RECOMMENDED LAND USE PLAN FOR THE TOWN OF WATERFORD: 2035

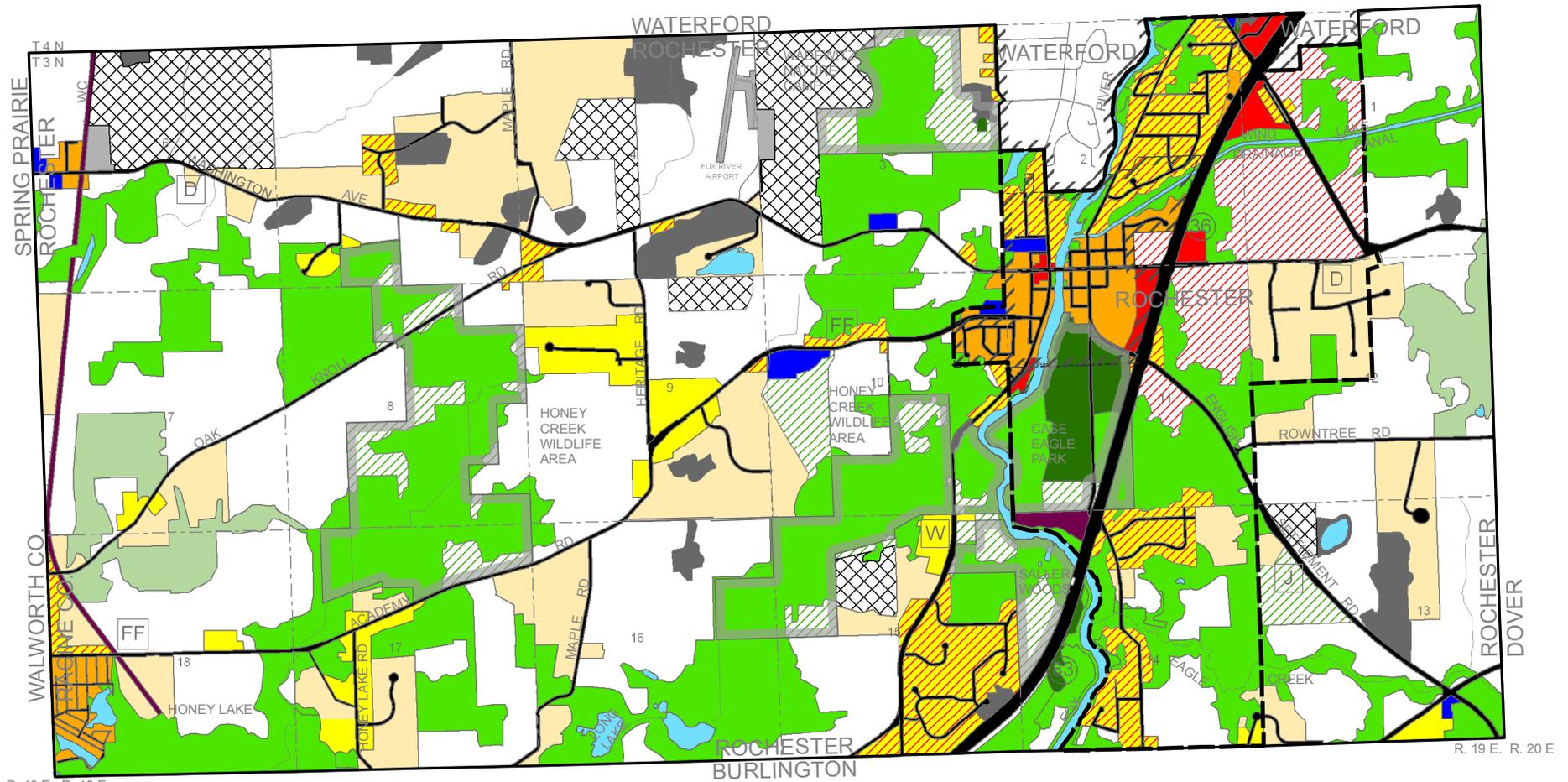


- | | |
|--|--|
|  SUBURBAN II RESIDENTIAL
(3.0 TO 4.99 ACRES PER DWELLING UNIT) |  EXTRACTIVE RESOURCE |
|  SUBURBAN I RESIDENTIAL
(1.5 TO 2.99 ACRES PER DWELLING UNIT) |  EXTRACTIVE (SAND AND GRAVEL OPERATION) |
|  LOW DENSITY RESIDENTIAL
(40,000 SQUARE FEET TO 1.49 ACRES PER DWELLING UNIT) |  PRIME AGRICULTURAL LAND |
|  MEDIUM-LOW DENSITY RESIDENTIAL (19,000 SQUARE FEET
TO 39,999 SQUARE FEET PER DWELLING UNIT) |  OTHER AGRICULTURAL, RURAL RESIDENTIAL, AND OPEN LAND |
|  MEDIUM DENSITY RESIDENTIAL (6,200 SQUARE FEET
TO 18,999 SQUARE FEET PER DWELLING UNIT) |  PRIMARY ENVIRONMENTAL CORRIDOR |
|  COMMERCIAL |  SECONDARY ENVIRONMENTAL CORRIDOR |
|  INDUSTRIAL |  ISOLATED NATURAL RESOURCE AREA |
|  TRANSPORTATION, COMMUNICATION, AND UTILITIES |  SURFACE WATER |
|  STREETS AND HIGHWAYS |  PLANNED URBAN SERVICE AREA BOUNDARY |
|  GOVERNMENTAL AND INSTITUTIONAL |  TOWN BOUNDARY |
|  RECREATIONAL |  PARCEL LINE |



Source: SEWRPC.

RECOMMENDED LAND USE PLAN FOR THE TOWN AND VILLAGE OF ROCHESTER: 2035



R. 18 E. R. 19 E

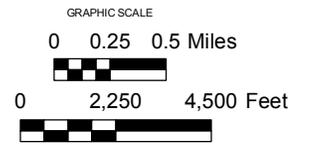
R. 19 E. R. 20 E

- RURAL DENSITY RESIDENTIAL AND AGRICULTURAL LAND (5 TO 30 ACRES PER DWELLING UNIT)
- SUBURBAN RESIDENTIAL (1.5 TO 4.99 ACRES PER DWELLING UNIT)
- LOW DENSITY RESIDENTIAL (19,000 SQUARE FEET TO 1.49 ACRES PER DWELLING UNIT)
- MEDIUM DENSITY RESIDENTIAL (6,200 TO 18,999 SQUARE FEET PER DWELLING UNIT)
- COMMERCIAL
- INDUSTRIAL
- TRANSPORTATION, COMMUNICATION AND UTILITIES
- GOVERNMENTAL AND INSTITUTIONAL

- RECREATIONAL
- OTHER PUBLIC OPEN SPACE
- AGRICULTURAL LAND
- EXTRACTIVE
- PRIMARY ENVIRONMENTAL CORRIDOR
- SECONDARY ENVIRONMENTAL CORRIDOR
- ISOLATED NATURAL RESOURCE AREA
- SURFACE WATER

- URBAN RESERVE
- PLANNED URBAN SERVICE AREA

Note: The Town and Village of Rochester are currently in the process of consolidating into a village.



Source: SEWRPC.

Exhibit 8

Conceptual Stage Relocation Plan

**CONCEPTUAL STAGE
RELOCATION PLAN**

Project I.D.2250-12-70

WIS 20/83
MAIN ST/FIRST ST., VILLAGE OF WATERFORD
BUENA PARK ROAD TO MILWAUKEE AVE (WIS 36)
RACINE COUNTY

Prepared by:
Wisconsin Department of Transportation
SE Region
Janet Cannon
September 25, 2014 (revised February 2, 2015)

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3.	Estimate of Displacements.....	4
4.	Divisive or Disruptive Effects	4
5.	Neighborhood Impact	4
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7.	Special Relocation Advisory Services	5
8.	Remedies for Insufficient Replacement Housing	5
9.	Available Replacement Residential Sites (Owner) – 3 Bedroom Dwelling.....	5
10.	Available Replacement Residential Sites (Owner) – 4 or 5 Bedroom Dwellings	5
11.	Relocation Cost Estimate.....	6
12.	Data Sources	6

1. Purpose

The purpose of a relocation plan is to assure that the agency will provide adequate relocation payments and services and to determine whether displaced persons can be satisfactorily relocated. The conceptual stage relocation plan is written in estimate form to determine the following:

1. The approximate number of individuals, families, businesses and non-profit organizations to be relocated by the proposed project.
2. The probable availability of decent, safe and sanitary replacement housing within the financial means of the individuals and families affected by the project.
3. The estimated total relocation assistance costs.

2. Project Description

The project is a 1.858 mile section of the WIS 20/83 corridor in the Village of Waterford in Racine County. The project consists of reconstructing the entire highway. This project will enhance safety by replacing the deteriorated pavement, adding turn lanes at intersections, replacing/modifying traffic signal equipment, increasing sight distance, providing the necessary traffic capacity, improving pedestrian and bicycle accommodations, and improving drainage throughout the corridor. Drainage will be analyzed for improvement with the addition or replacement of curb and gutter along the entire project length and providing additional storm sewer capacity. Sight distance deficiencies will be improved by lowering hills and improving deficient intersection angles. Intersection operation will be improved with the addition of turn lanes and upgrading intersection traffic signal control as needed. Bicycle accommodations will be provided along the entire project length. Pedestrian accommodations will be provided on both sides of the roadway. All curb ramps will be reconstructed according to ADA standards. User-activated flashing pedestrian beacons may be provided at the key crosswalk locations.

The segment of roadway between Buena Park Road and Jefferson Street would be widened and would allow for one lane of traffic in each direction separated by a continuous center two-way left turn lane (TWLTL). Between Jefferson Street and South First Street, the two traffic lanes eastbound and one traffic lane westbound would be provided with parking on both sides of the street. At some time in the future when safety and traffic volumes warrant the need, the roadway pavement marking could be changed to implement a 4-lane capacity expansion between Buena Park Road and South First Street. The segment of WIS 20/83 between east main Street and WIS 36 would be reconstructed to the same width as the existing roadway.

3. Estimate of Displacements

The preferred alternative would require a maximum of four (4) residential acquisitions, of which, (3) are known relocations and the fourth is appears to be uninhabited at this time, but has personal items that need to be moved. There are no business displacements.

All (3) potential residential relocations would be from single family dwellings and they are owner occupied. Based on data gathered for this project there seems to be good relocation potential in the community for owner occupants to purchase replacement dwellings in the community.

