



Special Bridge Inspection Report

Bridge #38010

Mn Hwy 61 over the Gooseberry River (Gooseberry Falls)
(Mn/DOT District D1-A - Duluth)



*Mn/DOT Bridge Office
3485 Hadley Avenue North
Oakdale, MN 55128*

Inspection Date: August 6, 2007

Inspected By: _____

Report Prepared By: _____

Report Reviewed By: _____

Bridge Description:

Bridge #38010 carries MNTH 61 over the Gosseberry River, it is located along the north shore of Lake Superior approximately 12 miles north of Two Harbors, MN in Lake County (Silver Lake Township). The bridge runs south to north.

Constructed in 1996-98, the bridge has seven spans with a total length of 282 feet. The main span is a 148 ft. long steel open spandrel deck arch, which rises 41 ft. above the spring line. The approach spans are continuous concrete slab spans (supported by steel pier caps). The roadway width is 47.2 ft. (2 lanes with wide shoulders) - the bridge deck is slightly curved, with a grade of 3.5% (upwards to the north), and a transverse slope of 5.6% (downwards to the east). There is a 7.8 ft. wide sidewalk along the east side of the bridge, and a 7.8 ft. wide walkway suspended below the west side of the bridge.

This bridge replaced Br. #3585, a riveted steel truss-arch constructed in 1922. Due to site constraints, the construction was staged to allow the old bridge to remain open to traffic. The northeast corner of the new bridge was constructed after the old bridge was removed.

The design loading is HS25 - the bridge has an inventory rating of HS 35, and an operating rating of HS 58.6. The bridge is owned & maintained by Mn/DOT District 1-A (Duluth). The Bridge Office has plans on file (metric).

Current NBI Condition Ratings & Structure Inventory Information:

NBI Deck Rating - 9 (Excellent Condition)
NBI Superstructure Rating - 9 (Excellent Condition)
NBI Substructure Rating - 9 (Excellent Condition)
NBI Channel Rating - 9 (Excellent Condition)

Bridge Sufficiency Rating: 96.1
Deficient Status: ADEQUATE
Inspection Frequency: 12 Months
Average Daily Traffic (ADT): 4,250 (measured in 2004)
Average Daily Truck Traffic (HCADT): 340
Year of Last Load Rating: 1995 (from original plans)
Year Painted: 1996

Scope of Inspection:

This special inspection was conducted as this bridge was identified by the FHWA as having similar design details of Bridge 9340 (35W bridge) that collapsed on August 1, 2007. At the governor's request, this bridge was to be inspected immediately.

This inspection focused any significant bridge details that would potentially compromise the safety of the bridge. This included and the main arch ribs, arch spandrel columns, arch spandrel caps, approach span piers, bearings, and expansion joints.

The truss spans were accessed using a Reachall UB-50 "snooper" - a shoulder closure and flagging was required. Approximately six hours were required for the inspection. The superstructure, substructure, and bridge deck were visually inspected. Ultrasonic testing was performed on the arch bearing anchor bolts at all four arch footings (see photo #1).

Summary & Recommendations:

No critical deficiencies were observed during this inspection. The most recent "in-depth" inspection report and annual inspection reports are attached to this report as reference.

Each arch footing has 34 threaded steel anchor bolts imbedded in the concrete footings - the plans show these bolts as being 38mm in diameter and 1,250 mm (50.4") long, with a minimum embedment length of 1,000 mm (39.4"). Ultrasonic examination of the arch footing anchor bolts indicated that the anchor bolts generally had a length 48", and 16 of the anchor bolts had a length of only 19". These were found on the southwest, northwest, and northeast arch footings (see diagrams at end of report). These findings will be reviewed by the Mn/DOT Bridge Office.

Some large rocks have fallen near the east footing of Pier #4 (near the northeast arch footing). While it does not appear that the pier column has been damaged, the rocks and debris should be removed to prevent corrosion and allow easier inspection (see photo #2).

There are some isolated areas of paint failure and superficial corrosion on the superstructure (see photos #3 & 4) - this should probably warrant a slightly lower NBI superstructure condition rating (8 - Very Good Condition).

There are some isolated light leaching cracks on the underside of the deck (see photo #5) - this should probably warrant a slightly lower NBI deck condition rating (8 - Very Good Condition).

Depending upon the follow-up of the UT findings on the arch bearing anchor bolts, the NBI substructure rating might need to be lowered.

