90 Inspection Date - 6/14/2016
Inspector - AGREINER (154)

035B00038N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	4	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	5	**Sufficiency Rating:**	46.6

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	6.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(6) Equal Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(3) SC- Unstable

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	31 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

16: Re Conc Top Flange

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	745.57	670.57	90%	26	3%	49	7%	0	0%

The top of the top flange is not visible due to an asphalt wearing surface. The deck overhangs and underside have areas of cracking and spalling with exposed steel. The downstream end of the deck and overhang was recently patched near abutment 1. Heavy spalling is present in the downstream overhang adjacent to this recently patched area near abutment 1. Another area of heavy spalling is present in the downstream overhang ~ 7' from abutment 2. The downstream overhang has widespread minor sized cracking of heavy intensity. The upstream deck overhang near abutment 2 has some moderate to heavy spalling with exposed steel and a heavy intensity of minor sized cracking with efflorescence. The deck underside (particularly between beams 1&2 and 3&4 from upstream) has several shallow spalls with exposed steel, areas of delamination cracking, and minor sized cracking with efflorescence that ranges from moderate to heavy in intensity. The heaviest intensity of this cracking is present at abutment 1 adjacent to the downstream beam.

510: Wearing Surfaces

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	635.93	475.93	75%	30	5%	130	20%	0	0%

The asphalt wearing surface has some areas of cracking, particularly along the shoulders. A portion of the deck and overhang have been patched at the downstream end of abutment 1. Cold mix asphalt was placed along the roadway shoulder at this location. Another area was patched with cold mix asphalt along the downstream shoulder near mid-length of the bridge. Some rutting is present in the wheel paths of the west bound lane and a moderate to heavy intensity of minor sized cracking is present along the downstream shoulder. See photos.

3210: Del/Spall/Patch/Pot(Wear Surf)

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	1	0	0%	0	0%	1	100%	0	0%

See element 510.

3220: Crack (Wearing Surface)

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	1	0	0%	1	100%	0	0%	0	0%

See element 510.

Inspection Report with SI&A Data

1080: Delamination/Spall/Patched Area									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
SQ.FT	1	0	0%	0	0%	1	100%	0	0%

See element 16.

1130: Cracking (RC and Other)									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
SQ.FT	1	0	0%	1	100%	0	0%	0	0%

See element 16.

110: Re Conc Opn Girder/Beam									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
FT	132	83	63%	25	19%	24	18%	0	0%

The exterior face of the upstream beam has some minor to moderate sized longitudinal cracking (moderate intenstiy) at the beams ends and near midspan. It also has some honeycombing/spalling at abutment 2. Throughout this beam there are some light vertical cracks. The interior face of the upstream beam has several shallow spalls with exposed steel throughout its length. Three locations of moderate to heavy spalling are present in the lower/interior face of this beam. These spalls are located in the middle third of the beam and have some exposed primary longitudinal reinforcement. Some section loss is present within this longitudinal steel (10-15%). The downstream face of Beam 2 from upstream has minor delamination and a couple of very small shallow spalls near Abutment 2. The interior face of the downstream exterior beam has several minor sized cracks of heavy intensity with extensive efflorescence and some shallow spalling near abutment 1. The interior face of this beam near Abutment 2 has a moderate intensity of minor cracking with efflorescence. The exterior face of the downstream beam has areas of cracking (moderate to heavy intensity) with efflorescence and a few shallow to moderate spalls with exposed steel. The most advanced deterioration of this beam is in the exterior face near abutment 1. At this location there is minor sized widespread cracking of heavy intensity with heavy efflorescence and some shallow spalling. This begins at abutment 1 and extends out ~ 9 ft. Otherwise, both the exterior beams have some discoloration below the drain outlets. See photos.

1080: Delamination/Spall/Patched Area									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
FT	1	0	0%	0	0%	1	100%	0	0%

See element 110.

Inspection Report with SI&A Data

1090: Exposed Rebar

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	1	0	0%	0	0%	1	100%	0	0%

See element 110.

1130: Cracking (RC and Other)

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	1	0	0%	0	0%	1	100%	0	0%

See element 110.

215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	104	0	0%	102	98%	2	2%	0	0%

Abutment 1 has a vertical crack below beam 3 from upstream that typically measures ~ 3/16 in. wide, but, is up to 1/4 in. at the widest location. This crack extends from the groundline to the top. This abutment also has some moderate scaling along the flowline. Some minor cracking of moderate intensity and moderate to heavy spalling are present at the upstream end of abutment 1s wingwall. There is also some minor cracking with heavy efflorescence below the upstream beam. Shallow spalling, heavy efflorescence, and staining are present under the downstream exterior beam. Abutment 2 has a ~ 3/16 in. wide vertical crack with seepage below the upstream exterior beam and it extends from the beam to the groundline. The upstream wingwall of Abutment 2 has some minor cracking with shallow spalling along the top. A small spall is present along the top of the abutment near beam 3 from upstream. The downstream abutment 2 wingwall has some minor to moderate cracking of moderate to heavy intensity. The more moderate sized cracking is at the top of the haunch. See photos.

1130: Cracking (RC and Other)

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	1	0	0%	1	100%	0	0%	0	0%

See element 215.

Inspection Report with SI&A Data

330: Metal Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	66	0	0%	58	88%	8	12%	0	0%

The downstream rail has new impact damage since the last inspection. The downstream rail near abutment 2 is pushed out and the north guardrail post and post 2 from the north are disconnected. Post 3s connection to the curb is bent back. The rail posts are mostly rusted and surface rust is scattered throughout the rail.

515: Steel Protective Coating

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	100.58	0	0%	0	0%	100.58	100%	0	0%

See element 330.

1020: Connection

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	1	0	0%	0	0%	1	100%	0	0%

See element330.

