

December 4, 2020

Vic Kane  
City of Oelwein  
20 - 2<sup>nd</sup> Avenue SW  
Oelwein, IA, 50662**Re: 2019 Bridge Inspection Services, City of Oelwein, Iowa  
IIW Project No.: 19052**

Dear Vic:

IIW, P.C. has completed the routine inspections of the City of Oelwein bridges. The inspections were performed in accordance with all applicable state and federal requirements for routine inspections of in-service bridges. The information has been input into the Iowa Department of Transportation's (IDOT) Structure Inventory and Inspection Management System (SIIMS).

We would like to summarize some of our general findings and recommendations. Please refer to the enclosed SIIMS inspection reports for the comprehensive reports formally filed with IDOT. This information is being provided to aid in the maintenance and management of the City's valuable bridge assets.

**1<sup>ST</sup> AVE. SW OVER DRY-RUN****FHWA No.: 8980**

## Inspection Observations

- Void under roadway near surface drain
- Spalling concrete with exposed reinforcing underside of arch
- Utilities run across inside of arch collecting flood debris

## Maintenance Recommendations

- Repair void near surface drain
- Perform comprehensive repair of spalling concrete

**2<sup>ND</sup> AVE. SW OVER DRY-RUN****FHWA No.: 8975**

## Inspection Observations

- Spalling concrete and exposed reinforcing of south barrel floor
- Vertical cracks with efflorescence at barrel walls
- West extension (privately owned) severely deteriorated

## Maintenance Recommendations

- Contact owner of privately owned west extension

**2<sup>ND</sup> ST. NE OVER DRY-RUN****FHWA No.: 8970**

## Inspection Observations

- NE sidewalk approach undermined
- Roadway deteriorated over bridge
- Spalling and delaminating concrete with exposed reinforcing underside of slab
- Deteriorating concrete near storm sewer penetrations and bearing areas

## Maintenance Recommendations

- Repair undermined sidewalk
- Repair roadway above bridge
- Schedule for replacement

**4<sup>TH</sup> ST. SW OVER DRY-RUN**

**FHWA No.: 8930**

Inspection Observations

- 1ft. scour at inlet and 4ft. scour at outlet
- Utility crosses floor of culvert near midspan
- Transverse cracks with efflorescence underside of slab

Maintenance Recommendations

- Install erosion protection (rip-rap) at inlet and outlet

**6<sup>TH</sup> AVE. SW OVER DRY-RUN**

**FHWA No.: 502470**

Inspection Observations

- Cracking with efflorescence at center walls and wingwalls
- Flood debris caught at outlet
- 2ft. scour at outlet

Maintenance Recommendations

- Remove flood debris from outlet
- Install erosion protection (rip-rap) at outlet

**10<sup>TH</sup> ST. SW OVER DRY-RUN**

**FHWA No.: 8920**

Inspection Observations

- Potholes patched with asphalt on deck
- Decayed posts and missing blocking of approach guardrail
- Concrete scaling with efflorescence underside of deck
- Spalling and delaminating concrete exposing circumferential reinforcing of pile encasements at east pier

Maintenance Recommendations

- Perform comprehensive deck repair with concrete overlay
- Repair/replace decayed and missing approach guardrail components
- Perform comprehensive repair of east pier pile encasements

**FREDERICK AVE. OVER DRY-RUN**

**FHWA No.: 24481**

Inspection Observations

- Expansion joints failed
- Erosion at both west wingwalls
- Cracking concrete with efflorescence underside of deck

Maintenance Recommendations

- Clean and reseal expansion joints
- Install erosion protection (rip-rap) at west wingwalls

**W CHARLES ST. (E) OVER DRY-RUN**

**FHWA No.: 8950**

Inspection Observations

- Waterway flows primarily through west barrel, 3-4ft. drift in east barrel
- Severe cracking and spalling concrete with efflorescence and exposed reinforcing of barrel walls and underside of slab

Maintenance Recommendations

- Schedule for replacement



W CHARLES ST. (W) OVER DRY-RUN

FHWA No.: 149695

Inspection Observations

- Weight posting sign missing at east approach
- Erosion at NE approach guardrail has compromised its stability and capacity
- Decayed posts and missing blocking of approach guardrail
- Spalling concrete on deck
- Corrosion of abutment bearings
- Scaling concrete with efflorescence underside of deck
- Erosion at both abutments
- SW exterior edge of deck severely spalled
- Deteriorating concrete at waterline of east pier

Maintenance Recommendations

- Replace weight posting at east approach
- Repair erosion at NE approach guardrail
- Repair/replace decayed and missing approach guardrail components
- Replace expansion joints
- Install erosion protection (rip-rap) at both abutments

We would like to emphasize that all formal inspection documentation has been completed and the information contained in this letter is for the City's reference. IIW would be available to meet with you or the City to discuss any of our findings in more detail.

IIW appreciates the opportunity to provide our services to the City of Dubuque. Please contact our office if we can provide any additional information regarding these inspections or the associated recommendations.

Sincerely,  
IIW, P.C.



