

#### **City Council**

#### **Agenda Item**

**Subject:** 2025 Bridge Inspection Report to Council

Meeting: City Council - Dec 01 2025

From: Alan Stager, City Manager

#### **BACKGROUND INFORMATION:**

Civil Design, Inc. performed the annual bridge inspections for the City of Watertown and will provide an update to Council, as required by our agreements with the SDDOT for the bridge inspection funding. The City has thirteen bridge structures that are inspected for structural safety, traffic safety, maintenance issues, and general condition. CDI performed an inspection in 2025 on seven of these structures. A snapshot summary of their report and findings are attached. The City also receives a detailed and comprehensive report of the inspection for each structure. This information is used by staff to plan any maintenance, short or long-range repairs, and eventual replacement if necessary.

#### FINANCIAL CONSIDERATIONS:

N/A

#### **OVERSIGHT / PROJECT RESPONSIBILITY:**

Alan Stager, City Manager Justin Petersen, City Engineer Lucas Ammann, Engineer II

#### STAFF RECOMMENDATION / SUGGESTED MOTION:

N/A

#### **ATTACHMENT(S):**

2025 City of Watertown Bridge Inspection Summary
City of Watertown NBIS Inspection Map CDI 2025 UPDATED2 Flattened
City of Watertown 2025 Bridge Inspections Presentation to Council 12.1.25

#### City of Watertown

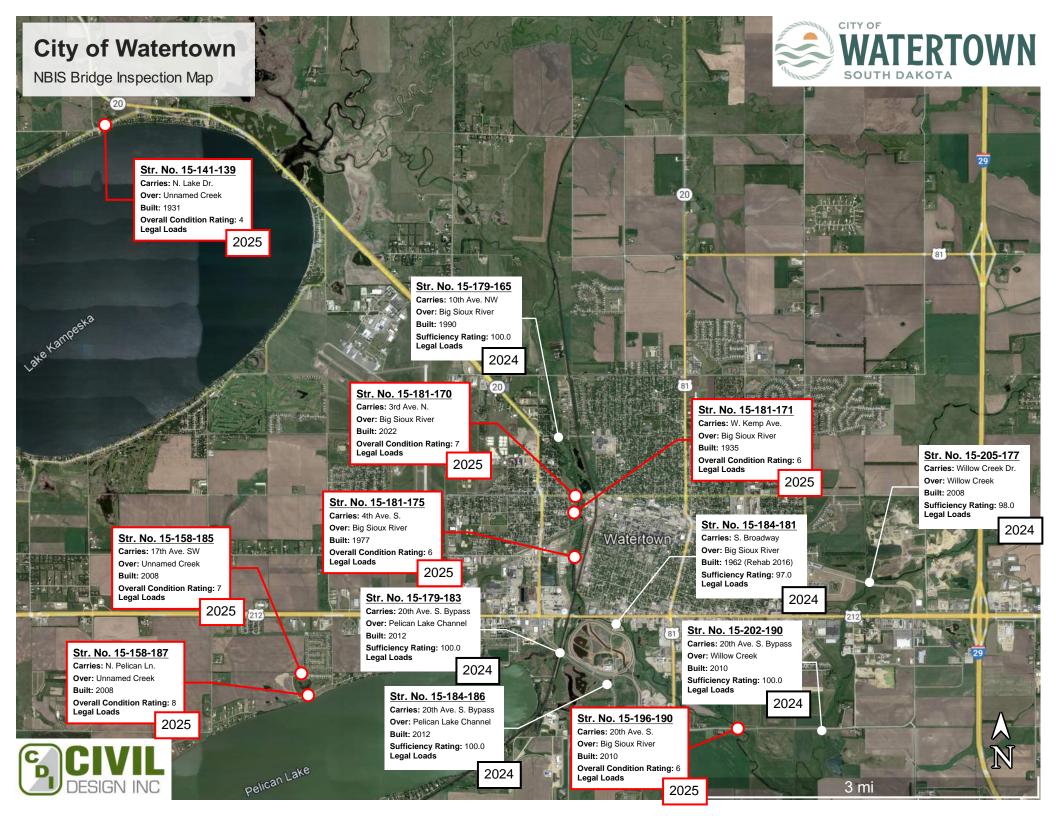
2025 Bridge Inspections Summary PT NBIS(45) PCN 04N9