803: Curb

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	66	48	73%	12	18%	6	9%	0	0%

The downstream curb has new impact damage at abutment 2. The end is cracked, broken, and spalled with exposed reinforcement steel. The guardrail post at abutment 2 and post 2 from the abutment are no longer connected to the curb. This is a newly repaired curb and otherwise it has some moderate cracking and spalling at rail post 3 from abutment 1. The upstream curb has some minor cracking and moderate spalling near abutment 2. The upstream curb has some some areas of minor to moderate scaling. Moderate cracking/scaling/spalling is present near the abutments.

Inspection Report with SI&A Data

1080: Delamination/Spall/Patched Area

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	1	0	0%	0	0%	1	100%	0	0%

See element 803.

1130: Cracking (RC and Other)

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	1	0	0%	1	100%	0	0%	0	0%

See element 803.

850: 2nd Elem

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

The diaphragms between the beams at the abutments have some cracking with efflorescence (moderate to heavy intensity) especially at the downstream ends of both abutments and the upstream end of abutment 2. A couple of small to moderate spalls are present at the downstream end of abutment 1 and the upstream end of abutment 2.

852: Drains

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	0	0%	1	100%

This bridge appears to have 3 drains along each side. The drains are mostly blocked with asphalt. A few drains are open along the downstream curb.

Inspection Report with SI&A Data

856: Chan Drift

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

Drift (silt, mud, and vegetation) have built up under the bridge along abutment 2. This is due to the poor channel alignment and all normal flow is along abutment 1.

858: Channel Alignment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

The stream makes a sharp turn at the upstream end of the structure. It is essentially being forced to flow under the bridge by the gabion baskets and concrete slurry just upstream of abutment 1. All normal flow is along abutment 1 and drift and vegetation are building up along the opposite bank. See photos.

860: Erosion Ctrl/Prt

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

The erosion control (Gabion baskets and concrete slurry) placed along the west embankment just upstream of abutment 1 appears to be functioning as designed. The stream makes a sharp turn at the upstream end of the structure and is essentially being forced under the bridge by these baskets.

STRUCTURE NOTES

-60.1

INSPECTION NOTES

Bridge is posted at Type 3, 31 tons. Both signs are in place at this time. This structure is scheduled to be replaced in 2017. Bridge Inspection by A.Greiner.

WORK

Action:	1015 - Bridge Rail-Repair

The downstream railing and curb need to be repaired. Generated by user "agreiner" on 6/15/2016

90 Inspection Date - 6/8/2015
Inspector - AGREINER (154)

035B00038N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	4	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	5	**Sufficiency Rating:**	46.6

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	6.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(6) Equal Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(3) SC- Unstable

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	31 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

16: Re Conc Top Flange

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	745.57	618.82	83%	126.75	17%	0	0%	0	0%

The top of the top flange is not visible due to an asphalt wearing surface. The deck overhangs and underside have areas of cracking and spalling with exposed steel. The downstream end of the deck and overhang was recently patched near abutment 1. Heavy spalling is present in the downstream overhang adjacent to this recently patched area near abutment 1. Another area of heavy spalling is present in the downstream overhang ~ 7' from abutment 2. The downstream overhang has widespread minor sized cracking of heavy intensity. The upstream deck overhang near abutment 2 has some heavy spalling with exposed steel and a heavy intensity of minor sized cracking with efflorescence. The deck underside (particularly between beams 1&2 and 3&4 from upstream) has several shallow spalls with exposed steel, areas of delamination cracking, and minor sized cracking with efflorescence that ranges from moderate to heavy in intensity. The heaviest intensity of this cracking is present at abutment 1 adjacent to the downstream beam.

510: Wearing Surfaces

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	635.93	475.93	75%	30	5%	130	20%	0	0%

The asphalt wearing surface has some areas of cracking, especially along the shoulders. A portion of the deck and overhang have been patched at the downstream end of abutment 1. Cold mix asphalt was placed along the roadway shoulder at this location. Another area was patched with cold mix asphalt along the downstream shoulder near mid-length of the bridge. Some rutting is present in the wheel paths of the west bound lane. See photos.

3220: Crack (Wearing Surface)

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	1	1	100%	0	0%	0	0%	0	0%

See element 510.

Inspection Report with SI&A Data

110: Re Conc Opn Girder/Beam

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	132	83	63%	25	19%	24	18%	0	0%

The upstream face of the upstream beam has some minor sized longitudinal cracking (moderate intenstiy) at the beams ends and near midspan. It also has some honeycombing/spalling at abutment 2. Throughout this beam there are some light vertical cracks. The downstream face of the upstream beam has several shallow spalls with exposed steel throughout its length. Three locations of moderate to heavy spalling are present in the lower/downstream face of this beam. These spalls are located in the middle third of the beam. The spalls on the bottom face of the beam near midspan have exposed some primary longitudinal reinforcement. Some section loss is present with this longitudinal steel (up to 10%). The downstream face of Beam 2 from upstream has a couple of very small shallow spalls near Abutment 2. The upstream face of the downstream exterior beam has several minor sized cracks of heavy intensity with extensive efflorescence and some shallow spalling near abutment 1. The interior face of this beam near Abutment 2 has a moderate amount of minor cracking with efflorescence. The exterior face of the downstream beam has areas of cracking (moderate to heavy intensity) with efflorescence and a few shallow spalls with exposed steel. The most advanced deterioration of this beam is in the exterior face near abutment 1. At this location there is minor sized widespread cracking of heavy intensity with heavy efflorescence and some shallow spalling. This begins at abutment 1 and extends out ~ 6 ft.. Otherwise, both the exterior beams have some discoloration below the drain outlets. See photos.

1080: Delamination/Spall/Patched Area

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	1	1	100%	0	0%	0	0%	0	0%

See element 110.

1090: Exposed Rebar

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	1	1	100%	0	0%	0	0%	0	0%

See element 110.