4. Divisive or Disruptive Effects

The proposed roadway improvements will require maximum of (3) residential displacements. Market data contained in this report indicates there is an adequate supply of available residential comparables in the area and there should be no division or disruption of families in the neighborhood caused by the proposed project.

5. Neighborhood Impact

The project area is located in southern Racine County with WIS 20/83 being used as a commuter corridor. The project design is intended to improve traffic flow and safety of the intersection and adjacent segments of highway.

The community is in agreement with the project. The local government and area residents have had involvement in the proposed improvements. Public involvement meetings indicated favorable responses to the highway improvements.

WIS 20/83 is a primary route for both through and local traffic with few alternates available. The typical inconvenience associated with highway construction is to be expected, but community support for the project is expected to result in acceptance of the neighborhood disruption that will be caused by the construction project.

6. Concurrent Displacements

There are no known concurrent displacements in the area.

7. Special Relocation Advisory Services

WisDOT shall carry out a relocation assistance advisory program, which satisfies the requirements of the Fair Housing Law 42 U.S.C 3601 et. Seq.; the Uniform Relocation Assistance and Relocation Acquisition Policies Act of 1970 as amended, 49 CFR Part 24; and, the Wisconsin Department of Administration, Administrative Code/Chapter 92 – Relocation Assistance (former Comm.202), and offers all the services listed in this subchapter commensurate with individual needs, whenever the acquisition of property for a proposed project will result in the displacement of a person.

8. Remedies for Insufficient Replacement Housing

No special program is required at this time. The market survey indicates that there should adequate comparable replacement housing available. Special provisions will be made if necessary.

9. Available Replacement Residential Sites (Owner) – 3 Bedroom Dwelling

	LOCATION	VALUE –RANGE	SOURCE
1	465 Summit Ave, Burlington 53105	\$161,000	MLS
2	29211 Riverview Ln, Waterford 53185	\$165,000	MLS
3	411 N State St., Rochester 53167	\$169,900	MLS
4	6424 Riverside Rd., Waterford 53185	\$176,500	MLS
5	325 Kendall St., Burlington 53105	\$184,900	MLS
6	461 Rivermoor Dr., Waterford 53185	\$188,900	MLS
7	612 Rohda Dr., Waterford 53185	\$195,000	MLS

10. Available Replacement Residential Sites (Owner) – 4 or 5 Bedroom Dwellings

	LOCATION	VALUE –RANGE	SOURCE
1	4837 Elm Island Cir., Waterford 53185	\$160,000	MLS

2	10116 W 4 Mile Rd., Caledonia 53126	\$165,000	MLS
3	449 Storle Ave., Burlington 53105	\$169,900	MLS
4	29828 Durand Ave., Burlington 53105	\$174,900	MLS
5	217 W. Jefferson St., Burlington 53105	\$179,900	MLS
6	208 Origen St., Burlington 53105	\$199,500	MLS
7	407 Fox River Hills Dr., Waterford 53185	\$204,900	MLS

11. Relocation Cost Estimate

	REPLACEMENT PAYMENT	REPLACEMENT HOUSING & CLOSING COSTS	MOVE PAYMENT
Unit 1 – Res Own	\$20,000.	\$2,500.	\$5,000.
Unit 2 – Res Own	\$20,000.	\$2,500.	\$5,000.
Unit 3 – Res Own	\$20,000.	\$2,500.	\$5,000.
Unit 4 – Res Vacant	\$0.	\$0.	\$3,500.
Totals	\$60,000.	\$7,500.	\$18,500.

TOTAL ESTIMATED RELOCATION COSTS = \$ 86,000.00

12. Data Sources

SE WI MULTIPLE LISTING SERVICE (MLS)

ONLINE SEARCH

Exhibit 9

Bureau of Aeronautics Correspondence

DeSombre, Rachel

From: Hetland, Justin - DOT <Justin.Hetland@dot.wi.gov>
Sent: Monday, August 11, 2014 10:02 AM
To: DeSombre, Rachel
Subject: RE: WisDOT ID 2250-12-00 WIS 20, Buena Park Road to Milwaukee Avenue (WIS 36), Racine County

Ms. DeSombre,

I've reviewed Project ID 2250-12-00 Buena Park Road to Milwaukee Avenue and do not have any issues at this time with the project from a Bureau of Aeronautics standpoint. Since portions of the project come close to the Fox River Airport, the FAA's Obstruction Evaluation Website should be checked to see if any notices of proposed construction will be required by the FAA. The 'Notice Criteria Tool' should be used to see if any equipment will require study, here's the link: <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>

If you have any questions about this process I can assist you. Filing with the FAA is required at least 45 days prior to the start of construction to give them enough time to complete the study, however determinations last a year and a half so I'd recommend filing with the FAA once the project is a little closer to being started.

On a final note, due to the proximity to the Fox River Airport, the Bureau of Aeronautics recommends contacting the airport as a friendly heads up about your project. The airport will welcome any information you have about the use of equipment that may affect airport operations. Contact Jerry Mehlhaff at the Fox River Airport at (262)534-6315.

Please let me know if you have any questions!

Justin M Hetland

Airspace Safety Program Manager
Department of Transportation/DTIM/Aeronautics
4802 Sheboygan Ave Room 701
Madison, WI 53707
608-267-5018 | justin.hetland@dot.wi.gov



From: DeSombre, Rachel [<mailto:Rachel.DeSombre@rasmithnational.com>]
Sent: Monday, August 04, 2014 1:05 PM
To: Hetland, Justin - DOT
Subject: WisDOT ID 2250-12-00 WIS 20, Buena Park Road to Milwaukee Avenue (WIS 36), Racine County

Good afternoon Justin,

The Wisconsin Department of Transportation (WisDOT), Division of Transportation System Development, Southeast Region is coordinating environmental impacts for the referenced project with this letter, and the information that is attached.

Project Purpose and Scope

The proposed project is located along WIS 20 in Racine County from just west of Buena Park Road to just northwest of WIS 36 in the Village of Waterford, WI and Towns of Waterford and Rochester, WI. The length of the project is

approximately 1.858 miles. See the enclosed Project Location Map and Preliminary Project Plan. The purpose of this project is to widen WIS 20 from Buena Park Road to First Street from a two-lane facility to a four lane facility and to reconstruct WIS 20 from Main Street to WIS 36 within its existing footprint. A traffic analysis completed for this project revealed that projected traffic volumes (year 2038) warrant a 4 lane roadway along the busiest segment from Buena Park Road to First Street. The existing bridge over the Fox River will be replaced to accommodate the new 4 lane roadway with bike and pedestrian accommodations in both directions. The existing pavement along WIS 20 is in fair to poor condition and is in need of replacement. Additional improvements would include adding in-street bicycle accommodations and sidewalk in location where none current exists. Please see attached plans.

The project is currently programmed for construction in 2018.

Environmental Concerns and Considerations

We are aware that this project is located within two miles of the Fox River Airport .

Environmental documentation for this project will include preparation of an Environmental Assessment (EA). Other activities include archeological and historical investigations, preparation of an erosion control plan, preparation of an ECIP prior to construction, preparation of an ACOE Section 404 permit application, and any necessary wetland restoration or mitigation if necessary. .

We would appreciate hearing from you regarding any concerns, suggestions, or comments about the proposed project as soon as possible. Your comment letter will be included in the Environmental Assessment for this project. Thank you for your assistance.

Thank you,

Rachel A. DeSombre, P.E.
Project Manager/Senior Project Engineer
262 317-3311
262 786-0826 fax

R.A. Smith National, Inc.
16745 West Bluemound Road, Suite 200, Brookfield, WI 53005-5938

Design with vision | Deliver excellence | Provide the most responsive service to our clients

Exhibit 10

**Wisconsin Department of Natural
Resources Correspondence**



July 5, 2012

Janet Cannon, P.E.
WisDOT Project Manager
141 NW Barstow Street
P.O. Box 798
Waukesha, WI 53212

Subject: Initial Scoping Comments for Project ID: 2250-12-00/70, STH 20, Racine County

Dear Ms. Cannon:

Thank you for the opportunity to provide scoping comments for the resurfacing and reconstruction of STH 20 in Racine County. It is understood the project includes the review of potential improvements to the existing STH 20 corridor that includes but is not limited to reconstruction, resurfacing and potential capacity expansion. I have listed Department initial review and scoping comments below.

Remediation and Redevelopment/Waste and Materials Management

- 1) Contaminated properties exist in the project corridor. The Department provides an on-line database of contaminated sites, called the Bureau for Remediation and Redevelopment Tracking System, or "BRRTS on the Web." It includes spills, underground storage tank leaks, Superfund cleanups and other contaminated sites that have been discovered and reported. The web address is: <http://dnrmaps.wi.gov/imf/imf.jsp?site=brrts2>. A contaminated material abatement plan needs to be defined if the project will excavate contaminated material.
- 2) An asbestos assessment of the corridor including any structures should be completed prior to demolition. If the project includes asbestos removal an abatement plan needs to be defined and a **Notification of Demolition and/or Renovation and Application for Permit Exemption (NR 406, 410, and 447 Wis. Adm. Code)** may be required. Please contact Mark Davis, Asbestos Specialist (414) 263-8674 to request additional information and permit application materials.
- 3) Should contamination be encountered within the right-of-way either before or during construction, you must notify the appropriate person in the DNR Solid Waste Section at 1-800-943-0003 prior to continuing operations.
- 4) Portable concrete batch plants may need a **Ch. 283 Wisconsin Pollutant Discharge Elimination System (WPDES) – Concrete Products Operations General Permit** for wastewater discharges. Please contact Ted Bosch, Wisconsin Department of Natural Resources, Wastewater Engineer (414) 263-8623 to request additional information and permit application materials.
- 5) Portable Asphalt batch plants may need a **Ch. 283 Wisconsin Pollutant Discharge Elimination System (WPDES) – Asphalt Plants Operations General Permit** for wastewater discharges. Please contact Ted Bosch, Wisconsin Department of Natural Resources, Wastewater Engineer (414) 263-8623 to request additional information and permit application materials.

Air

- 1) The Departments of Natural Resources (DNR) and DOT should discuss whether a Natural Resources Code (NR) 411 Screening Level Analysis or Indirect Source Permit is required for the STH 38 Project.

- 2) Portable concrete crusher plants may need a **NR 406/NR 407 Concrete Crusher Plant Air Permit** for air emissions. Please contact Mike Griffin, Wisconsin Department of Natural Resources, Air Compliance Engineer (414) 263-8554.