Bridge Photos:



Photo #1: Typical arch footing

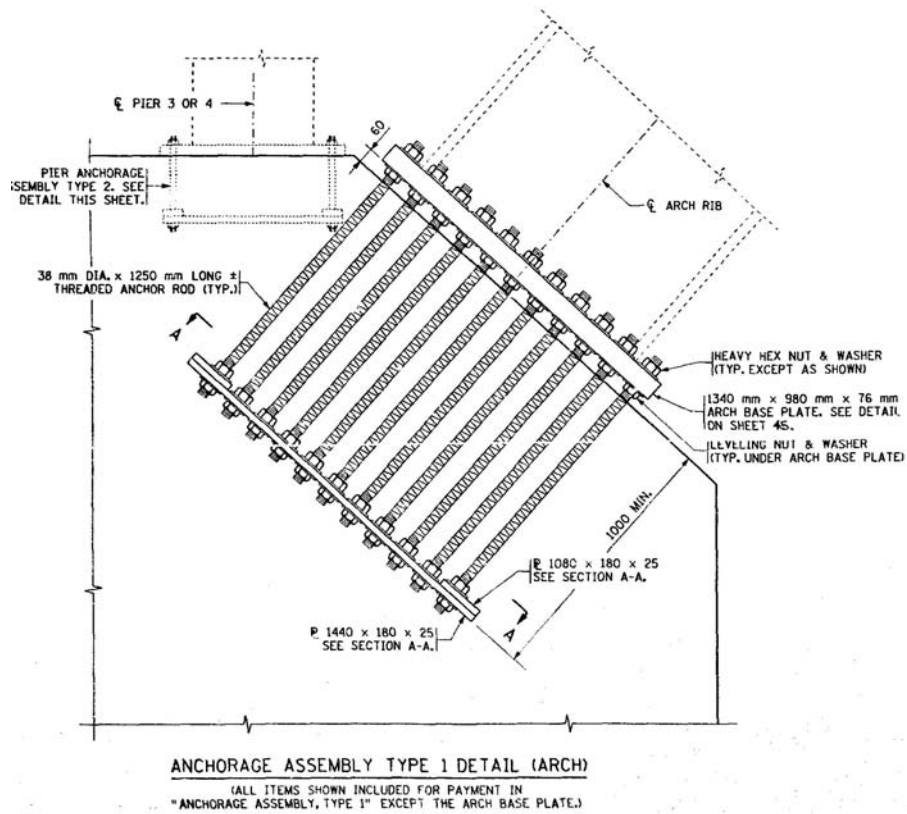


Figure 1: Plan view of anchor bolt details



Photo #2: Debris at Pier #4 (east column)



Photo #3: Paint failure on pier bracing connection (typical)



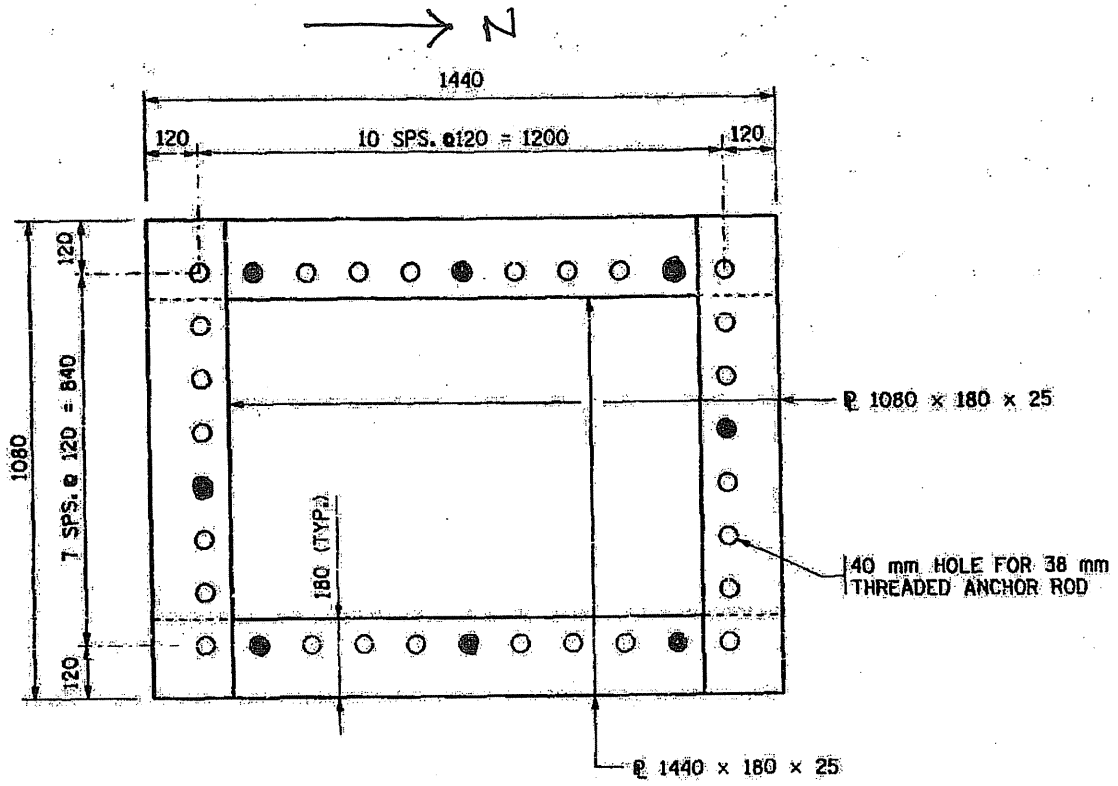
Photo #4: Minor corrosion on floorbeam end (typical)