#### Re-inspections (5) & Initial Inspections (2)

7-9 = Good Overall Condition
5-6 = Fair Overall Condition
0-4 = Poor Overall Condition

Inspector of Record: Chris Brozik, PE

Structure No.	Feature Carried	Feature Crossed	Inspection Date	Overall Condition	Current Posting	Recommended Posting	Recommended Repairs
15-141-139	North Lake Dr.	Unnamed Creek	8/28/2025	4	Not Posted	No Load Posting Required	Repairing the deteriorated areas of the barrel walls and top slab is not practical due to the age and condition of the structure.     Update the bridge railing to meet current standards.     This structure is nearing the end of its useful life and should be considered for replacement in the next 5-10 years.
15-158-185	17th Ave SW	Unnamed Creek	8/28/2025	7	Not Posted	No Load Posting Required	Replace missing hardware at SW sidewalk railing.     Remove moderate tree growth at SE corner of structure.
15-158-187	N Pelican Ln	Unnamed Creek	8/28/2025	8	Not Posted	No Load Posting Required	Repair undermining at SW sidewalk.
15-181-170	3rd Ave. NW	Big Sioux River	8/28/2025	7	Not Posted	No Load Posting Required	Clean and grout areas of honeycombing with exposed rebar on the underside of the concrete slab in center span.     Recommend application of an epoxy crack sealer at transverse and longitudinal cracking in deck over east and west piers.     Monitor sidewalk ends for vertical displacement advancement creating tripping hazards.     Paint areas of rusting in railing extensions at welded splices.
15-181-171	W. Kemp Ave.	Big Sioux River	8/28/2025	6	Not Posted	No Load Posting Required	Extend the deck drain pipes on the underside of the arches.     Stabilize the erosion at all corners of the structure.     Clear the deck drains of debris.     Install chain link to railing extensions at SW and SE sidewalk approach corners for pedestrian safety.     Install railing extensions at NW and NE sidewalk approach corners.
15-181-175	4th Ave. SW	Big Sioux River	8/28/2025	6	Not Posted	No Load Posting Required	<ol> <li>Install a Type 3 object marker at all four (4) corner of the structure.</li> <li>Add chain link fence to the north pedestrian railing and paint railing or consider a railing retrofit.</li> <li>Riprap berm slopes in front of the east and west abutments.</li> <li>Consider an epoxy deck seal to extend the life of the concrete deck.</li> <li>Repair areas of delamination in the top surface of the concrete slab.</li> <li>Replace east and west approach concrete sidewalk panels with settlement and tripping hazards.</li> <li>Remove small tree growth under and around SW and SE corners of the structure.</li> <li>Cut old timber falsework pile putting pressure on bottom of slab under span #5. Consider cutting all falsework pile flush with ground.</li> </ol>
15-196-190	20th Ave. SE	Big Sioux River	8/28/2025	6	Not Posted	No Load Posting Required	1. Install steel angle adjacent to neoprene bearing pad at girder #7, span #4 to prevent further movement. Alternatively reset neoprene bearing pad below girder to provide full bearing.  2. Replace failed expansion joint filler at east and west bridge ends.  3. Replace SW and NE object marker on ends of approach guardrails.  4. Replace the bent terminal post at the northwest guardrail end.  5. Install missing W-beam bolt on the northeast approach guardrail.  6. Routinely clean deck of debris to deter abrasive deterioration and to assist with the water flow. There are no drains on the structure with a minimal profile grade.  7. Consider installing deck drains at intermediate span locations where camber effect is noticeable.  8. Replace expansion filler joint material at all four (4) wingwalls of structure between wingwall and barrier rail.