Land Resources

- 1) Primary Environmental Corridors and Areas of Isolated Resources exist in the project area. The majority of these corridors are along the Fox River. Threatened and endangered species habitat may exist in these corridors. See the SEWRPC website for more information on Environmental Corridors at <http://www.sewrpc.org/regionallandinfo/regionalmapping/default.shtm>.
- 2) WDNR managed trails exist in the project area. These trails include the Fox River Trail and the Waterford Wind Lake Trail. Impacts to trails need to leave the trail in as-good or better condition than initial condition. Trails need to remain open during construction, or detoured with proper signage and safety precautions.
- 3) Public owned land exists in the project area. According to Section 6(f) of the federal Land and Water Conservation (L&WC) Act, lands acquired with L&WC funds that are taken by a highway project must be replaced with other property of equal market value and equivalent usefulness and location. Our Department along with the National Park Service administers this program. There is an additional U.S. Dept. of Transportation "Section 4(f)" process for federally funded transportation projects that impact various types of public parks, wildlife refuges, and recreation areas. We can provide more information on these programs if it becomes necessary.

Water Resources

- 1) The project area is located in the Fox River basin. DNR basin report provides an overview of land and water resource quality is available at <http://dnr.wi.gov/water/watershedDetail.aspx?key=924842>.
- 2) The Department recommends that all in-water construction in the corridor be avoided from March 15 to June 15 to protect endemic fish population during spawning activities. It is also necessary to maintain an unobstructed passageway through the construction area at these locations at all times to allow for continuous fish movements.
- 3) Channel stability and fish and wildlife passage should be standard design and construction objectives for bridge replacement. A preliminary draft of the Southeastern Wisconsin Regional Planning Commission (SEWRPC) *Planning Report No. 50, Criteria and Guidelines for Stream Crossings to Allow Fish Passage and Maintain Stream Stability Within the Regional Water Quality Management Plan Update Study Area* is attached. The document is also available at http://www.sewrpc.org/waterqualityplan/pdfs/pr-50_appendix-n.pdf. Well designed and installed structures keep channels stable; accommodate fish and wildlife passage, and lower maintenance costs.
- 4) Wetlands are present in the Data Collection Area. Lateral encroachment, side-slope expansion and roadway realignment into wetlands should be avoided or minimized. All wetlands in the project area should be delineated including a description of the wetlands class and function. A wetland compensation proposal will be needed in accordance with the DNR-DOT Cooperative Agreement for any unavoidable wetland losses.

Endangered Resources

- 1) There is potential for swallow nesting under the Fox River Bridge. The International Migratory Bird Act protects international migratory birds such as seagulls, swallows, and terns. If structural demolition has not started by March 15, the Department recommends that the building roof and exterior be checked twice daily and empty nests be removed. It is a violation of federal law to disturb nests if eggs or fledgling young are present. Please contact Brian Nelson, United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services at (920) 324-4514 if eggs or fledgling young are present.

- 2) Endangered resources are present in the study area. DNR and DOT should discuss endangered resources occurrences in the large Data Collection Area and determine if specific field surveys or investigations are needed. Endangered species recently observed in the project area include:
- | | | |
|-------------------------------|----------------|------------------|
| a. <i>Moxostoma carinatum</i> | River Redhorse | Threatened fish |
| b. <i>Besseyia bullii</i> | Kitten Tails | Threatened plant |

Construction Impacts

- 1) Any demolition of the bridge deck and/or structures must not result in permanent or long-term deposition of debris in the waterway or wetlands. All material that enters the water is to be removed. If site dewatering is required, sediment-laden water shall be pumped into an adequate sediment basin located in an upland location prior to discharge to a wetland or waterway.
- 2) Excess fill/borrow material or spoils should be stockpiled on upland areas an adequate distance away from wetlands, stormsewer inlets, floodplains, and the waterways. Piles of stockpiled soil shall be protected against erosion and measures shall be taken to control fugitive dust emissions generated during construction.
- 3) Construction erosion and sedimentation must be controlled to the disturbed area. The project must conform to TRANS 401.09 and 401.10. An effective erosion control plan needs to be developed for this project to prevent downstream migration of sediment and other potential pollutants. Erosion control devices shall be specified on the final construction plans. All disturbed areas shall be adequately protected against erosion within seven days of work completion. Erosion control can be removed entirely after vegetation is established.
- 4) Fertilizer (liquid or granular) should not be used on re-vegetated areas that are adjacent to wetlands or waterways. This minimizes the risk of concentrated nutrients entering into waters of the state that can cause habitat impairments. Temporary cover crops can be used in lieu of fertilizers in these sensitive areas while the seed germinates during the growing season.
- 5) All erosion control BMPs must be in place prior to ground disturbing activity.

Thanks again for the opportunity to provide scoping comments for STH 20 from STH 83 to STH 36 in Racine County. I would be glad to speak or meet with you to discuss the Department's comments and provide additional information.

Sincerely,

 *Kristina Betzold*

Environmental Analysis and Review Specialist

(414) 263-8517

kristina.betzold@wisconsin.gov

Cc: Scott Lee, WisDOT
Karla Leithoff, WisDOT

From: [Webster, Craig M - DNR](#)
To: [Elkin, John A.](#)
Cc: [Gilbertson, Allen - DOT](#); [Manske, Caleb](#); [Cannon, Janet - DOT](#)
Subject: RE: Fox River Bridge, STH 20 Reconstruction, Waterford ID 2250-12-00
Date: Thursday, February 12, 2015 4:30:22 PM

I had a chance yesterday to visit the bridge site. Water is very low right now – dam in Rochester is in draw down mode.

DNR is OK and supports the concrete ‘sea wall’ on the east side. We should talk about forming in a connection point (or two) for a floating type public access/fishing pier. Can Dot support that request?

Sediment sampling is not necessary.

Due to the high and fluctuating flows, DNR recommends a combination of steel sheet pile and enhanced turbidity barrier be used on this job. We can flesh out the details.

Can you get the various pipe outfalls to discharge at the wing wall or abutment corners vs right under the deck?

DNR is fine with the single pier being in the middle of the river.

Anything I am missing?

Craig Webster

Desk Phone: (262) 574-2141

Cell Phone: (414) 303-3011

Craig.Webster@Wi.Gov

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

From: Elkin, John A. [mailto:John.Elkin@rasmithnational.com]
Sent: Tuesday, February 03, 2015 4:22 PM
To: Webster, Craig M - DNR
Cc: Gilbertson, Allen - DOT; Manske, Caleb
Subject: RE: Fox River Bridge, STH 20 Reconstruction, Waterford ID 2250-12-00

Craig – since it's a girder-type bridge, it will most likely be sawn and picked with minimal debris dropped. We can include this approach in the construction specs as well. I've attached the photos of the OHWM as well as general photos of the north and south sides of the bridge.

John

John A. Elkin, P.E., Associate
R.A. Smith National, Inc.
262-317-3312

for Project 2250-12-00; Wis 20_83 Main St_South First Street; Racine County Transportation Air Quality

From: Webster, Craig M - DNR
Sent: Tuesday, May 12, 2015 2:55 PM
To: Cannon, Janet - DOT
Cc: Lee, Scott - DOT; Suydam, Justin W - DOT
Subject: RE: Environmental Report for Project 2250-12-00; Wis 20_83, Main St_South First Street; Racine
County: Transportation Air Quality Conformity guidance

Thanks Janet for inquiring about the Northern Long Eared Bat. Your project (STH 20 and 83) will not have any impacts on this species of bat. Please let me know if other questions or concerns come up.

Thanks
Craig
Craig Webster
Desk Phone: (262) 574-2141
Cell Phone: (414) 303-3011
Craig.Webster@Wisconsin.gov

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Visit our survey at <http://dnr.wisconsin.gov/customersurvey> to evaluate how I did.

Exhibit 11

State Historic Preservation Office

Section 106 Documentation

14-0698/RA

RECEIVED

SEP 30 2014

DIV HIST PRES

**SECTION 106 REVIEW
ARCHAEOLOGICAL/HISTORICAL INFORMATION**

Wisconsin Department of Transportation
DT1635 11/2006

For instructions, see FDM Chapter 26

I. PROJECT INFORMATION

Project ID 2250-12-00	Highway - Street Main Street / First Street (WIS 20)	County Racine
Project Termini Buena Park Road to Milwaukee Avenue (WIS 36)		Region - Office Southeast
Regional Project Engineer - Project Manager Janet Cannon, P.E.		Area Code - Telephone Number (262) 548-6890
Consultant Project Engineer - Project Manager R.A. Smith National, Inc. - John Elkin, P.E.		Area Code - Telephone Number (262) 317-3312
Archaeological Consultant Great Lakes Archaeological Research Center - Katherine Shillinglaw		Area Code - Telephone Number (414) 481-2093
Architecture/History Consultant Heritage Research, Ltd. - Brian Faltinson		Area Code - Telephone Number (262) 251-7792
Date of Need April 30, 2014		SHSW #
Return a signed copy of this form to: Janet Cannon, Project Manager - WisDOT SE Region		

II. PROJECT DESCRIPTION

Project Length 1.86 miles	Land to be Acquired: Fee Simple 2.7 acres	Land to be Acquired: Easement 3.0 acres
------------------------------	--	--

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right-of-Way Width			Terrace Width		
W. Main Street (WIS 20)	33'-60'	38'-60'	W. Main Street (WIS 20)	0'-10'	0'-5'
E. Main Street	33'	33'	E. Main Street	0'-3'	0'-3'
First Street (WIS 20)	33'	33'	First Street (WIS 20)	0'-10'	0'-10'
Shoulder			Sidewalk Width		
W. Main Street (WIS 20)	6'or C&G	C&G	W. Main Street (WIS 20)	5'-10'	5'-10'
E. Main Street	C&G	C&G	E. Main Street	5'-6'	5'-6'
First Street (WIS 20)	C&G	C&G	First Street (WIS 20)	4'-6'	5'-6'
Slope Intercept			Number of Lanes		
W. Main Street (WIS 20)	30'-62.5'	40'-95'	W. Main Street (WIS 20)	2	4
E. Main Street	32.5'-51'	32.5'-51'	E. Main Street	2+park	2+parking
First Street (WIS 20)	29.5'-50'	29.5'-65'	First Street (WIS 20)	2+park	2+parking
Edge of Pavement			Grade Separated Crossing		
W. Main Street (WIS 20)	15'-30.5'	25'-30.5'	W. Main Street (WIS 20)	N/A	N/A
E. Main Street	22'	22'-24'	E. Main Street	N/A	N/A
First Street (WIS 20)	16'-22'	16'-22'	First Street (WIS 20)	N/A	N/A
Back of Curb Line			Vision Triangle		
W. Main Street (WIS 20)	19.5'-29.5'	27.5'-31'	acres	0	0
E. Main Street	24.5'	24.5'			
First Street (WIS 20)	18.5'-24.5'	18.5'-24.5'			
Realignment			Temporary Bypass		
	N/A	N/A	acres	N/A	N/A
Other - List:			Stream Channel Change	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	N/A	N/A			
Attach Map(s) that depict "maximum" impacts.	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Tree topping and/or grubbing	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Brief Narrative Project Description - Include all ground disturbing activities. For archaeology, include plan view map indicating the maximum area of ground disturbance and/or new right-of-way, whichever is greater. Include all temporary, limited and permanent easements.