Photo #5: Light leaching cracks on underside of deck

BR# 38010

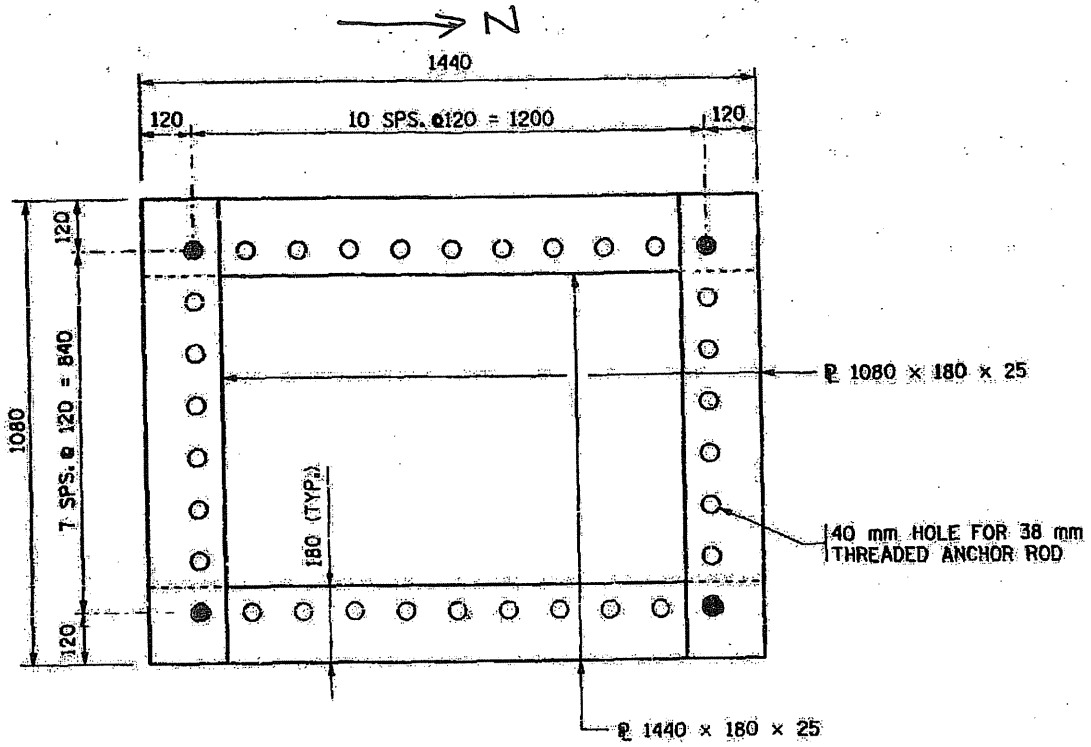
SOUTH WEST ARCH FOOTING
LOCATIONS WITH UT LENGTH OF 19" ARE
INDICATED BY A SOLID ●



