

# County & City Engineer's Bridge Inventory Reporting (Form 107) Instruction Guide

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**UPDATED AS OF:**

**August 2023**

Prepared by the

Iowa Department of Transportation

Transportation Development Division

Research & Analytics Bureau

## **DEFINITION OF A STRUCTURE**

To qualify as an NBI structure, a structure must comply with the following definition:

*“A structure including supports erected over a depression or an obstruction, such as water, highway or railway, and having a track or passageway for carrying traffic or other moving loads, and **having an opening measure along the center of the roadway of more than 20 feet between undercopings of abutments or spring lines of arches, or extreme ends of openings for multiple boxes**; it may also include multiple pipes, where the clear distance between openings is less than half of the smaller contiguous opening.”*

## **A FORM 107 MUST BE COMPLETED FOR ALL NEW STRUCTURES, REPLACEMENT STRUCTURES, AND/OR REMOVALS OF STRUCTURES TO THE INVENTORY.**

### **REPORTING CHANGES TO THE INVENTORY**

Additions, along with replacements and removals, are to be **reported when completed** via the link to the PDF Form 107 located at <https://iowadot.gov/siims> and emailed to Jodi Clement at [jodi.clement@iowadot.us](mailto:jodi.clement@iowadot.us). The federal mandate states that new structures must be reported and NBI data populated when open to traffic.

You will not receive an annual inventory listing or request for structure updates. Updates to the inventory should be made throughout the year based upon the above paragraph. You may view your asset list through the SIIMS application at any time.

### **NEW STRUCTURES ADDED TO INVENTORY**

A new structure that meets the above definition should be added to the inventory when it is new to a location due to new construction or realignment of a route. If a bridge is removed and another one constructed in the same place, a replacement form should be completed. You should not complete a removal form and a new form for these types of structures.

To complete the form, please check the box to indicate the bridge owner and *New Bridge*, leave the FHWA number fields blank, complete the form and email it to [jodi.clement@iowadot.us](mailto:jodi.clement@iowadot.us). If applicable, please measure and report the **NEW** vertical clearances. A signed form will be returned to you with the new FHWA number assignment.

### **REPLACEMENTS OF STRUCTURES IN INVENTORY**

Replacements are defined as being structures where the location of a new bridge is the same as a previous structure.

If the structure qualifies as a replacement, please check the box to indicate the bridge owner as *Replacement*, enter the existing FHWA number in the “Current” field, complete the Form and email it to [jodi.clement@iowadot.us](mailto:jodi.clement@iowadot.us). It is imperative to add the new length and year built for the replacement

structure. If applicable, please measure and report the **NEW** vertical clearances. A signed form will be returned to you with a replacement FHWA number.

When replaced with a new FHWA number, the original number will be archived in SIIMS. It may take up to 2 days for the new structure to be viewed in SIIMS.

### **REMOVAL OF STRUCTURES FROM INVENTORY**

Problems have arisen with the distinction between the removal process and the closure process. If a structure is replaced by a structure that is 20 feet or less OR is physically removed and not replaced, it is considered a **REMOVAL**. Only removals require a Form 107. **Closures** must be updated in the SIIMS application. Any structure that is closed to traffic should be noted as “closed” (K) under NBI Item 41 in SIIMS. No Form 107 is required for open/closed status change. These closures will remain on the inventory list, but will be carried as “closed only” in our records until such time the structure is replaced, removed, or repaired. The FHWA allows closed structures to remain in their inventory for a maximum of 10 years to collect federal aid in the event the structure is replaced and/or reopened in the future.

If a structure is to be removed, please check the box to indicate the bridge owner and *Removal*, enter the existing FHWA number in the “Current” field, explain the *Reason for Removal*, enter the length of the structure that has been removed, complete the Form and email it to [jodi.clement@iowadot.us](mailto:jodi.clement@iowadot.us). A signed form will be returned to you and the structure will be archived in SIIMS.