1130: Cracking (RC and Other)

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	1	1	100%	0	0%	0	0%	0	0%

See element 110.

Inspection Report with SI&A Data

215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	104	0	0%	102	98%	2	2%	0	0%

Abutment 1 has a vertical crack below beam 3 from upstream that typically measures ~ 3/16 in. wide, but, up to 1/4 in. at the widest location. This crack extends from the groundline to the top. This abutment also has some moderate scaling along the flowline. Some minor cracking and moderate to heavy spalling are present at the upstream end of Abutment 1s wingwall. There is also some minor cracking with heavy efflorescence below the upstream beam. Shallow spalling, heavy efflorescence, and staining are present under the downstream exterior beam. Abutment 2 has a ~ 3/16 in. wide vertical crack with seepage below the upstream exterior beam and it extends from the groundline to the top. The upstream wingwall of Abutment 2 has some light cracking with shallow spalling along the top. A small spall is present along the top of the abutment near beam 3 from upstream. The downstream abutment 2 wingwall has some minor to moderate cracking of moderate to heavy intensity. The more moderate sized cracking is at the top of the haunch. See photos.

1130: Cracking (RC and Other)

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	1	0	0%	1	100%	0	0%	0	0%

See element 215.

330: Metal Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	66	0	0%	66	100%	0	0%	0	0%

The downstream deck and curb have been repaired and the guardrail has been reattached. The railing is dulling and has some light surface rust. The rail posts have become mostly rusty.

515: Steel Protective Coating

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	100.58	0	0%	0	0%	100.58	100%	0	0%

See element 330.

Inspection Report with SI&A Data

803: Curb

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	66	62	94%	4	6%	0	0%	0	0%

The upstream curb has some minor cracking and moderate spalling near abutment 2. The upstream curb also has minor cracking/ scaling/spalling at the end near abutment 1. A new downstream curb was poured before the last inspection. It has some moderate cracking and spalling at rail post 3 from abutment 1. Otherwise, it is in satisfactory condition.

1130: Cracking (RC and Other)

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	1	1	100%	0	0%	0	0%	0	0%

See element 803.

850: 2nd Elem

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

The diaphragms between the beams at the abutments have some cracking with efflorescence (moderate to heavy intensity) especially at the downstream ends of the abutments and the upstream end of abutment 2. A couple of small to moderate spalls are present at the downstream end of abutment 1 and the upstream end of abutment 2.

852: Drains

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	0	0%	1	100%

This bridge appears to have 3 drains along each side. The drains are mostly blocked due to the asphalt overlay.

Inspection Report with SI&A Data

856: Chan Drift

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

Drift (silt, mud, and vegetation) have built up under the bridge along abutment 2. This is due to the poor channel alignment and all normal flow is along abutment 1.

858: Channel Alignment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

The stream makes a sharp turn at the upstream end of the structure. It is essentially being forced to flow under the bridge by the gabion baskets and concrete slurry just upstream of abutment 1. All normal flow is along abutment 1 and drift and vegetation are building up along the opposite bank. See photos.

860: Erosion Ctrl/Prt

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

The erosion control (Gabion baskets and concrete slurry) placed along the west embankment just upstream of abutment 1 appear to be functioning as designed. The stream makes a sharp turn at the upstream end of the structure and is essentially being forced under the bridge by these baskets.

STRUCTURE NOTES

-60.1

INSPECTION NOTES

Bridge is posted at Type 3, 31 tons. Both signs are in place at this time. This structure is scheduled to be replaced soon. It has BRO Funding for construction in 2016. Bridge Inspection by A.Greiner and K.Shugars.

WORK

Action:	-

90 Inspection Date - 6/13/2014
Inspector - AGREINER (154)

035B00038N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	4	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	5	**Sufficiency Rating:**	46.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	6.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(6) Equal Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(3) SC- Unstable

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	31 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

16: Re Conc Top Flange

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	745.57	618.82	83%	126.75	17%	0	0%	0	0%

Asphalt wearing surface has some areas of cracking, especially along the shoulders. A portion of the deck and overhang have been patched at the downstream end of abutment 1. Cold mix aphalt was placed along the roadway shoulder at this location. A moderate pothole is present in the wearing surface along the downstream shoulder near mid-length of the bridge.

510: Wearing Surfaces

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	635.93	604.14	95%	31.8	5%	0	0%	0	0%

7359: DO NOT USE Concrete Efflorescenc

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	10.76	10.76	100%	0	0%	0	0%	0	0%

Asphalt wearing surface has some areas of cracking, especially along the shoulders. A portion of the deck and overhang have been patched at the downstream end of abutment 1. Cold mix aphalt was placed along the roadway shoulder at this location. A moderate pothole is present in the wearing surface along the downstream shoulder near mid-length of the bridge.

Inspection Report with SI&A Data

110: Re Conc Opn Girder/Beam

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	132	85	64%	25	19%	22	17%	0	0%

The upstream face of the upstream beam has some minor sized longitudinal cracking (moderate intenstiy) at the beam ft.s ends and near midspan. It also has some honeycombing at abutment 2. Throughout this beam there are some light vertical cracks. The downstream face of the upstream beam has several shallow spalls with exposed steel throughout its length. Three locations of moderate to heavy spalling are present in the lower/downstream face of this beam. These spalls are located in the middle third of the beam. The spalls on the bottom face of the beam near midspan have exposed some primary longitudinal reinforcement. Some section loss is present with this longitudinal steel (10%). The downstream face of Beam 2 from upstream has a couple of very small shallow spalls near Abutment 2. The upstream face of the downstream exterior beam has several minor sized cracks of heavy intensity with extensive efflorescence and some shallow spalling near abutment 1. The interior face of this beam near Abutment 2 has a moderate amount of minor cracking with efflorescence. The exterior face of the downstream beam has areas of cracking with efflorescence and a few shallow spalls with exposed steel. The most advanced deterioration of this beam is in the exterior face near abutment 1. There is minor sized widespread cracking of heavy intensity with heavy efflorescence and some shallow spalling. This begins at abutment 1 and extends out ~ 6 ft.. Otherwise, both the exterior beams have some discoloration below the drain outlets.