SECTION A-A

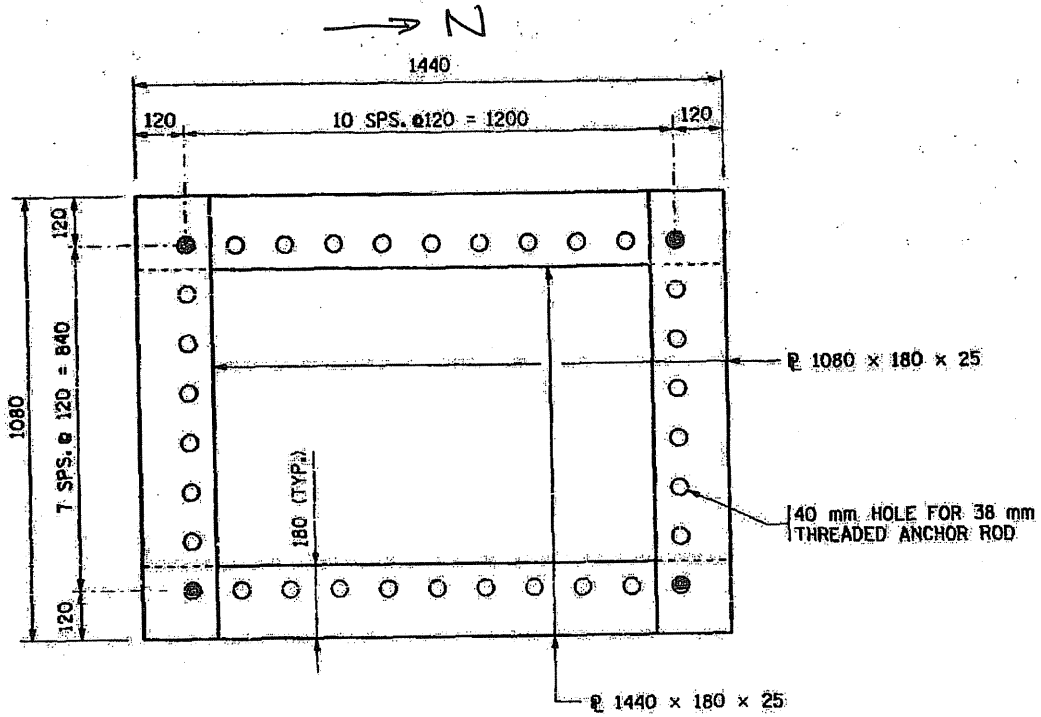
BR# 38010

NORTHWEST ARCH FOOTING
LOCATIONS WITH A UT LENGTH OF 19" ARE
INDICATED BY A SOLID ●



SECTION A-A

BR # 38010
NORTHEAST ARCH FOOTING
LOCATIONS WITH A UT LENGTH OF 19" ARE
INDICATED BY A SOLID ●



SECTION A-A



"In-Depth"
Bridge Inspection Report

Bridge #38010

Minnesota Trunk Highway 61 over the Gooseberry River at Gooseberry Falls
(Silver Creek Township, Lake County)



Mn/DOT Office of Bridges and Structures
3485 Hadley Avenue North
Oakdale, MN 55128

Inspection Date: August 13, 2001
Inspected By: [REDACTED]
Report Written By: [REDACTED]

Bridge Description:

Bridge #38010 carries MNTH 61 over the Gosseberry River, it is located on the north shore approximately 12 miles north of Two Harbors, MN in Lake County (Silver lake Township). The bridge runs south to north.

Constructed in 1997-98, the bridge has seven spans with a total length of 282 feet. The main span is a 148 ft. long steel deck arch, which rises 41 ft. above the spring line. The approach spans are continuous concrete slab spans (supported by steel pier caps). The roadway width is 47.2 ft. (2 lanes with wide shoulders) - the bridge deck is slightly curved, with a grade of 3.5% (upwards to the north), and a transverse slope of 5.6% (downwards to the east). There is a 7.8 ft. wide sidewalk along the east side of the bridge, and a 7.8 ft. wide walkway suspended below the west side of the bridge.

Due to site constraints, the construction was staged to allow the old bridge to remain open to traffic. The northeast corner of the bridge was constructed after the old bridge was removed.

The design loading is HS25 - the bridge has an inventory rating of 35 Tons, and an operating rating of 58.6 Tons. The bridge is owned & maintained by Mn/DOT District 1-A (Duluth). The Bridge Office has plans on file (metric).

Scope of Inspection:

The bridge was accessed using a Reach-all UB-50 Snooper - a shoulder closure was required. The snooper access is restricted on the west side of the bridge due to the suspended walkway. Approximately 5 hours were required for the inspection. The superstructure (including the arch rib interiors), substructure, and bridge deck were visually inspected.

Summary:

No significant structural problems were found during this inspection. The loose leveling nuts on the arch footings (noted in the 1998 inspection) have been tightened.

Recommendations:

Future inspections should emphasize the following:

- Arch ribs (interior, exterior, and footing anchorages)
- Spandrel columns, spandrel caps, and pinned spandrel connections
- Approach pier columns & caps
- The suspended walkway

Superstructure:

Paint System: In 1998, the bridge was painted with a brown 3-coat system (inorganic zinc/epoxy primer, epoxy intermediate coat, and polyurethane finish coat). The paint system is in good condition (little or no paint failure).

Main Arch Span (Span #4): The main arch span is 148 ft. long - there are two arch ribs (steel box girders), supporting steel spandrel columns & spandrel caps. The two center spandrel caps are connected directly to the arch ribs with pinned connections. All structural steel is Mn/DOT 3309 (weathering steel) - all connections are 7/8" A325 bolts.

Arch Ribs: The arch ribs are welded box sections - they are 3.28 ft. high and 2.25 ft. wide. The flange plates are 40mm thick, and the web plates are 18mm thick. The arches were fabricated in two sections, with a splice at the top of the arch. There are two internal stiffeners at each panel point. Access hatches are located on the interior web near the base of each arch (both ends).

Exterior Surfaces: No problems noted.

Interior Surfaces: The interior surfaces have only a primer coating (inorganic zinc/epoxy). There is some minor surface rust at the arch ends.

Anchorage: The arch ribs are anchored to concrete footings at each end. The arch ribs have welded end plates (76 mm thick), which are connected by threaded anchor rods to a steel plate imbedded in the concrete footing (34 1-1/2" diameter anchor rods at each arch end). Some of the leveling nuts at these connections were found to be loose during the 1998 inspection - these have now been properly tightened.

Spandrel Columns: The spandrel columns are square hollow steel members (18" x 18" by 5/8") they are bolted to the top flange of the arch rib and the bottom flange of the spandrel caps. There are external stiffener plates (40 mm) welded to the columns near the arch rib connections.