### **REQUIRED FIELDS ON THE FORM 107**

1. Indication of BRIDGE OWNER
2. Indication of ADDITION/REPLACEMENT/REMOVAL
  - If removal, please state why the structure is being removed from the inventory
3. EXISTING (current) FHWA number if Replacement or Removal
4. Indication of NBI STRUCTURE (Item 112) Indicate YES or NO
  - If NO, please explain why it is not an NBI structure
5. LENGTH OF STRUCTURE IN FEET (Item 49)
  - Structure length is the length of the roadway which is supported on the bridge structure. The length should be measured back to back of backwalls of abutments or from paving notch to paving notch.
  - Culvert lengths should be measured along the center line of the roadway regardless of their depth below grade. Measurement should be made between inside faces of exterior walls.
  - If the form is for a replacement structure, please list the length of the NEW structure.
6. LAT/LONG
7. SECTION/TOWNSHIP/RANGE
8. LOCATION DESCRIPTION (Item 9) (distance and direction from nearest intersection)
9. FACILITY CARRIED (Item 7)
10. FEATURE INTERSECTED (Item 6)

11. COUNTY and CITY bridge is located within (Item 3/Item 4)
12. COUNTY BRIDGE NUMBER (optional)
13. YEAR BUILT (Item 27)
  - If the form is for a replacement structure, please list the year built of the NEW structure.
14. DATE REPORTED
15. SUBMITTER'S NAME
16. SUBMITTER'S EMAIL
17. Indication of BRIDGE OWNER
  - If you are not the Bridge Owner or are completing the form on behalf of the Bridge Owner, please enter the name of the Bridge Owner
18. Indication of PROGRAM MANAGER
  - If you are not the Program Manager or are completing the form on behalf of the Program Manager, please enter the name of the Program Manager
    - **Program Managers are assigned by Bridge Owner only (eg. County or City) and are approved through the Office of Bridges and Structures "Bridge Inspector Form"**  
<https://iowadot.gov/siims>
19. MINIMUM VERTICAL CLEARANCE OVER STRUCTURE (Item 53) *required if* under another route and/or feature:
  - a. Example of feature: TRUSS over structure



b. Example of feature: OVERPASS over structure



20. MINIMUM VERTICAL CLEARANCE UNDER STRUCTURE (Item 54) *required if* over another route and/or feature:

- Example of feature: ROAD or RAILROAD beneath structure



PLEASE MAKE SURE THE APPROPRIATE STAFF REPORT ALL VERTICAL CLEARANCE CHANGES FOR A STRUCTURE ON THE VERTICAL CLEARANCE FORM TO [JODI.CLEMENT@IOWADOT.US](mailto:JODI.CLEMENT@IOWADOT.US).

The form may be found at the following link:

<https://iowadot.seamlessdocs.com/f/PrimaryHwyUnderpassVertHorizClearanceForm>.

Please contact Jodi if you would like more detailed instructions with examples.

### **CHANGES TO STRUCTURE DATA**

Please update any structure data, including inspection data, through the SIIMS application at the following link: <https://iowadot.gov/siims>.

If you discover incorrect values in SIIMS within fields that you are unable to edit, please contact:

Jodi Clement, Structure & Rail Crossing Data Maintainer

Research & Analytics Bureau

[Jodi.Clement@iowadot.us](mailto:Jodi.Clement@iowadot.us)

515.233.7741

The following link will direct you to the Bridge Survey Report – Form 107:

<https://iowadot.gov/siims>

1. Select “BRIDGE STATUS CHANGE FORM 107” on the left side of the page



- SIIMS HOME
- BRIDGE STATUS CHANGE FORM 107**
- CONTACTS
- RESOURCES AND INFORMATION
- TRAINING INFORMATION
- FAQS

If you are having issues with your LOGIN TO SIIMS, there was a recent change to new usernames and a different authentication process. Please send an e-mail to [siims.support@iowadot.us](mailto:siims.support@iowadot.us) for assistance.

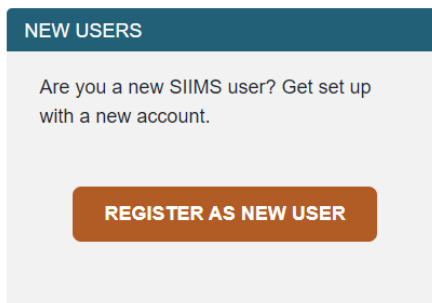
**Please see the Resources and Information page for recent additions.**

The recent training for SIIMS is available. [SIIMS Training](#) [Recording](#)

Documentation for the updates to SIIMS coming next month is available. [SIIMS June Updates](#)

\*If you do not have a User ID and Password for SIIMS, select the following link:

<https://iowadot.gov/siims#> and click “Register as New User” in the New Users box. If you have questions regarding this process, please contact Annette Jeffers in the Bridges & Structures Office at 515-239-1079 or [Annette.Jeffers@iowadot.us](mailto:Annette.Jeffers@iowadot.us).