Add continuation sheet, if needed.

III. CONSULTATION

How has notification of the project been provided to:

<input checked="" type="checkbox"/> Property Owners	<input checked="" type="checkbox"/> Historical Societies/Organizations	<input checked="" type="checkbox"/> Native American Tribes
<input checked="" type="checkbox"/> Public Information Meeting Notice	<input type="checkbox"/> Public Information Meeting Notice	<input type="checkbox"/> Public Info. Mtg. Notice
<input checked="" type="checkbox"/> Letter - Required for Archaeology	<input checked="" type="checkbox"/> Letter	<input checked="" type="checkbox"/> Letter
<input type="checkbox"/> Telephone Call	<input type="checkbox"/> Telephone Call	<input type="checkbox"/> Telephone Call
<input type="checkbox"/> Other:	<input type="checkbox"/> Other:	<input type="checkbox"/> Other:

*Attach one copy of the base letter, list of addresses and comments received. For history include telephone memos as appropriate.

IV. AREA OF POTENTIAL EFFECTS - APE

ARCHAEOLOGY: Area of potential effect for archaeology is the existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption.

HISTORY: Describe the area of potential effects for buildings/structures.
See attached Continuation Sheets

V. PHASE I ARCHEOLOGICAL OR RECONNAISSANCE HISTORY SURVEY NEEDED

<p style="text-align: center;">ARCHAEOLOGY</p> <p><input checked="" type="checkbox"/> Archaeological survey is needed</p> <p><input type="checkbox"/> Archaeological survey is not needed - Provide justification</p> <p style="margin-left: 20px;"><input type="checkbox"/> Screening list (date).</p>	<p style="text-align: center;">HISTORY</p> <p><input checked="" type="checkbox"/> Architecture/History survey is needed</p> <p><input type="checkbox"/> Architecture/History survey is not needed</p> <p style="margin-left: 20px;"><input type="checkbox"/> No structures or buildings of any kind within APE</p> <p style="margin-left: 20px;"><input type="checkbox"/> Screening list (date).</p>
--	---

VI. SURVEY COMPLETED

<p style="text-align: center;">ARCHAEOLOGY</p> <p><input type="checkbox"/> NO archaeological sites(s) identified - ASFR attached</p> <p><input type="checkbox"/> NO potentially eligible site(s) in project area - Phase I Report attached</p> <p><input type="checkbox"/> Potentially eligible site(s) identified-Phase I Report attached</p> <p style="margin-left: 20px;"><input type="checkbox"/> Avoided through redesign</p> <p style="margin-left: 20px;"><input type="checkbox"/> Phase II conducted - go to VII (Evaluation).</p> <p><input checked="" type="checkbox"/> Phase I Report attached - Cemetery/cataloged burial documentation</p>	<p style="text-align: center;">HISTORY</p> <p><input type="checkbox"/> NO buildings/structures identified - A/HSF attached</p> <p><input checked="" type="checkbox"/> Potentially eligible buildings/structures identified in the APE - A/HSF attached</p> <p><input type="checkbox"/> Potentially eligible buildings/structures avoided - documentation attached: see attached Finding of No Effect on Historic Properties Memo</p>
--	--

VII. DETERMINATION OF ELIGIBILITY (EVALUATION) COMPLETED

<p><input type="checkbox"/> No arch site(s) eligible for NRHP - Phase II Report attached</p> <p><input type="checkbox"/> Arch site(s) eligible for NRHP - Phase II Report attached</p> <p><input type="checkbox"/> Site(s) eligible for NRHP - DOE attached</p>	<p><input type="checkbox"/> No buildings/structure(s) eligible for NRHP - DOE attached</p> <p><input checked="" type="checkbox"/> Building/structure(s) eligible for NRHP - DOE attached</p>
---	--

VIII. COMMITMENTS/SPECIAL PROVISIONS - must be included with special provisions language

N/A

IX. PROJECT DECISION

No historic properties (historical or archaeological) in the APE.

No historic properties (historical or archaeological) affected.

Historic properties (historical and/or archaeological) may be affected by project;

Go to Step 4: Assess affects and begin consultation on affects

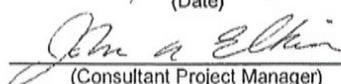
Documentation for Determination of No Adverse Effects is included with this form. WIDOT has concluded that this project will have No Adverse Effect on historic properties. Signature by SHPO below indicates SHPO concurrence in the DNAE and concludes the Section 106 Review process for this project.



(Regional Project Manager)

9/25/2014

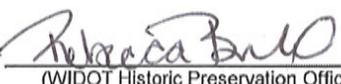
(Date)



(Consultant Project Manager)

09-24-2014

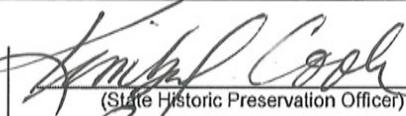
(Date)



(WIDOT Historic Preservation Officer)

9/29/14

(Date)



(State Historic Preservation Officer)

Sept 30 2014

(Date)

**Section 106 Review
Continuation Sheet #1**

II. Project Description

The WIS 20 reconstruction project is approximately 1.8 miles in length and extends from just west of Buena Park Road to just west of Milwaukee Avenue (WIS 36) in the Village and Town of Waterford and the Village of Rochester in Racine County, WI. The purpose of the project is to improve safety, riding characteristics, intersection operation, sight distance, and drainage throughout the corridor.

WIS 20 is a two lane undivided roadway with a rural cross-section from Buena Park Road to Rivermoor Drive and an urban cross-section from Rivermoor Drive to Milwaukee Avenue (WIS 36). Parking lanes are provided from Rivermoor Drive to Racine Street, from Jefferson Street to the Fox River Bridge, and from Main Street to N. River Road.

The traffic analysis completed for this project revealed that projected traffic volumes (year 2038) warrant a 4 lane roadway along the busiest segment. Two lanes of travel in each direction would be needed from Buena Park Road to the Main Street/First Street intersection.

Safety improvements are being considered for implementation with the reconstruction of WIS 20. Sight distance deficiencies would be improved by lowering hills and improving visibility at intersections. Intersection operation would be improved with the addition of turn lanes and upgrading intersection traffic signal control as needed. Deficient intersection angles would be improved to increase sight distance and intersection safety.

Bicycle and pedestrian accommodations would be provided along the entire project length. Bicycle accommodations would include dedicated bike lanes, shared travel/bike lanes, or shared parking/bike lanes. Pedestrian accommodations would include 5-foot wide sidewalk and a 10-foot wide shared-use path. All curb ramps would be reconstructed to Americans with Disabilities Act (ADA) standards.

Right-of-way acquisitions would be part of this project.

The existing bridge at the Fox River would be replaced as part of this project with a new 4 lane structure to accommodate the wider roadway with bike and pedestrian accommodations in both directions.

This project is currently scheduled to be constructed in 2018.

III. Consultation

Letters were sent to the abutting property owners at the start of the project to notify them of the upcoming field survey activities, including historic and archaeological surveys (see attached coordination letter). Local residents, local government officials, and agency representatives were invited to two Public Information Meetings (PIM), held on March 27, 2013 and August 26, 2013 (see attached PIM documentation). Two additional PIMs would be held to inform the public of anticipated improvements, impacts, and acquisitions.

Letters were sent to Native American interests (see attached Tribal coordination) to inform them of the project and to solicit any comments they may have in accordance with the National Historic Preservation Act. One response was received and is attached to this documentation.

IV. Area of Potential Effects (APE)

History: The APE was determined to include all properties adjacent to WIS 20 from 1,000 feet west of Buena Park Road to Milwaukee Avenue (WIS 36) and those properties adjacent to intersections and side roads that would be reconstructed.

VI. Survey Completed

History: Twenty-four properties were surveyed with the APE, two of which were initially determined to be potentially eligible for the National Register of Historic Places (see attached Architecture/History Survey sheets.) The back of sidewalk along these two potentially eligible properties would remain the same after construction; however, curb bump-outs would be constructed in front of these two properties. A Determination of Eligibility (DOE) was completed for both these properties (see attached Determination of Eligibility Forms).

Exhibit 12

Department of Agriculture, Trade & Consumer Protection

Correspondence



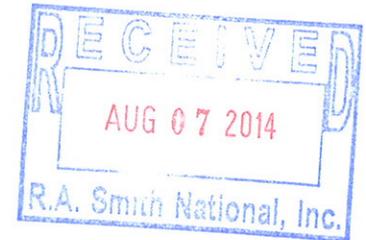
State of Wisconsin
Governor Scott Walker

Department of Agriculture, Trade and Consumer Protection

Ben Brancel, Secretary

August 5, 2014

Rachel DeSombre
R. A. Smith National
16745 W. Bluemound Road, Suite 200
Brookfield, WI 53005



Dear Rachel DeSombre:

Re: Project ID: 1250-12-00
Project Name: STH 20: Buena Park Rd to Milwaukee Ave (STH 36)
County: Racine

The Department of Agriculture, Trade, and Consumer Protection (DATCP) has reviewed the notification and any supplemental information you have provided concerning the potential need for an agricultural impact statement (AIS) for the above project. We have determined that an AIS will not be prepared for this project.

Please note that if the proposed project or project specifications are altered in any way which could be construed as increasing the potential adverse effects of the project on agriculture or on any farm operation, the DATCP should be renotified. Questions on the AIS program can be directed to me at the above address or by dialing 608/224-4646.