## CITY OF WATERTOWN | 2025 BRIDGE INSPECTIONS

**DECEMBER 1, 2025** 

CHRIS BROZIK, PE CIVIL DESIGN INC.

cbrozik@civildes.com









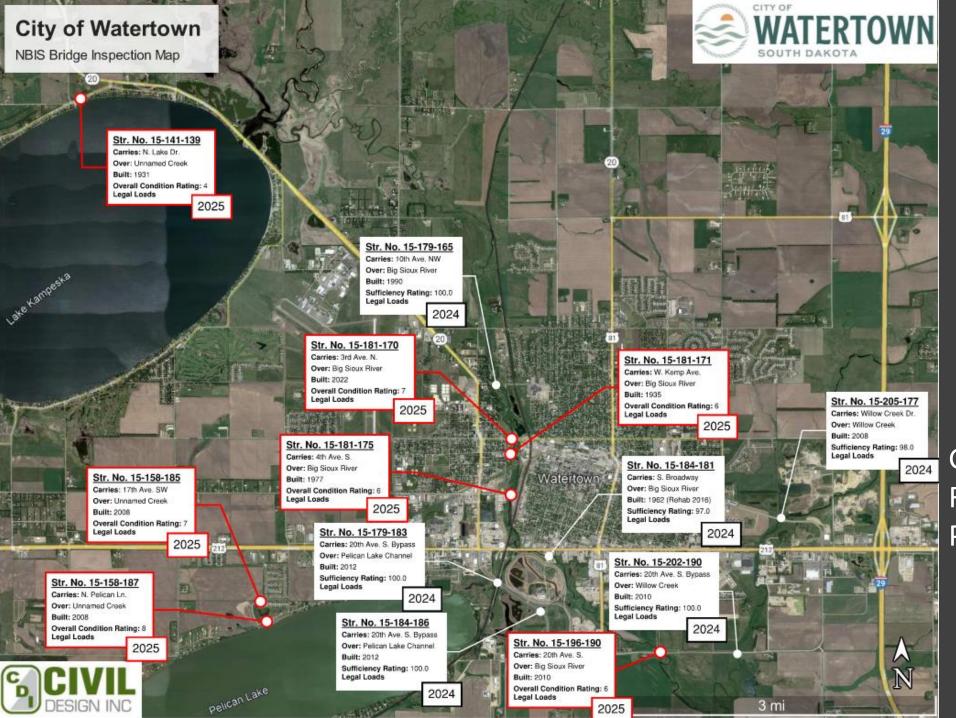




## **Bridge Inspection Overview**

- 13 NBIS Structures Owned & Maintained by the City of Watertown
- 7 Bridge Inspections Conducted in 2025
  - Inspections completed on Thursday, August 28
- NBIS Structure constitutes any Bridge or Box Culvert > 20 ft in Length
- Bridges inspected generally every 24 Months
- Box Culverts inspected generally every 24 or 48 Months, depending on overburden and condition
- Summary & Review Meeting with City of Watertown Engineering Department
  - Completed on Monday, November 17
- Inspections relate to structure condition & safety features only, no drainage analysis as part of this work







# 7 Structures Inspected in 2025

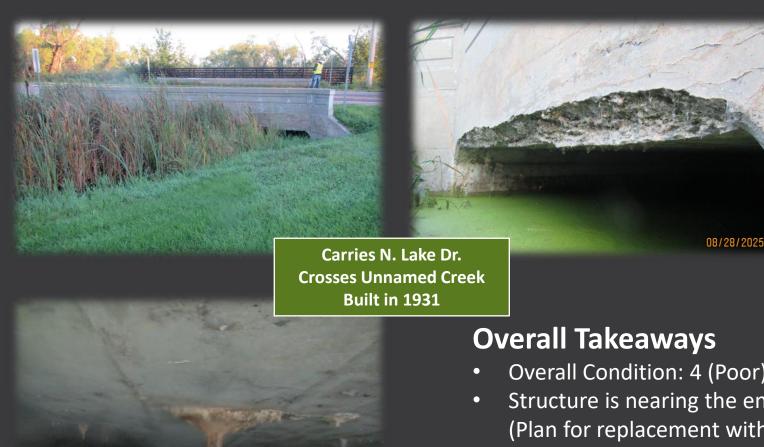
4 Bridges
3 Box Culverts

Good Condition: 3

Fair Condition: 3

Poor Condition: 1

## Structure No. 15-141-139





- Overall Condition: 4 (Poor)
- Structure is nearing the end of its useful service life (Plan for replacement within next 5-10 years)
- Minor repair/maintenance recommendations.
- No load posting currently required.