215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	104	0	0%	102	98%	2	2%	0	0%

Abutment 1 has a vertical crack below beam 3 from upstream that typically measures 1/8 in. wide, but, up to 1/4 in. at the widest location. This crack extends from the groundline to the top. This abutment also has some scaling along the flowline. Some light cracking and moderate spalling are present at the upstream end of Abutment 1 ft.s wingwall. There is also some shallow spalling and heavy staining under the downstream exterior beam. Abutment 2 has a ~1/8 in. vertical crack with seepage below the upstream exterior beam and it extends from the groundline to the top. The upstream wingwall of Abutment 2 has some light cracking with shallow spalling along the top. The downstream wingwall has some areas of light cracking with more moderate cracking at the top of the haunch. See photos.

330: Metal Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	66	23	35%	43	65%	0	0%	0	0%

The downstream deck and curb have been repaired and the guardrail has been reattached. The railing has some light surface rust and the posts are becoming mostly rusty.

Inspection Report with SI&A Data

515: Steel Protective Coating									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
FT	0.3	0.3	100%	0	0%	0	0%	0	0%

803: Curb									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
(LF)	66	62	94%	4	6%	0	0%	0	0%

The upstream curb has some light scaling/spalling at the ends near the abutments. A new downstream curb has been formed and poured. It is in satisfactory condition.

850: 2nd Elem									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
(EA)	1	0	0%	0	0%	1	100%	0	0%

The diaphragms between the beams at the abutments have some cracking with efflorescence. A couple of small to moderate spalls are present at the downstream end of abutment 1 and the upstream end of abutment 2.

852: Drains									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
(EA)	1	0	0%	0	0%	0	0%	1	100%

This bridge appears to have 3 drains along each side. The upstream drain near abutment 1 and the downstream drain near midspan are mostly blocked and the remaining drains are completely blocked by the asphalt overlay.

Inspection Report with SI&A Data

856: Chan Drift									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
(EA)	1	0	0%	1	100%	0	0%	0	0%

Drift (silt, mud, and vegetation) have built up under the bridge along abutment 2. This is due to the poor channel alignment.

858: Channel Alignment									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
(EA)	1	0	0%	0	0%	1	100%	0	0%

The stream makes a sharp turn at the upstream end of the structure. It is essentially being forced to flow under the bridge by the gabion baskets and concrete slurry just upstream of abutment 1. All normal flow is along abutment 1 and drift and vegetation are building up along the opposite bank. See photos.

860: Erosion Ctrl/Prt									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
(EA)	1	0	0%	1	100%	0	0%	0	0%

The erosion control (Gabion baskets and concrete slurry) placed along the west embankment just upstream of abutment 1 appear to be functioning as designed. The stream makes a sharp turn at the upstream end of the structure and is essentially being forced under the bridge by these baskets.

STRUCTURE NOTES
-60.1

INSPECTION NOTES
Bridge is posted at Type 3, 31 tons. Both signs are in place at this time. Bridge Inspection by A.Greiner.

WORK	
Action:	-

90 Inspection Date - 6/17/2013
Inspector - BCOMBS (217)

035B00038N - **8 Bridge ID**
Standard -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	3	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	5	**Sufficiency Rating:**	44.3

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	6.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(6) Equal Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(3) SC- Unstable

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	31 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

16: Re Conc Top Flange

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	745.57	432.43	58%	37.28	5%	275.86	37%	0	0%

Asphalt wearing surface has some areas of cracking. There is a section of deck missing at Abutment 1 on the downstream side and this is encroaching upon the driving lane--it ft.s right to the white edge-line and appears to be rotten even farther in. Near this area the asphalt has heavy random cracking indicating that the underlying concrete has deterioration. The white line is, however, directly over the downstream exterior beam. This needs to be patched.

510: Wearing Surfaces

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	635.93	604.14	95%	31.8	5%	0	0%	0	0%

7359: DO NOT USE Concrete Efflorescenc

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	10.76	10.76	100%	0	0%	0	0%	0	0%

Asphalt wearing surface has some areas of cracking. There is a section of deck missing at Abutment 1 on the downstream side and this is encroaching upon the driving lane--it ft.s right to the white edge-line and appears to be rotten even farther in. Near this area the asphalt has heavy random cracking indicating that the underlying concrete has deterioration. The white line is, however, directly over the downstream exterior beam. This needs to be patched.

Inspection Report with SI&A Data

110: Re Conc Opn Girder/Beam

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	132	89	67%	21	16%	22	17%	0	0%

The upstream face of the upstream beam has some light longitudinal cracking at the beam ft.s ends and near midspan. It also has some small areas of honeycombing at Abutment 2. Throughout this beam there are a few very light vertical cracks. The downstream face of the upstream beam has several shallow spalls with exposed steel throughout its length. Three locations of moderate spalling are present in the lower downstream face of this beam. One of these is near Abutment 2 and two are near midspan. The spalls on the bottom face of the beam near midspan have 3 large primary longitudinal reinforcement square bars exposed. Some section loss is present with this longitudinal bar (10%). It also appears that within this spall there was a void in the concrete. The downstream face of Beam 2 from upstream has a couple of very small shallow spalls near Abutment 2. The upstream face of the downstream exterior beam has several light cracks with extensive efflorescence and some shallow spalling with exposed steel near abutment 1. The interior face of this beam near Abutment 2 has a moderate amount of cracking with efflorescence. The exterior face of the downstream beam has areas of cracking with efflorescence and a few shallow spalls with exposed steel. The most advanced deterioration of this beam is near Abutment 1 at the bearing. The cracking is heavy in density but minor in size with heavy efflorescence that begins at Abutment 1 and extends ~10 ft.. Otherwise, the beams have some light delamination cracking and both the exterior beams have some discoloration below the drain outlets.