Sincerely,

Alice Halpin
Agricultural Impact Program

DATCP ID: #4012

Exhibit 13

Native American Tribes Correspondence



**Division of Transportation
System Development**
Southeast Regional Office
141 N.W. Barstow Street
P.O. Box 798
Waukesha, WI 53187-0798

**Scott Walker, Governor
Mark Gottlieb, P.E., Secretary**
Internet: www.dot.wisconsin.gov

Telephone: (262) 548-5903
Facsimile (FAX): (262) 548-5662
E-Mail: waukesha.dtd@dot.wi.gov

May 29, 2013

DTSD Bureau of Technical Services, Env. Section
Attn: Rebecca Burkel
3502 Kinsman Blvd
Madison, WI 53704

**INITIAL NOTIFICATION BY WISDOT
TO
NATIVE AMERICANS**

RE: Main Street/First Street, WIS 20
Northwest Highway (WIS 83) to Milwaukee Avenue (WIS 36)
Racine County
ID 2250-12-00

The Wisconsin Department of Transportation (WisDOT) and their consultant, R.A. Smith National, Inc, are in the process of developing plans for the design of the reconstruction of WIS 20 from 1,000 feet west of Buena Park Road to Milwaukee Avenue (WIS 36) in the Village and Town of Waterford and the Village of Rochester in Racine County, Wisconsin. The project also includes the reconstruction of E. Main Street from First Street to Milwaukee Street in the Village of Waterford. See attached Project Location Map.

The purpose of the project is to improve safety, riding characteristics, intersection operation, sight distance, and drainage throughout the corridor. The existing 2 lane roadway will be reconstructed as 4 lanes with bike accommodations from Buena Park Road to the Fox River and as 2 lanes with a shared parking/bike lane from the Fox River to Milwaukee Avenue. E. Main Street will be reconstructed as 2 lanes with a shared parking/bike lane in both directions, which is the same width as the existing roadway. The project is approximately 1.9 miles long and will be constructed in 2018.

Several safety improvements will be implemented with the reconstruction of WIS 20. Sight distance deficiencies will be improved by lowering hills and improving visibility at intersections. Intersection operation will be improved with the addition of turn lanes by upgrading traffic signal equipment. Deficient intersection angles will be reconstructed to increase sight distance and intersection safety. Bicycle and pedestrian accommodations will be provided along the entire project length. Bicycle accommodations will include dedicated bike lanes, shared travel / bike lanes, and shared parking / bike lanes. Pedestrian accommodations will include 5-ft. wide sidewalk or a 10-ft. wide shared-use path.

The existing bridge structure over the Fox River will be replaced. Several retaining walls along the project will be replaced, including retaining walls along the Fox River at the WIS 20 bridge.

Right-of-Way acquisitions are anticipated as part of this project; however, the extent of these potential acquisitions is unknown at this time.

A public information meeting was held on March 27, 2013, to familiarize interested parties with the project. Additional public information meetings are planned for Summer 2013, Spring 2014, and Spring 2017. In the near future, cultural resource investigation studies will be conducted for the above project. These investigations will enable WisDOT to determine whether historical properties as defined in 36 CFR 800 are located in the project area. Other environmental studies will also be conducted and include endangered species survey, contaminated material investigations, soil testing and right-of-way surveys. Information obtained from these studies will assist the engineers in the design to avoid, minimize or mitigate the proposed project's effect upon cultural and natural resources.

WisDOT would be pleased to receive any comments regarding this project or any information you wish to share pertaining to cultural resources located in the area. If your tribe wishes to become a consulting party under Section 106 of the National Historic Preservation Act or would like to receive additional information regarding this proposed project, please contact WisDOT Project Manager, Janet Cannon, at (262) 548-6890 or janet.cannon@dot.wi.gov.

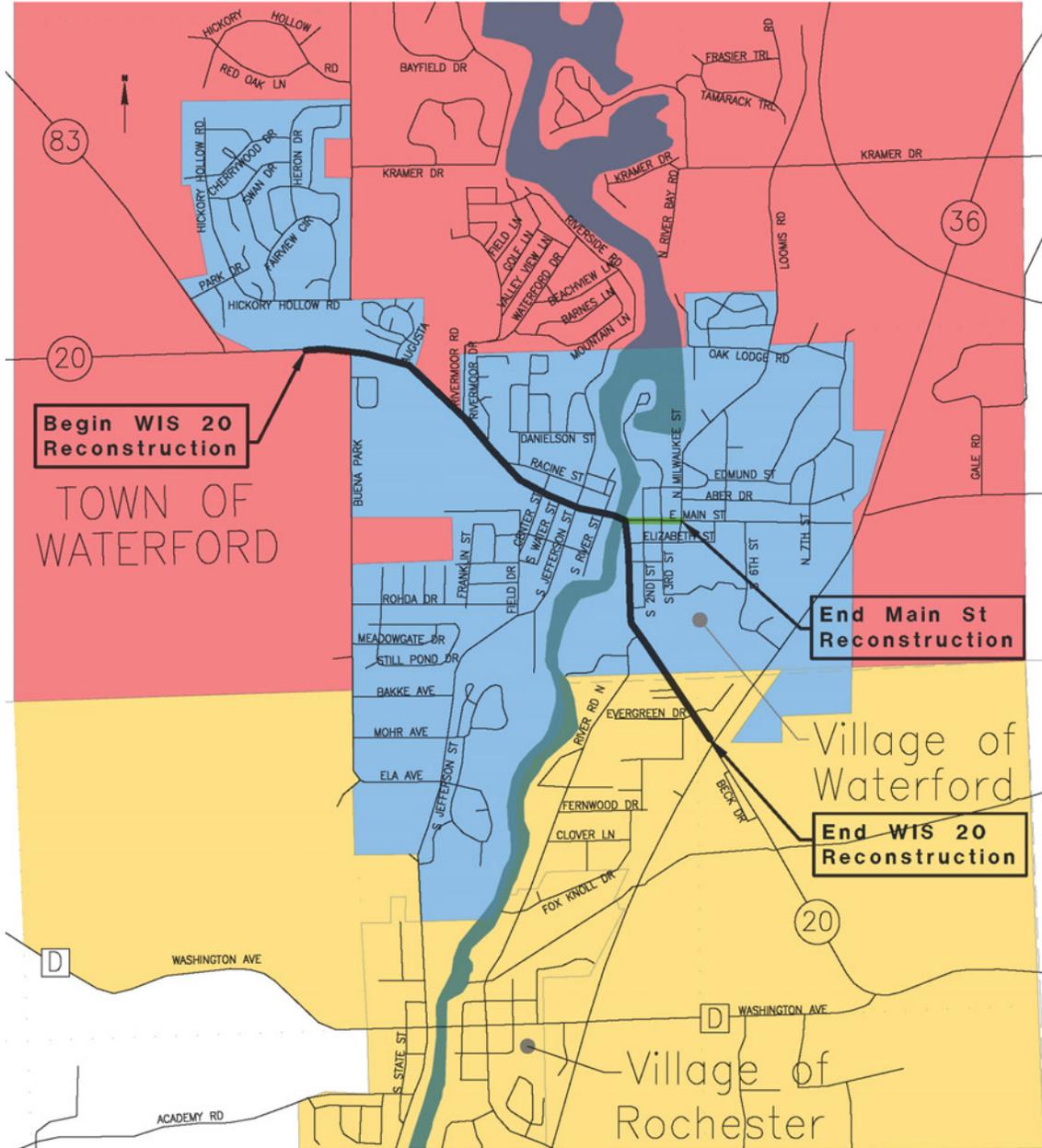
Sincerely,

Janet Cannon

Janet Cannon, P.E. – WisDOT Project Manager

cc: Rebecca Burkel, DTSD Bureau of Technical Services, Environmental Section
John Elkin, Consultant Project Manager, R.A. Smith National, Inc.

Project Location Map



Tribe	Attn:	Office	Address_1	Address_2	City	State	Zip
DTSD Bureau of Technical Services, Env. Section	Rebecca Burkel		3502 Kinsman Blvd		Madison	WI	53704
Bad River Band of Lake Superior Chippewa Indians of Wisconsin	Edith Leoso, THPO		P.O. Box 39		Odanah	WI	54861
Forest County Potawatomi Community of Wisconsin	Mike Alloway	Tribal Office	P.O. Box 340		Crandon	WI	54520
Ho-Chunk Nation	William Quackenbush, THPO	Executive Offices	P.O. Box 667	405 Airport Road	Black River Falls	WI	54615
Menominee Indian Tribe of Wisconsin	Dave Grignon, THPO		P.O. Box 910		Keshena	WI	54135
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin	Larry Balber, THPO	Red Cliff Band of Lake Superior	88385 Pike Road, Highway 13		Bayfield	WI	54814
Sokaogon Chippewa Community Mole Lake Band	Cultural Resource Director		3051 Sand Lake Road		Crandon	WI	54520
Sac and Fox Nation of Oklahoma	Sandra Massey, NAGPRA Rep.		RR 2, Box 246		Stroud	WI	74079
Sac and Fox Nation of Missouri in Kansas and Nebraska	Jane Nioce		305 N. Main		Reserve	KS	66434
Sac and Fox of the Mississippi in Iowa	Jonathan Buffalo, NAGPRA Rep.		349 Meskwaki Road		Tama	IA	52339-9629
Prairie Band Potawatomi Nation	Chairman Steve Ortiz, NHPA Rep.		16281 Q Road		Mayetta	KS	66509
Lac Vieux Desert Band of Lake Superior Chippewa Indians	giiwegiizhigookway Martin, THPO	ketegitigaaning Ojibwe Nation	P.O. Box 249		Watersmeet	MI	49969
WisDOT SE Region	Janet Cannon		141 NW Barstow St		Waukesha	WI	53187



POTAWATOMI
(Keeper of the Fire)

Forest County Potawatomi

Cultural Center and Museum

June 4, 2013

Janet Cannon, WisDOT Project Manager
WIS DOT
Southeast Regional Office
141 NW Barstow Street
P.O. Box 798
Waukesha, WI 53187

Re: Main Street/First Street, WIS 20, Northwest Highway (WIS 83) to Milwaukee Avenue (WIS 36) Racine
County ID 2250-12-00

Dear Janet Cannon:

This letter is in response to the proposed project referenced above, as provided in the letter dated May 29, 2013. As this project occurs within Potawatomi ancestral and previously occupied lands, we would like to express our concerns with any impacts to historic and cultural properties located within the project area of potential effect for the project mentioned above.

We appreciate receiving results of an archival review, cultural resource investigation studies, and archaeological reports. Should there be an impact or effect to cultural or historic properties as a result of this project, we will request consultation pursuant to Section 106 of the National Historic Preservation Act, as amended.