## Structure No. 15-158-185



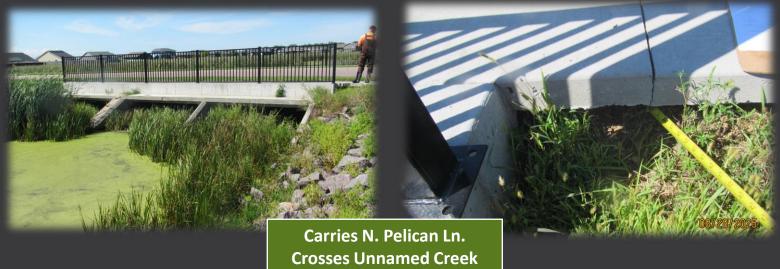


- Overall Condition: 7 (Good)
- Structure added to NBIS Inventory (Initial Inspection)
- Minor repair/maintenance recommendations.
- No load posting required.





## Structure No. 15-158-187





- Overall Condition: 8 (Good)
- Structure added to NBIS Inventory (Initial Inspection)
- Minor undermining to SE Sidewalk.
- No load posting required.





## Structure No. 15-181-170



Carries 3<sup>rd</sup> Ave. NW **Crosses Big Sioux River** Built in 2022





- Overall Condition: 7 (Good)
- Minor repair/maintenance recommendations.
- No load posting required.









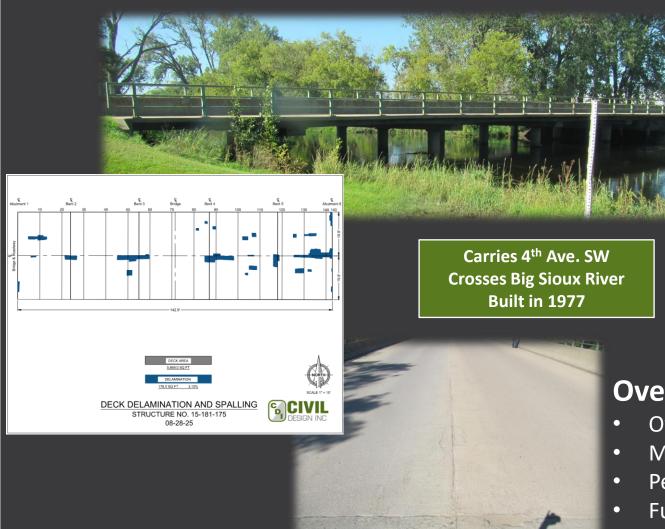




- Overall Condition: 6 (Fair)
- Minor repair/maintenance recommendations.
- Erosion & pedestrian safety related repairs.
- No load posting required.



## Structure No. 15-181-175





- Overall Condition: 6 (Fair)
- Minor repair/maintenance recommendations.
- Pedestrian safety related repairs.
- Future deck repairs & polymer chip seal recommended.
- No load posting required.



## Structure No. 15-196-190



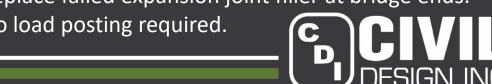






- Overall Condition: 6 (Fair)
- Minor to moderate repair/maintenance recommendations.
- Arrest Bearing Pad Movement.
- Replace failed expansion joint filler at bridge ends.
- No load posting required.





## Summary of Postings, Recommendations, Etc.

#### **SUMMARY SHEETS INCLUDE THE FOLLOWING:**

- Structure Number
- Feature Carried
- Feature Crossed
- Date Inspected
- Overall Condition (3 Good, 3 Fair, 1 Poor)
- Current & Recommended Posting, if any
- Repair, Rehab, Replacement Recommendations

#### MEETING BETWEEN CDI & ENGINEERING DEPT.

- Date: Monday, November 17
- Review Bridge Inspection Reports in Detail
- Go over Repair Recommendations
- Discuss Miscellaneous Items
- Discuss Potential Future Work

cture No. Feature Carried Feature Crossed Inspection	Overall	Current Posting	Recommended	Recommend	
Bridge Inspections Summary BIS(45) PCN 04N9	7-9 5-6 0-4	= Good Overall Condition = Fair Overall Condition = Poor Overall Condition			
of Watertown	Re-inspections (5) & Initial Inspections (2)				

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## **THANK YOU**

# QUESTIONS?

CHRIS BROZIK, PE VICE PRESIDENT

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