REHABILITATION STRUCTURE SURVEY REPORT

Wisconsin Department of Transportation
DT1696 4/2017

RECEIVED
5/13/2019
BUREAU OF STRUCTURES

☐ **Grade Separation** ☒ **Stream Crossing** ☐ **Culvert**

☐ **Railroad** ☐ **Retaining Wall** ☐ **Noise Barrier**

☐ **Sign Structure** ☐ **Other:** _____

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

Design Project ID 5820-00-30	Construction Project ID 5820-00-60	Highway (Project Name) Coon Valley - Bangor		
Final Plan Due Date 3/1/2023 (3/1/2021 Advanceable)	Preliminary Plan Due Date 10/1/2019	☒ Town ☐ Village ☐ City Bangor		
PS&E Date 5/1/2023 (5/1/2021 Advanceable)	Letting Date 11/14/2023	County La Crosse		
Structure Number B-32-0015		Section 08	Town 16N	Range 05W
Station -	Latitude: 435245.95 Longitude: 905955.72	☐ 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 STH 162		Feature On 2044	2,200	60	Major Collector
Feature Under Dutch Creek		Feature Under			
Region Contact: Todd Waldo (Area Code) Telephone Number(s): (608) 785-9462 Email: todd.waldo@dot.wi.gov		Consultant Contact: Knight E/A (Area Code) Telephone Number(s): (608) 713-9274 Email: rmckane@knightea.com			

Work To Be Performed

Field Information Required
Item Number *(see Pages 2–4)*

- ☒ A. Structural Repair 1–3, 22
- ☒ B. Overlay 1–3, 10–22, 26–28, 32, 34
  - ☒ Concrete Overlay ☐ Asphalt Overlay
  - ☐ Polymer Modified Asphalt Overlay ☐ Thin Bonded Polymer Overlay
  - ☐ Other: _____
- ☒ C. New Bearings 3, 8, 9, 22
- ☐ D. New Railings 15–17, 20–23
- ☐ E. Curb and Sidewalk Repair 2, 3, 16, 22, 23
- ☒ F. Abutment Repair 2, 3, 12, 16
- ☒ G. Pier Repair 2, 3, 12, 16
- ☐ H. New Deck 1–6, 9, 10, 13–28, 32–34
- ☐ I. Widening 1–28, 30, 32–35
- ☒ J. Joint Repair 2, 3, 8, 16, 19, 22
- ☒ K. Surface Repair 2, 3, 22
- ☐ L. Raising Bridge 3, 6, 9, 16, 20–24
- ☒ M. Slope Stabilization 1–3, 30
- ☐ N. Scour Repair ..... 1, 2 or 3, 16, 19, 21, 27, 29, 31–35
- ☒ O. Painting 16, 22, 24
- ☐ P. Other: _____

Field Information Required

If no structure number exists provide the following: Small County Map on which the location of proposed structure is shown in red and any highway relocation in green. In addition, provide Location Map of scale not less than 1" = 2000' showing the structure location and number.

☒ 1. Most recent inspection report, brief history of bridge construction date, and description of repairs with dates.

☒ 2. Outline deficient areas on existing structure plan or drawing.

☒ 3. Photographs of details requiring repairs or modifications, such as: bearings, x-frames, joints, etc. Photograph all deficient areas. Clearly label all photographs.

☐ 4. Provide proposed typical section for roadway and structure showing dimensions and cross slopes.

☐ 5. Survey beam seat or girder elevations at both sides of bridge at all substructure units.

☐ 6. Provide cross-section elevations at 10 foot intervals extending across the structure and a minimum of 100 feet beyond each end. Sections should be normal to centerline and show elevations at centerline roadway and gutter line. Take elevations along joints and at floor drains.

☐ 7. Show and identify starting stationing on bridge.

☒ 8. Record measurement, temperature of the structure, and date taken for each of the following:
(a) Joint opening measured normal to joint at centerline of roadway and both curb lines.
(b) Clearance between girder ends at piers.
(c) Distance from front face of abutment backwall to closest point of girder end measured parallel to girder.
(d) Temperature of structure determined by averaging top and under deck (if accessible) readings.

☒ 9. Fixed and expansion bearings - condition and orientation.

☒10. Number and width of proposed pours including construction staging sequence.

☒11. Location of existing construction joints in the deck.