Nathan W. Miller, PE  
Bridge Inspector/Program Manager

Enclosed: SIIMS Inspection Reports



**IIW, P.C.**  
 4158 PENNSYLVANIA AVENUE  
 DUBUQUE, IA 52002-2631  
 (563) 556-2467

**CITY OF OELWEIN**

**BRIDGE INSPECTION SUMMARY**

**2019**

BRIDGE ID.	FHWA	TYPE	INSPECTION SUMMARY				MAINTENANCE RECOMMENDATIONS				
			EXISTING SIGNAGE / WEIGHT EMBARGO	REDUCED INSP. FREQUENCY (MO)	WEARING SURFACE	COMMENTS	INSTALL OR REPAIR OBJECT MARKERS	INSTALL ADVANCED WEIGHT POSTING	REMOVE EXCESSIVE DECK OVERBURDEN	REMOVE DEBRIS FROM CHANNEL	COMMENTS
1ST AVE SW	8980	CONCRETE DECK ARCH 35' X 50'	---	---	AC RDWY	CONCRETE DETERIORATING NEAR DECK DRAINS. VOID UNDER ROADWAY NEAR SURFACE DRAIN.	---	---	---	---	REPAIR DAMAGED UTILITY HANGERS. REPAIR DETERIORATING CONCRETE NEAR DECK DRAINS AND UTILITY PENETRATIONS.
2ND AVE SW	8975	CONCRETE CULVERT 24' X 33' *	---	---	AC RDWY	HAIRLINE CRACKING OF WALLS AND ROOF SLAB. WEST EXTENSION STRUCTURE (BEYOND ROADWAY) SEVERELY DETERIORATED.	---	---	---	---	CONTACT OWNER OF PRIVATELY OWNED STRUCTURE EXTENSION.
2ND ST NE	8970	CONCRETE SLAB 31' X 48'	<b>EAST MISSING</b> W.L. 10T	---	AC RDWY	SEVERELY DETERIORATED CONCRETE WITH SPALLING CONCRETE AND EXPOSED REINFORCING UNDERSIDE OF DECK SLAB. SIDEWALK UNDERMINED AT NORTHEAST APPROACH.	---	<b>X</b>	---	---	REPAIR UNDERMINED SIDEWALK. SCHEDULE FOR REPLACEMENT. <b>ESTIMATED REMAINING LIFE &lt;10 YEARS.</b>
4TH ST SW	8930	CONCRETE CULVERT 28' X 24' *	---	---	INTEGRAL CONC	HAIRLINE CRACKING THROUGHOUT. STREAMBED DEGRADATION AT OUTLET. RAIL CORRODED.	<b>X</b>	---	---	---	PLACE ADDITIONAL REVETMENT AT OUTLET STREAMBED AND EMBANKMENTS. PAINT PIPE RAIL OVER CULVERT.
6TH AVE SW	502470	CONCRETE CULVERT 45' X 40' *	---	---	AC RDWY	2' SCOUR/STREAMBED DEGRADATION AT OUTLET. HAIRLINE CRACKING AT CENTERWALL AND PARAPETS.	<b>X</b>	---	<b>X</b>	---	ARMOR STREAMBED AT OUTLET. REMOVE VEGETATED DEBRIS FROM APRONS.
10TH ST SW	8920	CONTINUOUS STEEL BEAM 154' X 26'	W.L. 21T-30T-32T TRIPLE AXLE 14T	---	AC OVERLAY	SPALLING CONCRETE ON DECK. NUMEROUS AC PATCHES DETRIMENTAL TO CONCRETE. CONCRETE PIER ENCASEMENTS SPALLING WITH EXPOSED REINFORCING AND H-PILE AT EAST PIER.	---	<b>X</b>	---	---	EVALUATE COMPREHENSIVE DECK AND PIER PILE ENCASEMENT REPAIR OPTIONS.
FREDERICK AVE	24481	CONCRETE SLAB 41' X 71'	---	---	CONC	EROSION AT ENDS OF WEST WINGWALLS. LONGITUDINAL CRACKING ON TOP OF SLAB.	---	---	---	---	ARMOR WEST EMBANKMENTS. CLEAN AND RESAL EXPANSION JOINTS. APPLY CONCRETE SEALER TO BRIDGE DECK.
W CHARLES ST (E)	8950	CONCRETE CULVERT 44' X 44' *	---	---	AC RDWY	SEVERELY DETERIORATED CONCRETE WITH SPALLING AND EXPOSED REINFORCING ON BARREL WALLS AND ROOF SLABS.	---	---	---	---	SCHEDULE FOR REPLACEMENT. <b>ESTIMATED REMAINING LIFE &lt;10 YEARS.</b>
W CHARLES ST (W)	149695	CONTINUOUS STEEL BEAM 184' X 24'	<b>EAST MISSING</b> W.L. 25T-38T-38T NARROW BRIDGE	---	AC OVERLAY	SPALLING CONCRETE ON SURFACE OF DECK. AC EFFLORESCENCE UNDERSIDE OF DECK. EROSION OVERLAY DETRIMENTAL TO CONCRETE DECK. EROSION AT NORTHEAST SHOULDER APPROACHING ROADWAY.	<b>X</b>	<b>X</b>	---	---	EVALUATE COMPREHENSIVE DECK REPAIR OPTIONS. REPAIR NORTHEAST SHOULDER.

GENERAL INFORMATION ONLY. SEE SPECIFIC REPORT BEFORE POSTING. REPAIR OR REPLACEMENT APPROACH ROADWAY WIDTH IF CULVERT AND STRUCTURE WIDTH UNKNOWN.