You may send the results of the archival review, cultural resource assessments, and archaeological report to:

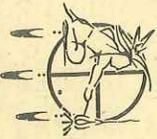
Forest County Potawatomi Community
Attn: Melissa Cook, Tribal Historic Preservation Officer
8130 Mish ko swen Drive
P.O. Box 340
Crandon, WI 54520
Melissa.Cook@fcpotawatomi-nsn.gov (for digital format)

If you have any questions, please contact me at 715-478-7248 or by email Melissa.Cook@fcpotawatomi-nsn.gov.

Respectfully,

Melissa Cook
Tribal Historic Preservation Officer

POTAWATOMI
(Keeper of the Fire)



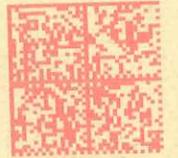
Forest County Potawatomi

Cultural Center and Museum
5460 Everybody's Road • Crandon, Wisconsin 54520

Janet Cannon, Project Manager
WISDOT
Southeast Regional Office
141 NW Barstow Street
Waukesha, WI 53187

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July 30, 2013

Forest County Potawatomi Community
Attn: Melissa Cook, Tribal Historic Preservation Officer
8130 Mish ko swen Drive
P.O. Box 340
Crandon, WI 54520

RE: Main Street/First Street, WIS 20
Northwest Highway (WIS 83) to Milwaukee Avenue (WIS 36)
Racine County
ID 2250-12-00

Dear Ms. Cook,

This letter is in response to your request dated June 4, 2013 for information regarding archival review, cultural resource investigation studies, and archaeological reports for the WIS 20 reconstruction project in the Village and Town of Waterford and Village of Rochester in Racine County, Wisconsin. Attached are the Archaeological and Architecture/History Reports that were completed for this project.

Thank you for your comments and interest in this project. If you have any questions or additional comments about the project, please contact John Elkin, Project Manager for R.A. Smith National at (262) 317-3312 or john.elkin@rasmithnational.com or Janet Cannon, Project Manager for WisDOT at (262) 548-6890 or janet.cannon@dot.wi.gov.

Sincerely,
R.A. Smith National, Inc.



John A. Elkin, P.E.
Consultant Project Manager

Attachments:

Archaeological Survey Field Report
Historic Cemetery Research: St. Thomas Aquinas Cemetery
Architecture/History Survey (WIS 20)
Architecture/History Survey (E. Main Street)

cc: Janet Cannon, WisDOT Project Manager
File

Exhibit 14

Indirect Effects Pre-Screening Worksheet

APPENDIX A: WisDOT's Pre-Screening Worksheet for EA and ER Projects For Determining the Need to Conduct a *Detailed* Indirect Effects Analysis

Prepared by Environmental Policy and Community Impacts Analysis Section
Bureau of Equity & Environmental Services
Division of Transportation System Development
Wisconsin Department of Transportation

NEPA requires the assessment of indirect effects of all projects under CEQ regulations. **All EIS documents require a detailed indirect effects analysis.** However, not all, non-EIS environmental reviews for transportation projects will warrant a *detailed analysis* of indirect effects. This pre-screening guidance will assist the Study Team in determining whether a more detailed analysis is necessary in order to comply with NEPA requirements. Refer to the complete indirect effects analysis guidance document and FDM (chapter 25-5-17) for further information.

This pre-screening worksheet may be helpful in scoping for the analysis. If the Study Team is uncertain what level of analysis the project will need, do not make an assumption that the project doesn't require the analysis. Contact the Environmental Policy and Community Impacts Section staff and the regional environmental coordinator for more assistance.

The factors listed below are not in any order of importance. Each EA and ER project needs to be examined individually to understand whether a particular factor or combination factors requires detailed analysis for indirect effects.

Factors to Consider

1. Project Design Concepts and Scope
2. Project Purpose and Need
3. Project Type (Categorical Exclusions, etc.)
4. Facility Function (Current and Planned—principal arterial, rural arterial, etc.)
5. Project Location
6. Improved Travel Times to an Area
7. Local Land Use and Planning Considerations
8. Population and Demographic Considerations
9. Rate of Urbanization
10. Public Concerns

1. Project Design Concepts and Scope

Do the project design concepts include any one of the following?

- ✓ Additional thru travel lanes (expansion) **YES – Minimal impact to surrounding properties, land use, usage patterns anticipated.**
- ✓ New alignment **NO**
- ✓ New and/or improved interchanges and access **NO**
- ✓ Bypass alternatives **NO**

2. Project Purpose and Need

Does the project purpose and need include:

- ✓ Economic development –in part or full (i.e. improved access to a planned industrial park, new interchange for a new warehouse operation). **NO**

3. Project Type

What is the project document “type”?

- ✓ EIS project—a detailed indirect effects analysis is warranted.
- ✓ Many EAs will require a detailed indirect effects analysis (However, it also depends on the project design concepts and other factors noted here.)
- ✓ If a Categorical Exclusion applies, a detailed assessment is not generally warranted, however documentation must be provided that addresses this determination including basic sheet information.

4. Facility Function

What is the primary function of the existing facility? What is the proposed facility?

- ✓ Urban arterial (Existing and Proposed)
- ✓ Rural arterial

5. Project Location (Location can be a combination.)

- ✓ Urban (within an Metropolitan Planning Area) Yes – Southeastern Wisconsin Regional Planning Commission
- ✓ Suburban (part of larger metropolitan/regional area, may or may not be part of an metropolitan planning area) NO
- ✓ Small community (population under 5000) Yes – Town of Waterford, Village of Waterford, Town of Rochester
- ✓ Rural with scattered development NO
- ✓ Rural, primarily farming/agricultural area No

6. Improved travel times to an area or region

- ✓ Will the proposed project provide an improvement of 5 or more minutes? (Based on research, improvements in travel time can impact the attractiveness of an area for new development.) No. Proposed travel times would be expected to remain roughly the same as existing.

7. Land Use and Planning

- ✓ What are the existing land use types in project area? The land use in the project area is predominantly commercial and residential development, with interspersed institutional (schools, churches) and recreational use (two parks).
- ✓ What do the local plans, neighborhood plans, and regional plans, indicate for future changes in land use? Same as existing.
- ✓ What types of permitted uses are indicated in the local zoning? Mostly residential and commercial.
- ✓ Would the project potentially conflict with plans in the project area? (e.g., capacity expansion in areas in which agricultural preservation is important to local government(s)?) NO

8. Population/Demographic Changes

- ✓ Have the population changes over past 5, 10 and 20 years been high, medium, low growth rate vs. state average over same period? (i.e. USDA defines high growth in rural areas as greater than annual population growth of 1.4 %.)

Time Period	Annual Population Growth	
	Village of Waterford	State of Wisconsin
5 Year (2008-2013)	2.0%	0.1%
10 Year (2003-2013)	2.3%	0.4%
20 Year (1993-2013)	3.2%	0.7%

Population growth for the Village of Waterford is higher than that of the State of Wisconsin but has slowed in the last 5 to 10 years. The USDA considers Racine County a "Metro" County

- ✓ What are the projections for the future for population? (Use Wisconsin DOA projections.) A 1.2% annual increase in population is projected between 2013 and 2040 for the Village of Waterford as compared to 0.5% for the State of Wisconsin. It appears that growth in the area will be slowing over the next 20 to 30 years.
- ✓ Have there been considerable changes for population demographics and employment over the past 10 – 20 or more years? **NO**

9. Rate of Urbanization

- ✓ Does the project study area contain proposed new developments? **There are no known developments proposed in the project area.**
- ✓ What are the main changes in developed area vs. undeveloped areas over past 5, 10 and 20 years? **Aerial photos from 1990 to 2010 were reviewed. Within the project corridor from Buena Park Road to WIS 36 limited development (addition of a condominium complex, gas station, bank) has occurred due to the corridor being fully developed within the Village of Waterford.**
- ✓ Have there been significant conversions of agricultural land uses to other land use types, such as residential or industrial? **NO**

10. Public, State and/or Federal Agency Concerns

- ✓ Have local officials, federal and/or state agencies, property owners, stakeholders or others raised concerns related to potential indirect effects from the project? (e.g., land use changes, "sprawl", increase traffic, loss of farmland, etc.) **NO**

Exhibit 15

Impact to Section 4(f) Property Correspondence

Village of Waterford
123 North River Street
Waterford, Wisconsin 53185

Date: October 14, 2013

To: Mr. John Elkin, P.E.,
Project Manager
R.A. Smith National, Inc.
16745 West Bluemound Rd., Suite 200
Brookfield, WI 53005

From: Rebecca Ewald, Administrator
Village of Waterford

RE: River Bend Park and Ten Club Park Temporary Limited Easements & Construction Time Requirements
Main Street/1st Street
Buena Park Road to Milwaukee Avenue (STH 36)
STH 20
Village of Waterford, Racine County
Project I.D. 2250-12-00

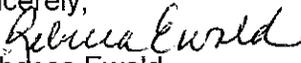
Dear Mr. Elkin:

This letter is to confirm that the Village of Waterford concurs with the Temporary Limited Easement (TLE) acquisition proposed for grading purposes at River Bend Park (0.05 acres) and Ten Club Park (0.04 acres) as shown in the 30% project plans provided to the Village. It is understood that the Village will be replacing the benches and planters located just behind the sidewalk in Ten Club Park and coordination of removal of the existing benches and installation of the new benches will be required. It is also understood that the concrete pad and bench just behind the sidewalk in River Bend Park may need to be removed and replaced during construction by the WisDOT highway contractor to accommodate reconstruction of the roadway and bridge over the Fox River.

With respect to the hours of construction, the Village Board desires construction between 10 p.m. and 6 a.m. be authorized by the Village Board rather than the engineer, since there are residences in the area that construction will take place, rather than the standard DOT language.

If you have any questions or need anything further concerning this project, please contact our office at (262) 534-7912.

Sincerely,


Rebecca Ewald
Village Administrator

Cc: Janet Cannon, P.E., WisDOT Southeast Region Project Manager

Exhibit 16

Traffic Noise Analysis Memo and Receptor Map



TECHNICAL MEMORANDUM

To: John Elkin, RA Smith National
Caleb Manske, RA Smith National

From: Susan Paulus, Lakeside Engineers

Date: February 2, 2015

Re: WisDOT Project ID 2250-12-00
Main Street/First Street
Buena Park Road to Milwaukee Avenue (WIS 36)
WIS 20
Racine County
Noise Analysis

CC: Tony Bublitz, Lakeside Engineers
Bao Tran, Lakeside Engineers

This memorandum describes the noise analysis for WIS 20 between Buena Park Road and WIS 36, which follows FDM Chapter 23. The noise analysis is needed for this Type 1 project because of the potential addition of through traffic lanes (FDM 23-10-1.1) within the 20 year design period.

