SEPARATION STRUCTURE SURVEY REPORT

Wisconsin Department of Transportation

DT1694 6/2012

☐ **Grade Separation** ☐ **Railroad** ☐ **Retaining Wall** ☐ **Noise Barrier**

☐ **Sign Structure** ☐ **High Mast Lighting** ☐ **Other:** _____

For guidance see: **http://dotnet/dtid_bos/extranet/structures/reports-checklists.htm**

Design Project ID	Construction Project ID	Highway (Project Name)		
Final Plan Due Date	Preliminary Plan Due Date	☐ Town ☐ Village ☐ City		
PS&E Date	Letting Date	County		
New Structure Number	Existing Structure Number	Section	Town	Range
Station	Latitude: Longitude:	☐ YES ☐ NO Structure Located on National Highway System		
For Survey and CADD Files Horizontal Coordinate System: Vertical Datum:		**Traffic Forecast Data**		
		Design Year	Average Daily Traffic (ADT)	Roadway Design Speed	Functional Class
Feature On		Feature On			
Feature Under		Feature Under			
Region Contact: (Area Code) Telephone Number(s): Email:		Consultant Contact: (Area Code) Telephone Number(s): Email:			

Instructions for Structure Survey

- *Report submitted with Preliminary Plan requires **no** CADD file submittal (see ESubmittal instructions).*
- *Report submitted for development of Preliminary Plan to structure design engineer requires CADD file(s) submittal and Report submittal to Soils Engineer.*
- *Coordinate with design engineer **before** going into the field if existing structure has no available plans, if staged construction is planned, or if there are adjoining/adjacent structures that will remain in place.*

In addition to this report, the following information shall be submitted.

1. **Small County Map** on which the location of proposed structure is shown in red, any highway relocation in green, and **Location Map** of scale not less than 1" = 2000' showing the structure location and number.

2. **Plan and Profile Sheet** on proposed reference line of feature on and feature under showing the following:
(a) Ground line; (b) Finished grade line; (c) Profile grade line elevations at least every 100 feet for 1,000 feet each side of the structure; (d) Vertical curve control points; (e) Horizontal curve control points; (f) Curve data, including full SE and runoff distance; (g) For railroad project, survey top of each rail and provide proposed geometrics in conformance with railroad company standards.

3. **Layout Sketch** of the site drawn to a scale of not less than 1 inch = 100 feet showing the following:
(a) Existing highway and structure; (b) Proposed highway alignment and R/W; (c) Station numbers; (d) Reference line intersection stationing and intersection angle; (e) North Arrow; (f) Buildings; (g) Above and below ground facilities; (h) Proposed structure when report submitted with Preliminary Plan; (I) Railroad company stationing; (j) Station at ends of existing structure; (k) Other features which influence the design.

4. **Typical Sections** of all roadways showing the following:
(a) Dimensions; (b) Slopes; (c) Type and width of surfacing or pavement; (d) Subgrade; (e) Sidewalk, curb and gutter; (f) Median treatment at underpass mounted or ditch section; (g) Clear zone width; (h) Horizontal clearances at underpass.

5. **Labeled Photographs** of: (a) Existing structure; (b) Site pictures in all controlling directions including, but not limited to North, East, South and West; (c) Buildings within 100 feet of proposed structure.

Proposed Structure

Preference for Structure Type at this Site: ☐ No Preference

Aesthetics Level – See Bridge Manual Chapter 4
☐ 1 ☐ 2 ☐ 3 ☐ 4 (For Levels 2, 3 & 4 Explain on Page 3)

Spans- Number	Approximate Centerline to Centerline Span Lengths Along Reference Line of Highway
Clear Roadway Width on Structure Ft.	Cross Slope on Deck or N.C. (Normal Crown) Ft./Ft.

Skew ☐ R.H.F. ☐ L.H.F.