Pin Assemblies (Spandrels #3 & 4): Near the top of the arch, the spandrel caps are connected directly to the arch ribs with pinned bearings (two at each connection), to allow some rotational movement. The cotter pins (on the cap nuts) shown in the plans were never installed - the holes were never drilled through the pin ends.



Pinned connection between arch rib & spandrel cap

Spandrel Caps: The spandrel caps are 36" deep rolled beams - they have welded web stiffeners at the spandrel column connections. Shear studs are welded to the top flange (full length) to connect to the deck slab. Due to the staged construction, spandrel cap #6 has a spliced section (approximately 8 ft. long) on the east end.

Struts/Bracing: The arch ribs are connected with transverse struts at each panel point. At spandrels #1 & 6 the spandrel columns are connected with diagonal bracing.

Suspended Pedestrian Walkway: There is a pedestrian walkway suspended from the bridge running along the exterior of the west arch. The walkway is supported by steel hanger tubes (4" x 4" x 1/2") - these are bolted to the bottom flange of the spandrel columns & pier caps. The hangers support the sidewalk floor system (transverse floorbeams and longitudinal beams). The concrete sidewalk slab is 6" deep. The walkway is connected (pinned) to the west arch rib in two locations to provide lateral support.



Suspended sidewalk (looking north)



Underside view of sidewalk

Approach Spans: The approach spans (Spans #1-3 & 5-7) are continuous concrete slab spans - the slabs are supported by steel piers - each has two columns supporting a steel pier cap. Due to the staged construction, Piers #4-6 were constructed in two sections - the west half was constructed first, and then the east ends were constructed after the old bridge was removed. Piers #6 & 7 required temporary support columns during construction - these were removed.



View of north approach spans - note pier cap splices due to staged construction.

Pier Caps: The pier caps on the approach spans are the same as the arch spandrel caps (36" deep rolled beams). They have web stiffeners at the column connections. Due to the staged construction, Piers #4-6 have splices, and Piers #5 & 6 have additional web stiffeners (where the temporary supports were located). In some locations, the welds on these extra stiffeners are now located in tension zones.

Pier Columns: The approach pier columns are the same dimensions as the arch spandrel columns (18" x 18" by 5/8"). The pier columns are bolted to concrete footings at the base, and bolted to the bottom flange of the pier cap at the top. The columns have exterior stiffener plates (18 mm) at the footings. At Piers #3 & 4, the columns are connected with diagonal bracing.

Substructure:

Arch & Approach Pier Footings: The arch & pier footings are reinforced concrete spread footings on rock foundations. The arch footings are anchored into the rock. All footings are located well above the river channel.

Abutments: Both abutments are reinforced concrete - they are supported by spread footings anchored into solid rock.

Wingwalls: There are reinforced concrete wingwalls at the abutment corners, except at the southeast corner. At the southeast corner, the south abutment of the old bridge (constructed in 1923/1937) was left in place, and serves as the wingwall.

Southeast Retaining Wall: There is a stone masonry retaining wall (constructed in the 1930's) along the east side of the south approach (adjacent to the old bridge abutment). The wall is approximately 300 ft. long, 15-25 ft. high, and 12 ft. wide.

Bridge Deck/Slab:



Deck Slab: The continuous concrete deck/slab is the same design on the arch span as on the approach spans (spanning between spandrel caps instead of pier caps). The solid slabs are 12" deep, with 18" deep haunch sections at the caps. There are two mats of epoxy-coated steel reinforcement. A section of the slab at the northeast corner was poured separately as part of the staged construction.

Wearing Surface: The deck has a 2" deep low slump concrete overlay.

Roadway Railings: The roadway has 2-line square tube steel railings with steel posts (anchored to the bridge deck).

Sidewalk Railing: The sidewalk has 3.5 ft. high ornamental steel railing.

Expansion Joints: There are strip seal expansion joints at both abutments.

Other Bridge Elements:

Approach Panels: Both approaches are concrete - no problems noted.

Signing: No problems noted.

Approach Guardrail: Plate beam guardrail on approaches - no problems noted.

Drainage: There are no deck drains.

Slope Protection: Loose rock slopes.

Curb & Walk: No problems noted.

Miscellaneous: There are two telephone conduits running below the suspended walkway.

Gooseberry River Channel: This bridge is located at Gooseberry Falls - there are falls both upstream & downstream from the bridge. As all substructure footings are located above the channel - the scour risk is low. The river channel is solid rock (bank erosion is not a concern).

Field Inspection Notes: While the bridge condition has been summarized in the preceding notes, the field notes have been included to provide more detailed information. Pier, span, and arch spandrel numbering taken from original plans.

Old Abutment & Southeast Retaining Wall:

South Abutment:

Span #1 (approach): Walkway below.

Pier #1:

Span #2 (approach): [2001] Underside of deck/slab has 2 longitudinal leaching cracks.

Pier #2:

Span #3 (approach): [2001] Underside of deck/slab has 1 longitudinal leaching crack.

Pier #3:

Arch Bay #1: [2001] Underside of deck/slab has 2 longitudinal leaching cracks.