☒12. Estimated Quantities:

Preparation, Decks, Type 1	Sq. Yd. 3	
Preparation, Decks, Type 2	Sq. Yd. 1	
Full Depth Deck Repair	Sq. Yd. 1	Galvanic Anodes? NO
Concrete Surface Repair Superstructure	Sq. Ft. 430	Galvanic Anodes? NO
Concrete Surface Repair Substructure	Sq. Ft. 204	Galvanic Anodes? NO
Curb Repair	LF. 0	Galvanic Anodes? NO

☒13. Sufficiency number: 69.0 (obtain from HSI Bridge Inventory System)

☒14. Appraisal and Condition Rating

	Deck Condition	Superstructure Condition	Substructure Condition	Load Capacity Appraisal	Structural EVAL Appraisal
Current	6	6	5	x	x

☒ 15. Load Ratings

	Inventory	Operational
Current Calculated Date: 5/24/2013	HS20	HS33
After Completed by Bridge Designer	HS22	HS37

☒ 16. Utilities on/near Structure. (WisDOT policy is to avoid placing utilities on the structure.)
☐ Yes ☒ No

Type	Owner and Contact Information	Size	Opening at Abutment	Weight	Pressure

☒ 17. Is existing bridge railing deficient?
☒ Yes ☐ No If Yes – Replacement Rail Type: Retrofit to comply with current standards

☒ 18. Drains to be:
☐ Raised ☐ Closed ☐ Downspouted ☐ New

☒ 19. Traffic maintained on bridge during work?
☐ Yes ☒ No If Yes – Include sketches

☒ 20. Will guard rail be attached?
☒ Yes ☐ No If Yes – Which corners? All four

☒ 21. Will work to be performed eliminate all deficiencies?
☒ Yes ☐ No If No – Explain:

☒ 22. Hazardous waste (asbestos) to be removed?
☐ Yes ☒ No If Yes – Explain:

☐ 23. Wing location(s) for surface drain anchors: N/A

☒ 24. Painting?
☒ Yes ☐ No If Yes – Explain on Page 4
(all, part, railing, color system, containment, bid items)

☐ 25. Desired roadway width: *(new deck / widening)* _____ Ft.
Desired sidewalk clear width: Left: _____ Ft. Right: _____ Ft.

☒ 26. Maximum increase in grade line elevation 1 In.

☒ 27. Benchmark description to be shown

☒ 28. Desired final cross slopes on bridge 0.02 Ft./Ft.

☐ 29. Underwater Inspection Report including:
- Streambed Cross Section With Pier, Footing and Seal Elevations
- Pier Elevation Drawings
- Pier Layout
- Hydrographic Survey

☒ 30. Slope stabilization, provide:
Type: Riprap Quantity: 287 CY.
Slope: 2:1 Ft./Ft. Fill: _____ CY.

☐ 31. Preliminary layout of grout bags or proposed scour repair.
C.I.P. Articulated Mats (for Scour) _____ CY.
Grout Bags (for Scour) _____ CY.
Heavy Riprap _____ CY.
Extra Heavy Riprap _____ CY.

☒ 32. Report submitted with Preliminary Plan requires **no** CADD file submittal *(See ESubmittal instructions)*.

☐ 33. Report submitted for development of Preliminary Plan to structure design engineer requires CADD file (if available) submittal and Report submittal to Soils Engineer if project involves foundation modifications.

☒ 34. Coordinate with structure 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.

☐ 35. If project involves substructure widening coordinate with structure and/or hydraulic design engineer to determine if information on the separation and/or stream crossing SSR will be required.

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.

1.New structure in 1952, new deck in 1985, and structure painting in 1989.
8a. Joint opening - South Abutment: east end = 1/2", centerline = 3/4", west end = 1 1/2"
- North Abutment: east end = 1 1/4", centerline = 1/2", west end = 1/2"
8c. Distance from abutment backwall to edge of girder, parallel to girder = 8.5" at South Abutment, Girder 5E
8d. Average temperature of deck = 53°
9. Bearings oriented north and south. Per Inspection Report (8/2/2017) condition - moveable bearings have heavy laminated corrosion on masonry plates and hardware. Movement of bearings may be restricted by pack rust. Fixed bearing have no noticable damage and will not be replaced.
10. Proposed number of pours =1. Bridge will be closed to traffic and the overlay will be poured all at once. Pour width = 26'
11. Centerline longitudinal joint.
17. Existing railing is not to current height standards and will be retrofitted to be raised to required heights.
24. Railing to be spot painted or regalvanized. Girders to be cleaned and painted according to 517.3000.S, Structure Overcoating Cleaning and Priming.
34 . N/A

No Concrete Approach Slab is proposed at the request of Region due to no existing issues at structure.