215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	104	0	0%	102	98%	2	2%	0	0%

Abutment 1 has a ~1/4 in. vertical crack below Beam 3 from upstream that extends from the groundline to the top. This abutment also has some scaling along the flowline. Some light cracking and moderate spalling are present at the upstream end of Abutment 1 ft.s wingwall. There is also some shallow spalling under the downstream exterior beam. Abutment 2 has a ~1/8 in. vertical crack with seepage. It is below the upstream exterior beam and it extends from the groundline to the top. The upstream wingwall of Abutment 2 has some light cracking with and shallow spalling along the top. The downstream wingwall has some areas of light cracking with more moderate cracking at the top of the haunch. Abutment 1 has heavy staining under the downstream exterior beam. See photos.

330: Metal Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	66	33	50%	33	50%	0	0%	0	0%

Due to the heavy deterioration of the downstream deck and curb, rail posts 1, 4, and 6 are no longer secured to the curb with angle clips. The remaining guard rail post clips are most likely in rotten concrete. This would most likely not redirect impact and should be repaired.

Inspection Report with SI&A Data

515: Steel Protective Coating

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	0.3	0.3	100%	0	0%	0	0%	0	0%

803: Curb

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	66	28	42%	4	6%	30	45%	4	6%

The upstream curb has some light scaling/spalling at the ends near the abutments. At abutment 1 the downstream curb is mostly missing for a length of 3 ft.. The concrete that is left at this location is very rotten and the steel that was within the curb is suspended in the air. For approximately 12 ft. from abutment 1 the downstream curb is very heavily spalled with areas of exposed steel with rotten concrete. The remaining portion of the downstream curb is moderately to heavily spalled with some exposed steel.

850: 2nd Elem

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

The diaphragms between the beams at the abutments have some cracking with efflorescence. A couple of small to moderate spalls are present at the downstream end of Abutment 1 and the upstream end of Abutment 2.

852: Drains

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	0	0%	1	100%

This bridge appears to have 3 drains along each side. The upstream drain near abutment 1 and the downstream drain near midspan are mostly blocked and the remaining drains are completely blocked by the asphalt overlay.

Inspection Report with SI&A Data

856: Chan Drift

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

Drift (silt, mud, and vegetation) have built up under the bridge along the east embankment. The stream appears to be mostly low volume flow evident by the heavy vegetation growth, drift, and almost stagnant water.

858: Channel Alignment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

The stream makes a sharp turn at the upstream end of the structure and this is being aided by the gabion baskets just upstream of Abutment 1. The stream flows along Abutment 1 and drift and vegetation are building up along the opposite bank. The stream appears to be mostly low volume flow evident by the heavy vegetation growth, drift, and almost stagnant water. See photos.

860: Erosion Ctrl/Prt

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

The erosion control (Gabion baskets) placed along the west embankment just upstream of Abutment 1 appear to be functioning as designed. The stream makes a sharp turn at the upstream end of the structure and this is being aided by these baskets. The stream appears to be mostly low volume flow evident by the heavy vegetation growth, drift, and almost stagnant water.

STRUCTURE NOTES

-60.1

INSPECTION NOTES

Bridge is posted at Type 3, 31 tons. Both signs are in place at this time. Bridge Inspection by B.Combs.

WORK

Action:	-

90 Inspection Date - 11/29/2012
Inspector - JCALLAHAN (8)

035B00038N - **8 Bridge ID**
Special (0-60 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	3	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	5	**Sufficiency Rating:**	44.4

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	10.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(6) Equal Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(3) SC- Unstable

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	31 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

16: Re Conc Top Flange

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	745.57	432.43	58%	37.28	5%	275.86	37%	0	0%

Asphalt wearing surface has some areas of cracking. There is a section of deck missing at Abutment 1 on the downstream side and this is encroaching upon the driving lane--it ft.s right to the white edgeline and appears to be rotten even farther in. This needs to be patched.

510: Wearing Surfaces

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	635.93	604.14	95%	31.8	5%	0	0%	0	0%

7359: DO NOT USE Concrete Efflorescenc

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	10.76	10.76	100%	0	0%	0	0%	0	0%

Asphalt wearing surface has some areas of cracking. There is a section of deck missing at Abutment 1 on the downstream side and this is encroaching upon the driving lane--it ft.s right to the white edgeline and appears to be rotten even farther in. This needs to be patched.

110: Re Conc Opn Girder/Beam

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	132	89	67%	21	16%	22	17%	0	0%

The upstream face of the upstream beam has some light longitudinal cracking at the beam ft.s ends and near midspan. It also has some small areas of honeycombing at Abutment 2. Throughout this beam there a a few very light vertical cracks. The downstream face of the upstream beam has several shallow spalls with exposed steel throughout its length. Three locations of moderate spalling are present in the lower downstream face of this beam. One of these is near Abutment 2 and two are near midspan. The spalls near midspan have a large primary longitudinal reinforcement bar exposed. Some section loss is present with this longitudinal bar. The downstream face of Beam 2 from upstream has a couple of very spall shallow spalls near Abutment 2. The upstream face of the downstream beam has several light cracks with extensive efflorescence and some shallow spalling with exposed steel near abutment 1. The interior face of this beam near Abutment 2 has a lighter amount of cracking with efflorescence. The exterior face of the downstream beam has areas of cracking with efflorescence and a few shallow spalls with exposed steel. The most advanced deterioration of this beam is near Abutment 1 at the bearing. The cracking is heavy in density but minor in size with heavy efflorescence that begins at Abutment 1 and extends 6 ft.-8 ft.. Otherwise, the beams have some light delamination cracking and both the exterior beams have some discoloration below the drain outlets.