The following improvements are proposed for this project to address the key deficiencies and to improve safety along the corridor:

- Improve traffic flow by the potential future widening from two lanes to four lanes from Buena Park Road to the Main Street/First Street intersection
- Improve intersection operations with turn lanes and intersection control
- Improve sight distance deficiencies
- Provide traffic signals at Main Street/First Street (interim project)
- Improve drainage
- Provide bicycle and pedestrian accommodations
- Replace Fox River Bridge
- Aesthetic improvements and lighting

The noise analysis used the Traffic Noise Model (TNM) Version 2.5 to model the existing (2011) and future (2038) noise along the corridor. First, the existing model was created and the inputs into TNM included:

- Geometrics (horizontal and vertical)
- Intersection controls
- Buildings
- Trees
- Topography
- Receptors

Once the existing model was created it was copied to develop the future model. To complete the future model the following updates were made:

- Change horizontal alignment from Buena Park Road to First Street / Main Street intersections to reflect the expanded four lane section
- Update vertical alignment
- Change topography
- Input 2038 traffic information

The locations and elevations of the buildings, trees, and receptors remained the same as the existing model.

The geometrics entered reflect the horizontal and vertical alignments included in the 60 percent plans which will be submitted to WisDOT in July 2014. The 60 percent plans included a shift of the proposed alignment to the south from STA 340+00 to 350+00. The inputs included the centerline of each direction of travel and the width of the travel way in each direction, not including shoulders. The elevations at the centerline were entered for each direction of traffic.

There are three intersections along the corridor with intersection controls on WIS 20, as shown below. It was assumed that 50 percent of vehicles stop at the traffic signals and 100 percent of vehicles stop at the all-way stop.

Intersection Control			
Year	WIS 20 at Buena Park Road	WIS 20 at Jefferson Street	WIS 20 at First Street / Main Street
2011	Signal	Signal	All-Way Stop
2038	Signal	Signal	Signal

Buildings and trees near WIS 20 were entered as they decrease the potential sound levels at nearby receptors. Buildings were entered as building rows, which could have a maximum building area of 80 percent. In the downtown area, 80 percent building coverage likely underestimates the actual building coverage. Trees were entered when thick foliage was apparent between WIS 20 and a receptor.

Receptors were entered based on FDM 23-30-2 Table 2.1. The ground level elevation at the receptor was approximated using the contours. Any significant topography between the roadway and the receptor was entered into the models.

For the traffic inputs, WisDOT provided the breakdown of vehicles into passenger cars, medium truck, heavy truck, motorcycle, and bus as well as the forecast for the project length. The forecast was divided into five segments:

- West of Buena Park Road
- Buena Park Road to Jefferson Street
- Jefferson Street to First Street
- E Main Street to River Road
- River Road to WIS 36

A summary of the traffic information entered into the existing and future models is shown in the tables below. The traffic information entered is consistent with the Basic Sheet 6: Traffic Summary Matrix.

Percent of Vehicles			
Vehicle Type	Road	NB percent	SB percent
MC	1%	1%	0%
Car	85%	85%	85%
Bus	2%	3%	2%
Medium Trucks	7%	6%	7%
Heavy Trucks	5%	5%	6%
Total	100%	100%	100%

Traffic Volume Inputs					
	West of Buena Park Road	Buena Park Road to Jefferson Street	Jefferson Street to First Street	E Main Street to River Road	River Road to WIS 36
AADT, 2011	7800	10400	13900	6800	7000
AADT, 2038	10500	13800	18100	9000	9300
K250	9.7%	9.7%	9.7%	9.7%	9.7%
DHV, 2011	757	1009	1348	660	679
NB split (59%)	446	595	795	389	401
SB split (41%)	310	414	553	270	278
DHV, 2038	1019	1339	1756	873	902
NB split (59%)	601	790	1036	515	532
SB split (41%)	418	549	720	358	370
Speed (mph)	40	35/25	25	25	35
Station Start	300+00	314+00	358+00	366+50	384+00
Station Stop	314+00	358+00	366+50	384+00	406+00

The results of the noise analysis are included in the Traffic Noise Evaluation Factor Sheet D-3.

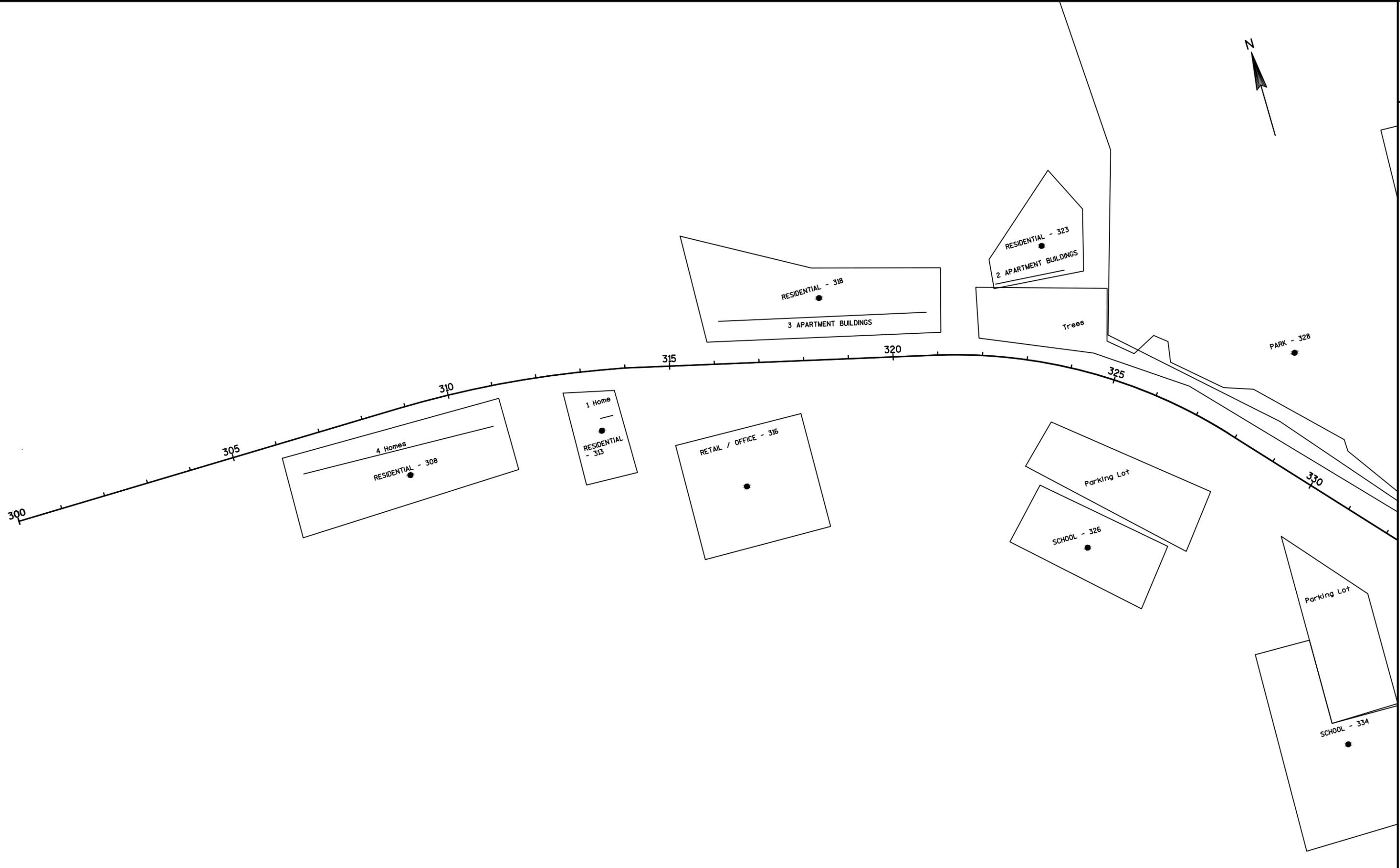
Wisconsin Department of Transportation

Daily % Class Distribution for 07/21/2008 through 07/23/2008 (48 hours)

Site Names: 510115, 1399, SE
 County: Racine
 Funct. Class: U Principal Arterial - Other
 Location: STH 20 BTWN CTH D & STH 83

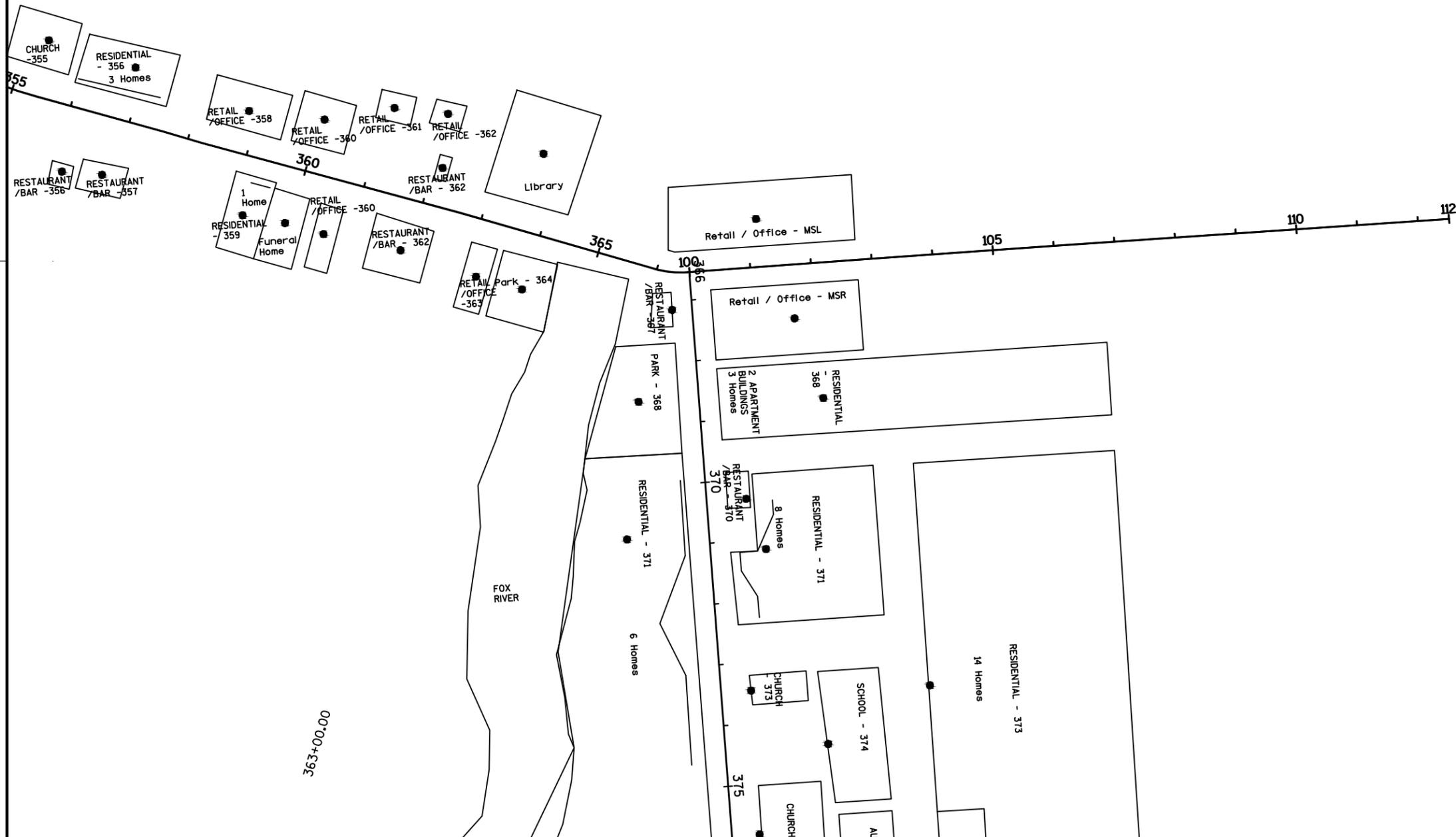
Seasonal Factor Group: 2
 Daily Factor Group: 2
 Axle Factor Group: 5
 Growth Factor Group: 1