Spandrel #1: [1998] Top flange of spandrel cap has minor indentation (11.5 ft. from the west end stiffeners).

Arch Bay #2: [2001] Underside of deck/slab has 1 longitudinal leaching crack.

Spandrel #2: The west arch strut connection has missing bolt (never installed, as the internal arch stiffener plate interfered).



Arch Bay #3: [2001] Underside of deck/slab has 4 longitudinal leaching cracks.

Spandrel #3: Spandrel cap supported by pinned bearings.

Arch Bay #4:

Spandrel #4: Spandrel cap supported by pinned bearings.

Arch Bay #5:

Spandrel #5: The sidewalk support connection on the west truss was drilled improperly (overlapping holes). [1998] The sidewalk floorbeam support is slightly buckled (at the west arch connection).



Arch Bay #6: [2001] Underside of deck/slab (east edge) has 4 transverse leaching cracks.

Spandrel #6: Cap has splice on the east end (from staged construction).

Arch Bay #7: [2001] Underside of deck/slab (east edge) has 4 transverse leaching cracks.

Pier #4: Cap has splice on the east end (from staged construction).

Span #5 (north approach): [2001] Underside of deck/slab has 10 LF longitudinal & 10 LF transverse leaching cracks.

Pier #5: Cap has splice between columns (pier had temporary support column during staged construction).

Span #6 (north approach):

Pier #6: Cap has splice between columns (pier had temporary support column during staged construction).

Span #7:

North Abutment:

Arch Rib Interior Inspection: Access hatches can just barely be reached with Reach-all UB-50 snoopers. The internal surfaces are in good condition (primer coated). There is some minor surface rust at the arch ends.



Arch rib interiors - typical surface rust at arch ends



Arch interior - view of splice (top of arch)



Arch interior - internal stiffeners at spandrel connections

Mn/DOT Structure Inventory Report

Bridge ID: 38010 TH 61 over GOOSEBERRY RIVER

Date: 08/07/2007

+ GENERAL +	+ ROADWAY +	+ INSPECTION +
Agency Br. No.	Bridge Match ID (TIS) 1	Deficient Status ADEQ
District 1 Maint. Area 1A	Roadway O/U Key 1-ON	Sufficiency Rating 96.1
County 38 - LAKE	Route Sys/Nbr MNTH 61	Last Inspection Date 04-27-2006
City	Roadway Name or Description	Inspection Frequency 12
Township SILVER CREEK	MN 61	Inspector Name DISTRICT1
Desc. Loc. 0.3 MI NE OF JCT CSAH 1	Roadway Function MAINLINE	Structure A-OPEN
Sect., Twp., Range 22 - 054N - 09W	Roadway Type 2 WAY TRAF	+ CONDITION CODES +
Latitude 47d 08m 36.42s	Control Section (TH Only) 3805	Deck 9
Longitude 91d 28m 06.31s	Ref. Point (TH Only) 039+00.290	Superstructure 9
Custodian STATE HWY	Date Opened to Traffic 08-01-1997	Substructure 9
Owner STATE HWY	Detour Length 6 mi.	Channel 9
Inspection By DISTRICT 1	Lanes 2 Lanes ON Bridge	Culvert N
BMU Agreement No.	ADT (YEAR) 4,250 (2004)	+ APPRAISAL RATINGS +
Year Built 1996	HCADT 340	Structure Evaluation 9
Year Fed Rehab	Functional Class. RUR/PR ART OTH	Deck Geometry 9
Year Remodeled	+ RDWY DIMENSIONS +	Underclearances N
Temp	If Divided NB-EB SB-WB	Waterway Adequacy 9
Plan Avail. CENTRAL	Roadway Width 47.2 ft	Approach Alignment 8
+ STRUCTURE +	Vertical Clearance	+ SAFETY FEATURES +
Service On HWY;PED	Max. Vert. Clear.	Bridge Railing 1-MEETS STANDARDS
Service Under STREAM	Horizontal Clear. 47.2 ft	Appr. Guardrail 0-SUBSTANDARD
Main Span Type STEEL ARCH	Lateral Clr. - Lt/Rt	GR Transition 1-MEETS STANDARDS
Main Span Detail STEEL ARCH	Appr. Surface Width 43.0 ft	GR Termini 1-MEETS STANDARDS
Appr. Span Type CCONC SLAB SPAN	Roadway Width 47.2 ft	+ IN DEPTH INSP. +
Appr. Span Detail	Median Width	Frac. Critical
Skew	+ MISC. BRIDGE DATA +	Underwater
Culvert Type	Structure Flared NO	Pinned Asbly.
Barrel Length	Parallel Structure NONE	Spec. Feat.
Number of Spans	Field Conn. ID BOLTED	+ WATERWAY +
MAIN: 1 APPR: 6 TOTAL: 7	Cantilever ID	Drainage Area 78.1 sq mi
Main Span Length 153.9 ft	Foundations	Waterway Opening 440 sq ft
Structure Length 282.1 ft	Abut. CONC - SPRD ROCK	Navigation Control NO PRMT REQD
Deck Width 59.0 ft	Pier CONC - SPRD ROCK	Pier Protection
Deck Material C-I-P CONCRETE	+ PAINT +	Nav. Vert./Horz. Clr.
Wear Surf Type LOW SLUMP CONC	Year Painted 1996 Pct. Unsound	Nav. Vert. Lift Bridge Clear.
Wear Surf Install Year 1996	Painted Area 28,868 sf	MN Scour Code L-STBL;LOW RISK
Wear Course/Fill Depth 0.17 ft	Primer Type 3309-INORGANIC ZINC	Scour Evaluation Year 2000
Deck Membrane NONE	Finish Type URETHANE	+ CAPACITY RATINGS +
Deck Rebars EPOXY COATED REBAR	+ BRIDGE SIGNS +	Design Load HS25
Deck Rebars Install Year 1996	Posted Load NOT REQUIRED	Operating Rating HS 58.6
Structure Area 16,644 sq ft	Traffic NOT REQUIRED	Inventory Rating HS 35.0
Roadway Area 13,315 sq ft	Horizontal NOT REQUIRED	Posting
Sidewalk Width - L/R 7.8 ft 7.8 ft	Vertical NOT APPLICABLE	Rating Date 01-01-1996
Curb Height - L/R		Mn/DOT Permit Codes
Rail Codes - L/R 01 01		A: 1 B: 1 C: 1