Inspection Report with SI&A Data

215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	104	0	0%	102	98%	2	2%	0	0%

Abutment 1 has an approximate 1/8 in. vertical crack below Beam 3 from upstream that extends from the groundline to the top. This abutment also has some scaling along the flowline. Some light cracking and moderate spalling are present at the upstream end of Abutment 1 ft.s wingwall. There is also some shallow spalling under the downstream exterior beam. Abutment 2 has an approximate 1/8 in. vertical crack with seepage. It is below the upstream beam and it extends from the groundline to the top. The upstream wingwall of Abutment 2 has some light cracking with and shallow spalling along the top. The downstream wingwall has some areas of light cracking with more moderate cracking at the top of the haunch.

330: Metal Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	66	33	50%	33	50%	0	0%	0	0%

Due to the heavy deterioration of the downstream deck and curb, rail posts 1, 4, and 6 are no longer secured to the curb. This may not redirect impact and should be repaired.

515: Steel Protective Coating

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	0.3	0.3	100%	0	0%	0	0%	0	0%

803: Curb

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	66	28	42%	4	6%	30	45%	4	6%

The upstream curb has some light scaling/spalling at the ends near the abutments. At abutment 1 the downstream curb is mostly missing for a length of 3 ft.. The concrete that is left at this location is very rotten and the steel that was within the curb is suspended in the air. For approximately 12 ft. from abutment 1 the downstream curb is heavily spalled with some exposed steel with rotten concrete. The remaining portion of the downstream curb is moderately to heavily spalled with some exposed steel.

Inspection Report with SI&A Data

850: 2nd Elem

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

The diaphragms between the beams at the abutments have some cracking with efflorescence. A couple of small to moderate spalls are present at the downstream end of Abutment 1 and the upstream end of Abutment 2.

852: Drains

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	0	0%	1	100%

This bridge appears to have 3 drains along each side. The upstream drain near abutment 1 and the downstream drain near midspan are mostly blocked and the remaining drains are completely blocked by the asphalt overlay.

856: Chan Drift

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

Drift (silt, mud, and vegetation) have built up under the bridge along the east embankment. The stream appears to be mostly low volume flow evident by the heavy vegetation growth, drift, and almost stagnant water.

858: Channel Alignment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

The stream makes a sharp turn at the upstream end of the structure and this is being aided by the gabion baskets just upstream of Abutment 1. The stream flows along Abutment 1 and drift and vegetation are building up along the opposite bank. The stream appears to be mostly low volume flow evident by the heavy vegetation growth, drift, and almost stagnant water. See photos.

Inspection Report with SI&A Data

860: Erosion Ctrl/Prt									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
(EA)	1	0	0%	1	100%	0	0%	0	0%

The erosion control (Gabion baskets) placed along the west embankment just upstream of Abutment 1 appear to be functioning as designed. The stream makes a sharp turn at the upstream end of the structure and this is being aided by these baskets. The stream appears to be mostly low volume flow evident by the heavy vegetation growth, drift, and almost stagnant water.

STRUCTURE NOTES
-60.1

INSPECTION NOTES
This is a special inspection performed by Joe Callahan. Bridge is posted at Type 3, 31 tons. Both signs are in place at this time.

WORK	
Action:	-

90 Inspection Date - 6/18/2012
Inspector - AGREINER (154)

035B00038N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	4	**61 Channel:**	5
59 Superstructure:	5	**62 Culvert:**	N
60 Substructure:	5	**Sufficiency Rating:**	62.9

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	10.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(6) Equal Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(3) SC- Unstable

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	31 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

16: Re Conc Top Flange

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	745.57	469.71	63%	0	0%	275.86	37%	0	0%

The asphalt wearing surface has some transverse cracking near the bridge ends and some longitudinal cracking along the white lines. The missing portion of the downstream curb at abutment 1 has created a vertical edge right at the roadway shoulder. The concrete is very rotten at this location and should be repaired. See photos.

510: Wearing Surfaces

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	635.93	635.93	100%	0	0%	0	0%	0	0%

7359: DO NOT USE Concrete Efflorescenc

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	10.76	10.76	100%	0	0%	0	0%	0	0%

The asphalt wearing surface has some transverse cracking near the bridge ends and some longitudinal cracking along the white lines. The missing portion of the downstream curb at abutment 1 has created a vertical edge right at the roadway shoulder. The concrete is very rotten at this location and should be repaired. See photos.

110: Re Conc Opn Girder/Beam

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	132	89	67%	21	16%	22	17%	0	0%

The upstream face of the upstream beam has some light longitudinal cracking at the beam ft.s ends and near midspan. It also has some small areas of honeycombing at abutment 2. Throughout this beam there a a few very light vertical cracks. The downstream face of the upstream beam has several shallow spalls with exposed steel throughout its length. Three locations of moderate spalling are present in the lower downstream face of this beam. One of these is near abutment 2 and two are near midspan. The spalls near midspan have a large longitudinal reinforcement bar exposed. Only light corrosion is present within this longitudinal bar. The downstream face of beam 2 from upstream has a couple of very spall shallow spalls near abutment 2. The upstream face of the downstream beam has several light cracks with extensive efflorescence and some shallow spalling with exposed steel near abutment 1. The interior face of this beam near abutment 2 has a lighter amount of cracking with efflorescence. The exterior face of the downstream beam has areas of cracking with efflorescence and a few shallow spalls with exposed steel. The most advanced deterioration of this beam is near abutment 1. The cracking is heavy in density but minor in size with heavy efflorescence that extends 6 ft.-8- from abutment 1. Otherwise, the beams have some light delamination cracking and both the exterior beams have some discoloration below the drain outlets. See photos.

