SEPARATION STRUCTURE SURVEY REPORT

Wisconsin Department of Transportation
DT1694 4/2017

RECEIVED
3/11/2019
BUREAU OF STRUCTURES

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

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

For guidance see: http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/strct/survey.aspx

Design Project ID 3614-00-05	Construction Project ID 3614-00-75	Highway (Project Name) Creek Road		
Final Plan Due Date September 1, 2019	Preliminary Plan Due Date March 15, 2019	☒ Town ☐ Village ☐ City Bradford		
PS&E Date November 1, 2019	Letting Date March 10, 2020	County Rock		
New Structure Number B-53-177	Existing Structure Number P-53-0101	Section 26	Town 02-N	Range 14-E
Station 20+34.48	Latitude: 42.60639° N Longitude: 88.80332° W	☐ 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 Creek Road		Feature On 2040	520	50 mph	Local Road
Feature Under Wisconsin & Southern Railroad		Feature Under			
Region Contact: Zachary Pearson (Area Code) Telephone Number(s): 608-246-5319 Email: zachary.pearson@dot.wi.gov		Consultant Contact: Patrick Boland, Jewell Associates Engineers (Area Code) Telephone Number(s): 608-588-7484 Email: Patrick.Boland@JewellAssoc.com			

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:
36W-Inch Prestressed Concrete Girders ☐ 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
1	78 Ft.

Clear Roadway Width on Structure	Cross Slope on Deck or N.C. (Normal Crown)	Skew
28 Ft.	N.C. Ft./Ft.	40° ☒ R.H.F. ☐ L.H.F.

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

Type of Slope Protection
Slope Paving - Select Crushed Material

Specify Wing Location(s) for Beam Guard Attachment	Specify Wing Location(s) for Surface Drain Anchors
All Four Wings	N/A

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

YES	NO		
☐	☒	Structure Will be Constructed to Accommodate Traffic Staging	**Vertical Clearance Design**
☐	☒	Structural Approach Slab	☐ 14' 9" to 15' 3"
☐	☒	Lighting Required: Bolt Circle Diameter _____ inches	☐ 16' 3" to 16' 9"
☐	☒	Traffic/Lighting Staff been Notified for Review	☒ Other: 23'-0"
☐	☒	Conduit in Parapet: Diameter _____ Number _____	
☐	☒	Historical Properties (Archaeological, Historic) Present Near Structure	

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:	
1	78 Ft.	40°	☒ R.H.F. ☐ L.H.F.

Latitude:	Longitude:
42.60639° N	88.80332° W

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.

Bridge abutments will be skewed 40º which is the maximum allowed for this structure type.

Concrete approach slabs and asphaltic flumes are required. Details will be included in the final roadway plans.

MSE walls R-53-084 & R-53-085 will be located at the abutments of the structure. Construction of MSE walls will be coordinated with the construction of the bridge.

Chain link fence will be placed along the top of the MSE retaining walls.

Railroad ditches in front of the retaining walls will be graded to facilitate drainge towards the south.