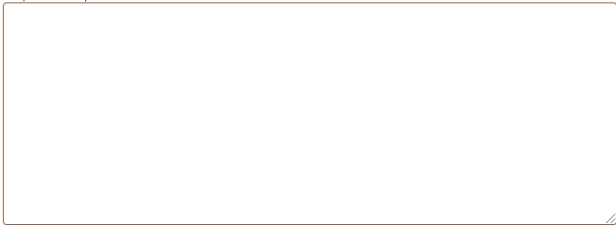
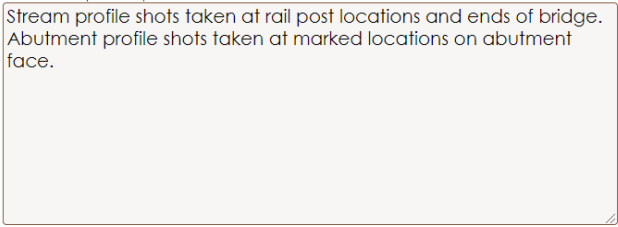
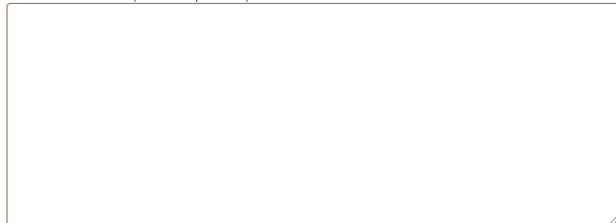
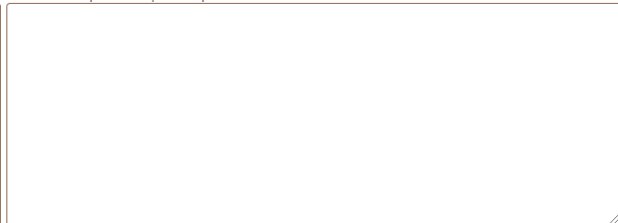


April 2020 HSIS Enhancements and Bug Fixes of Note

A new version of HSIS was released on 4/22/2020. The following is a list of some of the enhancements and bug fixes made to HSIS since the last release. This is not a comprehensive list of bug fixes and enhancements.

If you discover any bugs or have suggestions for enhancements, please email ryan.bowers@dot.wi.gov. If you do find a bug, please provide as much information as possible about what structure you were working on, what browser you used, if you were using a mobile device or not, items you were editing or clicking on prior to the bug occurring, etc. The more information you provide, the better chance we have at determining the cause and fixing it. Any screenshots or videos you can take of the screen are helpful.

- 1) A bug that kept users from selecting the critical finding activity on inspection creation has been fixed.
- 2) You can now enter inspection procedures specific for each different inspection type. For the image below, fracture critical and uw-dive inspections were the inspection types selected, and now there is a box for each type for entering procedures. The historic "structure inspection procedure" box will be visible if it has text in it from previous inspections. You can copy the text and paste it to the new type-specific procedure if it applies. The "structure inspection procedure" box cannot be edited and will not be visible at some point in the future.

<p>Inspection specific notes</p> 	<p>Structure inspection procedure</p> <p>Stream profile shots taken at rail post locations and ends of bridge. Abutment profile shots taken at marked locations on abutment face.</p> 
<p>Fracture critical inspection specific procedures</p> 	<p>UW- dive inspection specific procedures</p> 

- 3) Additional information, such as the structure number, is provided in the inspection pdf footer.

. B-01-004 13-Apr-2020 inspection as of 14-Apr-2020

- 4) A vertical clearance document must be uploaded to complete the vertical clearance measured activity.
- 5) For activities where elements are not able to be edited as part of the activity, such as uw-profile or scour plan of action, the elements are no longer displayed in the final pdf.
- 6) Scour and settlement defects with a CS4 quantity increase were not automatically triggering an action. This has been fixed.

- 7) Photos can now be attached to maintenance items. This is done on the maintenance tab. There are buttons to choose and upload the document beneath the comment field.

This Inspection Maintenance

Action Item
Deck - Repair Railing


Status: Identified/recommended Action priority:

Estimate quantity: Estimate unit amount (\$):

Item comment:

Documents/Images


Document (8010010_maint_403148_1.jpg)



Note: A red arrow points to the 'Choose File' button in the second row.

Any maintenance photos added will be displayed in the final inspection pdf and in the maintenance tab located under General Inventory.