Mn/DOT BRIDGE INSPECTION REPORT

Inspector: DISTRICT1

BRIDGE 38010 TH 61 OVER GOOSEBERRY RIVER

INSP. DATE: 04-27-2006

County: LAKE Location: 0.3 MI NE OF JCT CSAH 1 Length: 282.1 ft
 City: Route: MNTH 61 Ref. Pt.: 039+00.290 Deck Width: 59.0 ft
 Township: SILVER CREEK Control Section: 3805 Maint. Area: 1A Rdwy. Area / Pct. Unsnd: 13,315 sq ft
 Section: 22 Township: 054N Range: 09W Local Agency Bridge Nbr: Paint Area / Pct. Unsnd: 28,868 sq ft
 Span Type: CCONC SLAB SPAN
 NBI Deck: 9 Super: 9 Sub: 9 Chan: 9 Culv: N Open, Posted, Closed: OPEN
 Appraisal Ratings - Approach: 8 Waterway: 9 MN Scour Code: L-STBL;LOW RISK Def. Stat: ADEQ Suff. Rate: 96.1
 Required Bridge Signs - Load Posting: NOT REQUIRED Traffic: NOT REQUIRED
 Horizontal: NOT REQUIRED Vertical: NOT APPLICABLE

STRUCTURE UNIT: 0

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
26	TOP OF CONC DECK-EPX	2	04-27-2006	551 SF	551	0	0	0	0
			05-05-2005	551 SF	551	0	0	0	0
Notes: This rating is for the suspended walkway deck. The walkway is cracking.									
378	LS O/L(CONCSLAB-EPX)	2	04-27-2006	16,644 SF	16,644	0	0	0	0
			05-05-2005	16,644 SF	16,644	0	0	0	0
Notes: Overlay has moderate cracking with leaking and with patches.									
300	STRIP SEAL JOINT	2	04-27-2006	118 LF	118	0	0	N/A	N/A
			05-05-2005	118 LF	118	0	0	N/A	N/A
Notes:									
301	POURED DECK JOINT	2	04-27-2006	270 LF	135	0	135	N/A	N/A
			05-05-2005	270 LF	135	0	135	N/A	N/A
Notes: 50% has failed. 3 ft. x 6 in. spall C/L south pourable.									
321	CONC APPROACH SLAB	2	04-27-2006	2 EA	1	1	0	0	N/A
			05-05-2005	2 EA	1	1	0	0	N/A
Notes: Cracks in north approx. 1 ft. x 6 in. spall at c/l south end.									
333	RAILING - OTHER	2	04-27-2006	702 LF	702	0	0	N/A	N/A
			05-05-2005	702 LF	702	0	0	N/A	N/A
Notes: This rail is a pedestrian rail. Mike Chell inspected car fire damage 2006.									
334	METAL RAIL-COATED	2	04-27-2006	682 LF	662	20	0	0	0
			05-05-2005	682 LF	682	0	0	0	0
Notes: 20 ft. railing damaged from 2006 car fire, paint burnt off, and strength might be compromised.									
113	PAINT STEEL STRINGER	2	04-27-2006	400 LF	400	0	0	0	0
			05-05-2005	400 LF	400	0	0	0	0
Notes: Stringers are part of the walkway.									
141	PAINTED STEEL ARCH	2	04-27-2006	296 LF	296	0	0	0	0
			05-05-2005	296 LF	296	0	0	0	0
Notes:									
152	PAINT STL FLOORBEAM	2	04-27-2006	86 LF	86	0	0	0	0
			05-05-2005	86 LF	86	0	0	0	0
Notes: Floor Beams are part of the walkway.									
384	PNT STL SPANDREL COL	2	04-27-2006	12 EA	12	0	0	0	0
			05-05-2005	12 EA	12	0	0	0	0
Notes: # 3 & 4 are pin assemblies. The nuts were drilled but not the pins.									