2. Select the box indicating the bridge owner of the bridge you are reporting:



Iowa Department of Transportation

Form 220023 (9-12)

Performance & Technology Division  
800 Lincoln Way Ames, IA 50010

## Bridge Survey Report (Form 107)

Form questions should be directed to:  
Jodi Clement at 515-233-7741  
or Jodi.Clement@dot.iowa.gov

Bridge Owner (Item 22)

County  City  Other

*Please determine structure type before continuing.*

3. Select one of the following options: New Bridge, Replacement, or Removal.



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Bridge Owner (Item 22)

County  City  Other

New Bridge  
(new location)  Replacement  
(same location)  Removal

4. Enter the existing FHWA number for any replacements or removals in the "Current" field. For new bridges, please do not assign your own FHWA number to the bridge, leave this area blank.
- A replacement FHWA number will be assigned to you through the approved form.
  - When you enter the FHWA number for Removal, you will need to state why the bridge is being removed.
  - For new structures, leave the FHWA number field blank. The Structure Data Maintainer will assign this number and report it back to you through the approved form.
5. Email the completed form to [Jodi.Clement@iowadot.us](mailto:Jodi.Clement@iowadot.us).
6. Once your form has been approved by the Structure Data Maintainer, you will receive an email with the completed form and new FHWA number.
7. **The FHWA requires that all fields in the structure inventory and appraisal inventory be completed. The data can be entered by either completing an initial inspection from the SIIMS Inspection Website or editing the Central Database Values from the SIIMS Manager Website. The required NBI data must be completed within 30 days of the notification of a new FHWA bridge number.**





Form 220023 (9-12)

Office of Analytics  
800 Lincoln Way Ames, IA 50010

# Bridge Survey Report (Form 107)

Form questions should be directed  
Jodi Clement at 515-233-7741  
or Jodi.Clement@iowadot.us

Rejection Comments \_\_\_\_\_

Bridge Owner (Item 22)

County  City  Other

New Bridge (new location)  Replacement (same location)  Removal

FHWA Number (Item 8): \_\_\_\_\_ Current: 123450

Reason for Removal \_\_\_\_\_

NBI Structure\* (Item 112)

Yes  No

County (Item 3) HARDIN

Length of Structure (Item 49)

52 feet

County Bridge Number JK 235

Year Built (Item 27) 2021

Structure

42.2835508 -93.3097157  
Lat Long

Date Reported 08-13-2021

4 88N 21W  
Section Township Range

Reported By (Submitter) JOHN SMITH

Location Description (Item 9)

.2 MI NORTH OF D59

Submitter's Email JOHN SMITH@ABC.COM

Facility Carried (Item 7)

J AVE

Are you the Bridge Owner?  Yes  No  On Behalf Of

Feature Intersected (Item 8)

FISHER CREEK

Bridge Owner JAY JOHNSON

Are you the Program Manager?  Yes  No  On Behalf Of

Minimum Vertical Clearance OVER Structure (Item 53)

99 ft 11 in

Program Manager BETSY NELSON

Minimum Vertical Clearance UNDER Structure (Item 54)

99 ft 11 in

For complete instructions on filling out this form, see the "County & City Engineer's Form 107 Instruction Guide" at the following location: <https://siims.iowadot.gov/Form107InstGuide.pdf> or by clicking [here](#).

For further reference on filling out the above form with item numbers indicated, please see the NBI Guide.

### IMPORTANT NOTICE:

The FHWA requires that all fields in the structure inventory and appraisal inventory be completed. The data can be entered by either completing an initial inspection from the SIIMS Inspection Website or editing the Central Database Values from the SIIMS Manager Website. **The required NBI data must be completed within 30 days of the notification of a new FHWA bridge number.**

### NBI Structure (Item 112):

"A structure including supports erected over a depression or an obstruction, such as water, highway or railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measure along the center of the roadway of **more than 20 feet** between undercopings of abutments or spring lines of arches, or extreme ends of openings for multiple boxes; it may also include multiple pipes, where the clear distance between openings is less than half of the smaller contiguous opening."

Office of Analytics Comments

Approvals:

*John Smith*

8/2/2021

(Bridge Owner / Program Manager)

(Date)

(IDOT - Performance & Technology Division)

(Date)