Maintenance Items

Item	Priority	Recommended by	Status	Status change
Slope Protection - Install Heavy Riprap	MEDIUM	Blum, Chris (9528)	IDENTIFIED	11/05/14
Add riprap to both abutment slopes to protect slopes from erosion. 75% missing at each abutment. Water to high to check during 2018 inspection.				
Approach - Wedge Approach	MEDIUM	Blum, Chris (9528)	IDENTIFIED	10/29/18
Wedge approaches on each end to match bridge surface.				
Bearings - Clean Assemblies / Paint		Wittrock, Jon (9613)	IDENTIFIED	04/12/20
Deck - Repair Railing		Wittrock, Jon (9613)	IDENTIFIED	04/12/20
				

General Inventory

Identification Location Map File Program Manager Construction Maintenance Improvement Route Clearance Special Component Media Event

filter 1 item(s) filtered

Action Item: Channel - Install Scour Countermeasures Status: Identified/recommended Complete (yr): 04/20/20 Status change: 04/20/20

Action priority: HIGH Inspection 04/14/20 'R'

Recommended by: McDaniel, Travis (9006)

Approved by: [dropdown]

Estimate quantity: [input]

Estimate unit amount (\$): [input]

Scheduled date: mm/dd/yyyy

Performed by: [input]

Construction project: [dropdown]

FOS id: [input] [input]

Actual amount: [input]

Item comment: [input]

Status comment: [input]


Documents/Images

Document (B020059_maint_404547_1.jpg)

Choose File replace

Choose File upload

8) The way files are listed in the inspection pdf has been revised. The table that used to list word documents, excel files, and pdfs has been replaced. Files are now listed in the same list and format as the images. The file name is listed so you can easily select the file you are looking for in the files folder. In order to help clarify which files are part of the inspection pdf, "included" is listed after the pdf. PDFs are part of the inspection pdf accessed through the "History" tab. Word documents and excel files are not part of the pdf; "included" is not shown after the file name. These files can only be accessed by going to General Inventory > File.

Scour POA Item 1	
Example word document	p68-032_20_xud1.docx
Scour POA Item 2	
	
Scour POA Item 3	
Example excel file	p68-032_20_xud3.xlsx
Scour POA Item 4	
Example PDF	p68-032_20_xud4.pdf (included)

- 9) Additional functionality has been added to the deck evaluation activity. The deck evaluation activity should be used whenever deck chaining, IR, GPR, or chloride ion testing is done. The date the method was done should be entered as the inspection date. Multiple methods can be selected for one entry. An example of the chaining method is shown.

The screenshot shows the 'Inspection' form with a navigation bar containing buttons for 'Edit', 'History', 'Frequency', 'Structure Information', 'Notes/Requirements', and 'Deck Evaluation'. Below the navigation bar is a 'Method' dropdown menu with an 'add' button. The dropdown menu is open, showing the following options: 'Chaining', 'Chloride Ion', 'GPR', and 'IR'.

The screenshot shows the 'Inspection' form with the 'Deck Evaluation' button highlighted. The 'Chaining' method is selected, and the form displays the following details:

- Chaining**
Measured by: Enter company name for IR and GPR, individual name for chaining
- Notes: Include any notes about the deck evaluation activity here.
- Delamination (%): 10
- Validation Methods: Available (dropdown menu) and add button
- delete button

For chaining and IR, the percentages entered will be shown as suggested values for inspections. The suggested value will be displayed beneath the condition state it should be applied to for defect 3210. If defect 3210 is not included in the inspection, the suggested values will not be visible. If the inspector adds the defect, the recommended values will be shown. In the image shown, 10% was entered for delamination and is suggested for CS2. By clicking the "511" button, the CS2 value will be populated with 511.

8000	Wearing Surface (Bare)	SF	5111	=Σ	4761	300	50	0	
3210	Debonding/Spall/Patched Area/Pothole	SF	0		50	50	0		
	Recommended from 04/16/20 Chaining Deck Evaluation						511		
Both edges <u>spalled</u> from plow damage - repaired w <u>quickset</u> which starting to crack/crumble. 2 small <u>spalls/agg popouts</u> at SW end in lane.									

Information entered for the “Deck Evaluation” activity is shown in the final pdf. All known fields should be completed and documents uploaded prior to completing the activity. Documents can include IR results received or sketches showing delaminated areas found during chaining.

Deck Evaluation

Method: Chaining	Measured by: Enter company name for IR and GPR, individual name for chaining	Notes: Include any notes about the deck evaluation activity here.	
Delamination (%) 10.0			
Element: Reinforced Concrete Deck-Coated Reinforcing -> Wearing Surface (Bare) -> Debonding/Spall/Patched Area/Pothole		Recommended CS2: 511	Recommended CS3:

We are in the process of populating the HSIS database with historic IR and GPR data. Condition state values will not be recommended until the historic data is added to HSIS.

The deck evaluation activity for chaining should only be used if the entire deck is chained. Delaminated areas should be sketched, and the document uploaded in HSIS. The deck evaluation activity for chaining should not be used for estimated areas of delamination.