Mn/DOT BRIDGE INSPECTION REPORT

Inspector: DISTRICT1

BRIDGE 38010 TH 61 OVER GOOSEBERRY RIVER

INSP. DATE: 04-27-2006

STRUCTURE UNIT: 0

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5	
380	SECONDARY ELEMENTS	2	04-27-2006	18 EA	18	0	0	0	N/A	
			05-05-2005	18 EA	18	0	0	0	N/A	
Notes: Structural tubing walkway hangers.										
310	ELASTOMERIC BEARING	2	04-27-2006	18 EA	18	0	0	N/A	N/A	
			05-05-2005	18 EA	18	0	0	N/A	N/A	
Notes:										
202	PAINT STL COLUMN	2	04-27-2006	12 EA	12	0	0	0	0	
			05-05-2005	12 EA	12	0	0	0	0	
Notes:										
215	CONCRETE ABUTMENT	2	04-27-2006	140 LF	134	6	0	0	N/A	
			05-05-2005	140 LF	134	6	0	0	N/A	
Notes: 4 ft. x 4in. loose concrete at S/W corner. Cracks in headblock with a 3 ft. x 6 in. W delam at the centerline on the south headblock. Graffiti on abut.										
231	PAINTED STEEL CAP	2	04-27-2006	705 LF	705	0	0	0	0	
			05-05-2005	705 LF	705	0	0	0	0	
Notes: Steel caps are spandrel caps. The 2 northern most caps have stiffeners welded at counter of span in bottom flange. Look as if they were set up to have a column under it. Bad detail the way it is.										
387	CONCRETE WINGWALL	2	04-27-2006	4 EA	3	1	0	0	N/A	
			05-05-2005	4 EA	3	1	0	0	N/A	
Notes: Old mortar joints need pointing on S/E wing.										
358	CONC DECK CRACKING	2	04-27-2006	1 EA	0	0	1	0	N/A	
			05-05-2005	1 EA	0	0	1	0	N/A	
Notes: Northbound lane has map cracking. Southbound longitudinal cracking. Needs sealing.										
359	CONC DECK UNDERSIDE	2	04-27-2006	1 EA	0	1	0	0	0	
			05-05-2005	1 EA	0	1	0	0	0	
Notes: Underside of deck has scattered longitudinal efflorescence cracks. Some cracks radiate from the core holes.										
964	CRITICAL FINDING	2	04-27-2006	1 EA	1	0	N/A	N/A	N/A	
			05-05-2005	1 EA	1	0	N/A	N/A	N/A	
Notes: DO NOT DELETE THIS CRITICAL FINDING SMART FLAG.										
981	SIGNING	2	04-27-2006	1 EA	1	0	0	0	0	
			05-05-2005	1 EA	1	0	0	0	0	
Notes:										
982	GUARDRAIL	2	04-27-2006	1 EA	0	0	1	N/A	N/A	
			05-05-2005	1 EA	0	0	1	N/A	N/A	
Notes: Southwest post broken. Northeast end post broken.										
984	DRAINAGE	2	04-27-2006	1 EA	1	0	0	N/A	N/A	
			05-05-2005	1 EA	1	0	0	N/A	N/A	
Notes:										
985	SLOPES	2	04-27-2006	1 EA	1	0	0	N/A	N/A	
			05-05-2005	1 EA	1	0	0	N/A	N/A	
Notes: Debris beginning to accumulate at columns and cross bracing.										
986	CURB & SIDEWALK	2	04-27-2006	1 EA	0	1	0	N/A	N/A	
			05-05-2005	1 EA	0	1	0	N/A	N/A	
Notes: West curb has cracks at 1-4 ft. intervals. Northeast at expansion joint has a spall of 1.5 sq ft.										

Mn/DOT BRIDGE INSPECTION REPORT

Inspector: DISTRICT1

BRIDGE 38010 TH 61 OVER GOOSEBERRY RIVER

INSP. DATE: 04-27-2006

STRUCTURE UNIT: 0

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
988	MISCELLANEOUS	2	04-27-2006	1 EA	1	0	0	N/A	N/A
			05-05-2005	1 EA	1	0	0	N/A	N/A

Notes: Graffiti by the walkway and abutment.

General Notes: Separate F/C report on file. Two utility pipe under lower sidewalk through floor beams and are empty as of 2003. 2005
 Inspection: [REDACTED] in 2005.
 7/19/05 Snooper Inspection: [REDACTED]
 2006 Inspection: [REDACTED] Post inspection note(1/16/07 [REDACTED] deck spalls in NB shoulder repaired
 in 2007.

Inspector's Signature

Reviewer's Signature / Date