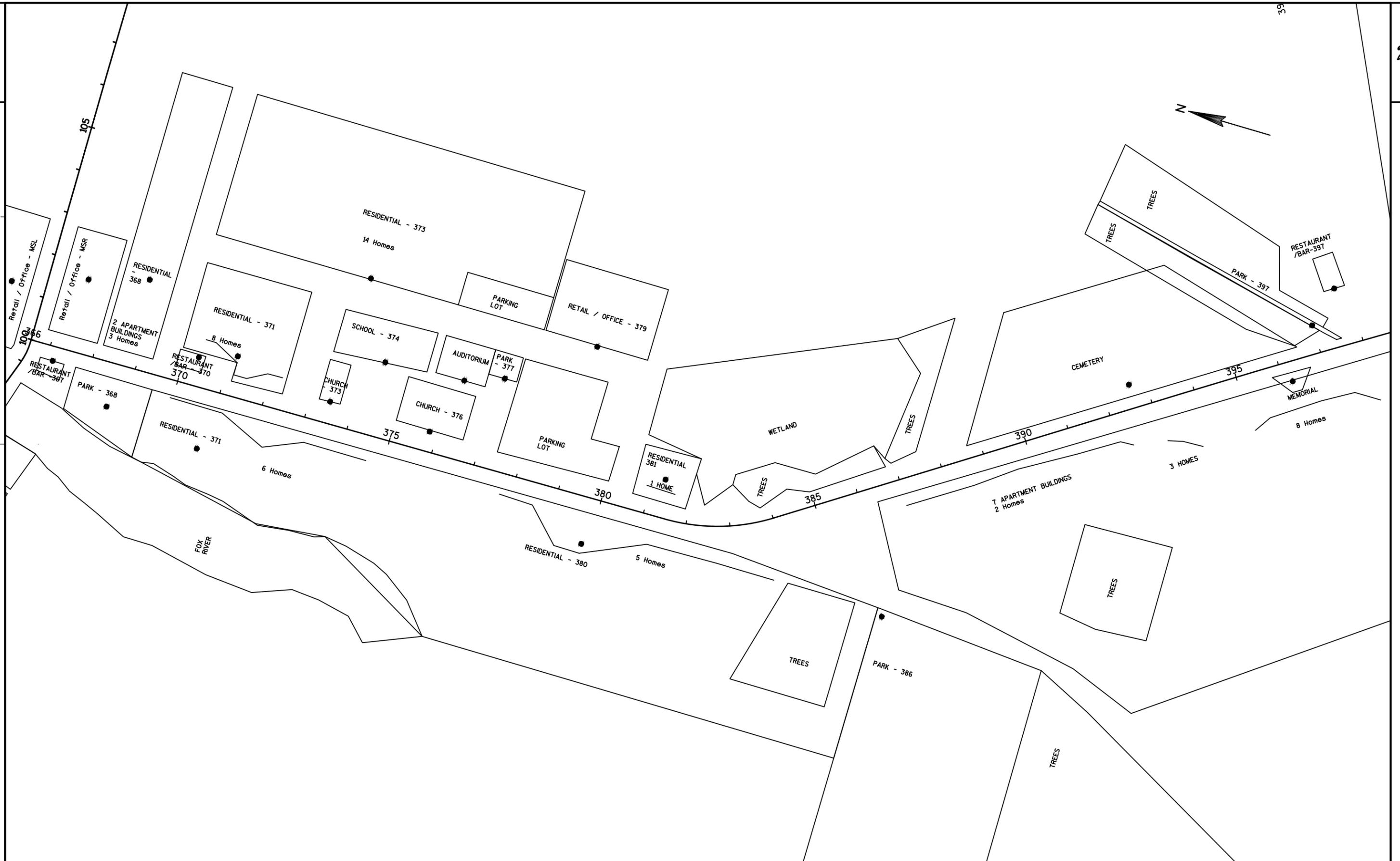
	Roadway	Neg DIR	Pos DIR
MC	0.53	0.81	0.27
CAR	60.11	60.26	59.97
PU	25.19	25.05	25.32
BUS	2.39	2.58	2.21
2D	5.92	5.89	5.95
SU 3	0.50	0.41	0.58
SU 4+	0.13	0.04	0.21
ST 4-	4.05	4.36	3.76
ST 5	1.06	0.50	1.59
ST 6+	0.07	0.02	0.12
MT 5-	0.05	0.08	0.02
MT 6	0.00	0.00	0.00
MT 7+	0.00	0.00	0.00
Trucks	14.17	13.89	14.44
Combo Trucks	5.23	4.96	5.49
Classified	100.00	100.00	100.00
Volume	9,997	4,839	5,158

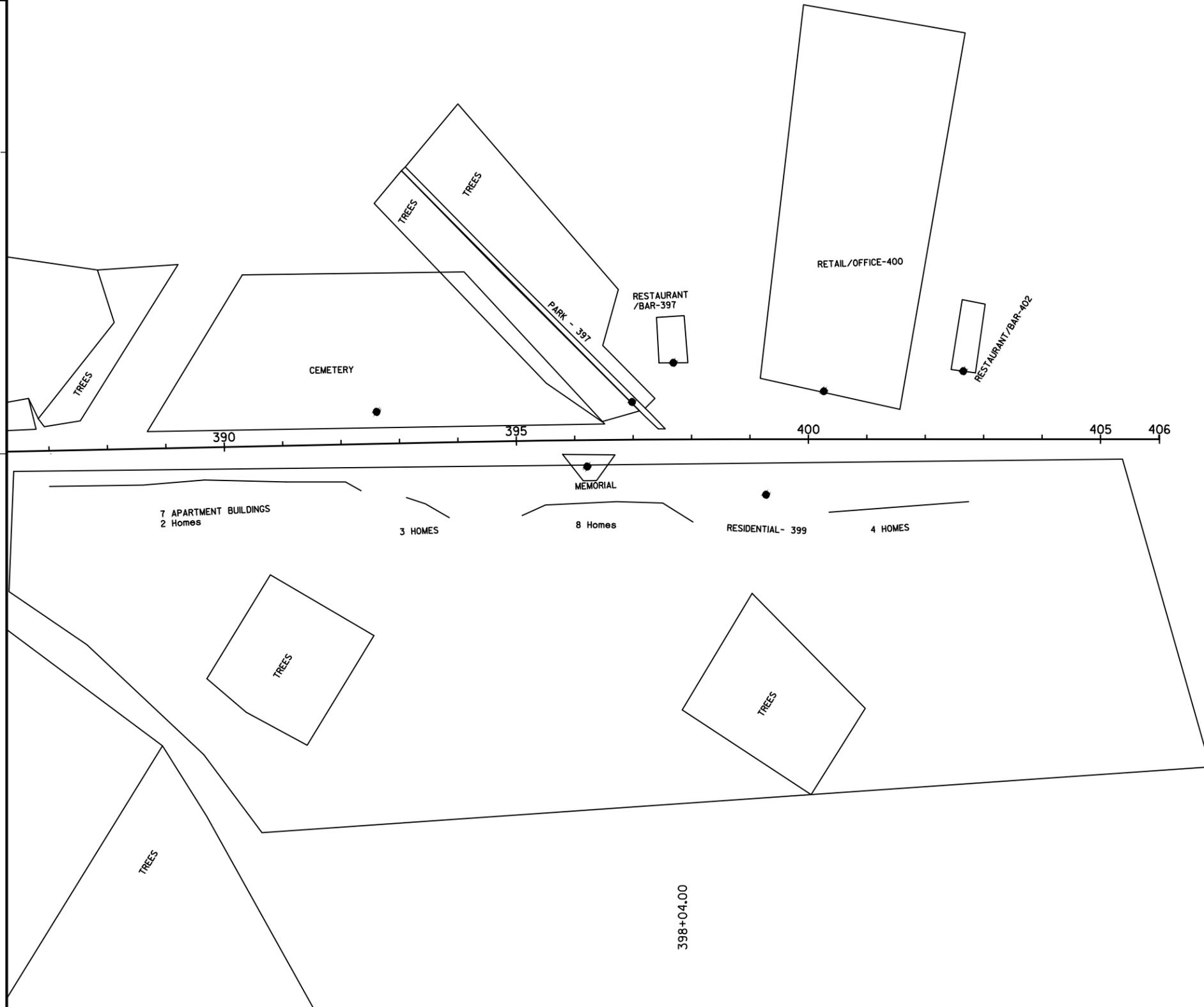




● These Properties will be razed due to proposed alignment







PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	NOISE ANALYSIS	SHEET	E
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