Inspection Report with SI&A Data

215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	104	0	0%	102	98%	2	2%	0	0%

Abutment 1 has an approximate 1/8 in. vertical crack below beam 3 from upstream that extends from the groundline to the top. This abutment also has some scaling along the flowline. Some light cracking and moderate spalling are present at the upstream end of abutment 1 ft.s wingwall. Abutment 2 has an approximate 1/8 in. vertical crack with seepage. It is below the upstream beam and it extends from the groundline to the top. The upstream wingwall of abutment 2 has some light cracking with and shallow spalling along the top. The downstream wingwall has some areas of light cracking with more moderate cracking at the top of the haunch. See photos.

330: Metal Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	66	33	50%	33	50%	0	0%	0	0%

Due to the heavy deterioration of the downstream curb, rail posts 1, 4, and 6 are no longer secured to the curb. This may not redirect impact and should be repaired. See photos.

515: Steel Protective Coating

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	0.3	0.3	100%	0	0%	0	0%	0	0%

803: Curb

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	66	28	42%	4	6%	30	45%	4	6%

The upstream curb has some light scaling/spalling at the ends near the abutments. At abutment 1 the downstream curb is mostly missing for a length of 3 ft.. The concrete that is left at this location is very rotten and the steel that was within the curb is suspended in the air. For approximately 12 ft. from abutment 1 the downstream curb is heavily spalled with some exposed steel with rotten concrete. The remaining portion of the downstream curb is moderately to heavily spalled with some exposed steel. See photos.

Inspection Report with SI&A Data

850: 2nd Elem

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

The diaphragms between the beams at the abutments have some cracking with efflorescence. A couple of small to moderate spalls are present at the downstream end of abutment 1 and the upstream end of abutment 2. See photos.

852: Drains

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	0	0%	1	100%

This bridge appears to have 3 drains along each side. The upstream drain near abutment 1 and the downstream drain near midspan are mostly blocked and the remaining drains are completely blocked by the asphalt overlay. See photos.

856: Chan Drift

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

Drift (silt, mud, and vegetation) have built up under the bridge along the east embankment. The stream appears to be mostly low volume flow evident by the heavy vegetation growth, drift, and almost stagnant water. See photos.

858: Channel Alignment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

The stream makes a sharp turn at the upstream end of the structure and this is being aided by the gabion baskets just upstream of abutment 1. The stream flows along abutment 1 and drift and vegetation are building up along the opposite bank. The stream appears to be mostly low volume flow evident by the heavy vegetation growth, drift, and almost stagnant water. See photos.

Inspection Report with SI&A Data

860: Erosion Ctrl/Prt									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
(EA)	1	0	0%	1	100%	0	0%	0	0%

The erosion control (Gabion baskets) placed along the west embankment just upstream of abutment 1 appear to be functioning as designed. The stream makes a sharp turn at the upstream end of the structure and this is being aided by these baskets. The stream appears to be mostly low volume flow evident by the heavy vegetation growth, drift, and almost stagnant water. See photos.

STRUCTURE NOTES
-60.1

INSPECTION NOTES
Bridge is posted at type 3, 31 tons. Both signs are in place at this time. See photos. Inspected by A.Greiner.

WORK	
Action:	-

90 Inspection Date - 6/9/2011
Inspector - RROGERS (35)

035B00038N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	5	**62 Culvert:**	N
60 Substructure:	4	**Sufficiency Rating:**	49

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	10.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(6) Equal Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(3) SC- Unstable

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	31 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

16: Re Conc Top Flange

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	745.57	469.71	63%	0	0%	275.86	37%	0	0%

Asphalt wearing surface has minor transverse cracking at bridge ends. Remaining portion of beam is in good condition at this time. See photos.

510: Wearing Surfaces

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	635.93	635.93	100%	0	0%	0	0%	0	0%

7359: DO NOT USE Concrete Efflorescenc

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	10.76	10.76	100%	0	0%	0	0%	0	0%

Asphalt wearing surface has minor transverse cracking at bridge ends. Remaining portion of beam is in good condition at this time. See photos.

110: Re Conc Opn Girder/Beam

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	132	89	67%	21	16%	22	17%	0	0%

Upstream exterior beam has cracking and shallow cover spalling with exposed steel. Downstream exterior beam has cracking with efflorescence and shallow cover spalling with exposed steel. Interior beams are in good condition. See photos.

Inspection Report with SI&A Data

215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	104	0	0%	102	98%	2	2%	0	0%

Abutments have some cracking and scaling at flowline. Abutment 1 has a large vertical crack at downstream end and abutment 2 has a similar vertical at upstream end. Cracks are approximately 1/4 in. wide. Need to monitor. See photos.

330: Metal Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	66	33	50%	33	50%	0	0%	0	0%

Rail has minor impact damage. Due to condition of downstream curb, posts 1,4, and 6 are loose. This needs to be repaired soon. See photo.

515: Steel Protective Coating

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	0.3	0.3	100%	0	0%	0	0%	0	0%

803: Curb

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	66	33	50%	0	0%	33	50%	0	0%

Downstream curb is heavily scaled on top having exposed steel with section loss. Curb will need to be repaired.See photo.

850: 2nd Elem

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

Diaphragms have areas of cracking with efflorescence and some minor spalling. See photos.

Inspection Report with SI&A Data

852: Drains

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	0	0%	1	100%

Drains are blocked with asphalt overlay at this time.

860: Erosion Ctrl/Prt

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

Erosion control placed along the west embankment upstream of abutment 1 appears to be functioning as designed. See photos.

7361: DO NOT USE Scour

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	1	100%	0	0%	0	0%	0	0%

No scour is present at this time. See photos.