Sidewalks/Multi-Use Path ☐ Yes ☐ No	Left Clear Sidewalk/Path Width Ft.	Separation Barrier ☐ Yes ☐ No	Right Clear Sidewalk/Path Width Ft.	Separation Barrier ☐ Yes ☐ No

Type of Slope Protection

Specify Wing Location(s) for Beam Guard Attachment	Specify Wing Location(s) for Surface Drain Anchors

Specify Wing Location(s) where Bridge Barrier/Rail Continues on Roadway Approach

YES	NO	
☐	☐	Structure Will be Constructed to Accommodate Traffic Staging
☐	☐	Structural Approach Slab
☐	☐	Lighting Required: Bolt Circle Diameter _____ inches
☐	☐	Traffic/Lighting Staff been Notified for Review
☐	☐	Conduit in Parapet: Diameter _____ Number _____
☐	☐	Historical Properties (Archaeological, Historic) Present Near Structure

Vertical Clearance Design
☐ 14' 9" to 15' 3"
☐ 16' 3" to 16' 9"
☐ Other: _____

Utilities on Structure (WisDOT policy is to avoid placing utilities on the structure.)

YES	NO	
☐	☐	Utilities will be located on the structure? (if YES, provide the following information as well as the alignment and profile on Page 3)
☐	☐	Utilities have been approved by Region Utility Coordinator or previously approved by the Bureau of Structures? (if NO, please explain on Page 3)

Type	Owner and Contact Information	Size	Opening at Abutment	Weight	Pressure

Proposed Disposition of Existing Structure

YES	NO	
☐	☐	Structure will be Removed ☐ Bid Item ☐ Later Contract ☐ Other: _____
☐	☐	Structure will Remain in Service, Purpose: _____

For Structure Designers Use Only
Proposed Structure

Spans – Number:	Span Lengths (C.L. to C.L. of Substructure):	Skew:	☐ R.H.F. ☐ L.H.F.
Latitude:		Longitude:	

Additional Information

Elaborate on other concerns such as: DNR, Local, Utility Conflicts, Aesthetics, Railing Type and Staged Construction.
Please be as detailed and specific as possible.

The more information that can be provided, the better. This will result in fewer questions from BOS during structure design or consultant review and a better end product.

The following is not all inclusive; please add/delete discussion items to fit site/project specific details that may influence structure design:

Geotechnical Coordination:
Detail who is completing geotechnical work/soil borings (in-house or consultant) and anticipated schedule of work.

Aesthetics:
If aesthetic level 2 or more is indicated, you must suggest particular requirements such as railing type, pier shape, aesthetic option (type I,II or III), special form liners, stain/paint, color (federal color number), etc. See Bridge Manual Chapter 4 for updated information. Also include coordination that is yet to be made. If applicable, provide B-##-### for example structures in the area that are similar to proposed or desired; attach an exhibit for reference. contact BOS with questions.

Structural Approach Slabs:
If requested, provide justification for their inclusion. See Bridge Manual Chapter 12.11.

Proposed Structure (& Future Expansion):
Discuss proposed size and type of structure and vertical/horizontal clearances (if special clearances are required for construction staging). Describe future expansion, if any is anticipated, which may include lower roadway lane expansion, upper roadway widening, etc. Anticipated future expansion of bridge may have impacts to profile grade, consider vertical clearance requirement.

Temporary Shoring:
Describe anticipated locations of temporary shoring needed for construction. Especially important for stage construction or current structure that remain in service during construction.

Construction Staging:
Discuss construction staging in detail and describe desired sequencing; provide sketches of staging.

Traffic Barrier:
Discuss barrier locations, type, and heights approaching the structure, if applicable.

Bike/Pedestrian/Other Structure Accommodations:
Discuss proposed sidewalks, multi-use paths, separation barriers, medians, wildlife passages, etc.

Utilities:
List utilities located under, near, or on the proposed structure. Include type of utility, action to be taken and who owns the utility. If conduit/utility will be on the proposed structure describe who will be servicing it, number and size of conduits needed and any other pertinent information. Justification for placing utilities on proposed structure and means of attaching.

Site Drainage:
Discuss potential drainage concerns involving the proposed structure. Possible concerns include proposed roadway drainage pipes under substructure units, anticipated need for deck drains and median drainage. Include locations of pipes and invert elevations as appropriate.

DNR:
Discuss the status of coordination between Region/Consultant and DNR. Include any agreements made, concerns with the site, or areas requiring special attention as expressed by DNR.