STRUCTURE NOTES

-60.1

INSPECTION NOTES

Bridge is posted at type 3, 31tons. Both signs are in place at this time. See photos. Inspected by R.Rogers, A.Greiner, and B.Combs

WORK

Action:	-

90 Inspection Date - 6/4/2010
Inspector - RROGERS (35)

035B00038N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	5	**62 Culvert:**	N
60 Substructure:	4	**Sufficiency Rating:**	48.7

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	10.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(6) Equal Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(3) SC- Unstable

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	31 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

16: Re Conc Top Flange

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	745.57	469.71	63%	0	0%	275.86	37%	0	0%

Asphalt wearing surface is in good condition at this time. See photos.

510: Wearing Surfaces

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	635.93	635.93	100%	0	0%	0	0%	0	0%

7359: DO NOT USE Concrete Efflorescenc

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	10.76	10.76	100%	0	0%	0	0%	0	0%

Asphalt wearing surface is in good condition at this time. See photos.

110: Re Conc Opn Girder/Beam

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	132	89	67%	21	16%	22	17%	0	0%

Upstream exterior beam has cracking and shallow cover spalling with exposed steel. Downstream exterior beam has cracking with efflorescence and shallow cover spalling with exposed steel. Interior beams are in good condition. See photos.

215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	104	0	0%	102	98%	2	2%	0	0%

Abutments have some cracking and scaling at flowline. Abutment 1 has a large vertical crack at downstream end and abutment 2 has a similar vertical at upstream end. Need to monitor. See photos.

Inspection Report with SI&A Data

330: Metal Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	66	33	50%	33	50%	0	0%	0	0%

Rail has minor impact damage. Due to condition of downstream curb, several posts are loose. This needs to be repaired soon. See photo.

515: Steel Protective Coating

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	0.3	0.3	100%	0	0%	0	0%	0	0%

803: Curb

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	66	33	50%	0	0%	33	50%	0	0%

Downstream curb is heavily scaled on top have exposed steel. See photo.

852: Drains

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	1	100%	0	0%	0	0%	0	0%

< none >

7361: DO NOT USE Scour

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	1	100%	0	0%	0	0%	0	0%

Scour is present at the footing of abutment 1. This is not a problem at this time. Need to monitor.

Inspection Report with SI&A Data

STRUCTURE NOTES
-60.1

INSPECTION NOTES
Both posting are in place at this time. See photos. Inspected by R.Rogers, A.Greiner.

WORK	
Action:	-

90 Inspection Date - 6/23/2009
Inspector - RROGERS (35)

035B00038N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	5	**62 Culvert:**	N
60 Substructure:	4	**Sufficiency Rating:**	48.7

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	10.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(1) Meets Standards
36B Transitions	(1) Meets Standards
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(6) Equal Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(3) SC- Unstable

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	31 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

16: Re Conc Top Flange

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	745.57	618.82	83%	126.75	17%	0	0%	0	0%

Asphalt wearing surface is in good condition at this time. See photos.

510: Wearing Surfaces

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	635.93	635.93	100%	0	0%	0	0%	0	0%

7359: DO NOT USE Concrete Efflorescenc

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	10.76	10.76	100%	0	0%	0	0%	0	0%

Asphalt wearing surface is in good condition at this time. See photos.

110: Re Conc Opn Girder/Beam

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	132	89	67%	21	16%	22	17%	0	0%

Upstream exterior beam has cracking and shallow cover spalling with exposed steel. Downstream exterior beam has cracking with efflorescence and shallow cover spalling with exposed steel. Interior beams are in good condition. See photos.

215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	104	0	0%	102	98%	2	2%	0	0%

Abutments have some cracking and scaling at flowline. Abutment 1 has a large vertical crack at downstream end and abutment 2 has a similar vertical at upstream end. Need to monitor. See photos.

Inspection Report with SI&A Data

330: Metal Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	66	33	50%	33	50%	0	0%	0	0%

Rail has minor impact damage. Due to condition of downstream curb, several posts are loose. This needs to be repaired soon. See photo.

515: Steel Protective Coating

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	0.3	0.3	100%	0	0%	0	0%	0	0%

803: Curb

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	66	33	50%	0	0%	33	50%	0	0%

Downstream curb is heavily scaled on top have exposed steel. See photo.

852: Drains

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	1	100%	0	0%	0	0%	0	0%

7361: DO NOT USE Scour

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	1	100%	0	0%	0	0%	0	0%

Scour is present at the footing of abutment 1. This is not a problem at this time. Need to monitor.

Inspection Report with SI&A Data

STRUCTURE NOTES
-60.1

INSPECTION NOTES
Both posting are in place at this time. See photos. Inspected by R.Rogers, A.Greiner, and B.Howe.

WORK	
Action:	-

90 Inspection Date - 7/7/2008
Inspector - RROGERS (35)

035B00038N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	5	**62 Culvert:**	N
60 Substructure:	4	**Sufficiency Rating:**	49.1

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	10.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(1) Meets Standards
36B Transitions	(1) Meets Standards
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(6) Equal Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(3) SC- Unstable

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	31 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

16: Re Conc Top Flange

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	745.57	618.82	83%	126.75	17%	0	0%	0	0%

< none >

510: Wearing Surfaces

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	635.93	635.93	100%	0	0%	0	0%	0	0%

7359: DO NOT USE Concrete Efflorescenc

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	10.76	10.76	100%	0	0%	0	0%	0	0%

< none >

110: Re Conc Opn Girder/Beam

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	132	89	67%	21	16%	22	17%	0	0%

Upstream exterior beam has cracking and shallow cover spalling with exposed steel. Downstream exterior beam has cracking with efflorescence and shallow cover spalling with exposed steel. Interior beams are in good condition. See photos.

215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	104	0	0%	102	98%	2	2%	0	0%

Abutments have some cracking and scaling at flowline. Abutment 1 has a large vertical crack at downstream end and abutment 2 has a similar vertical at upstream end. Need to monitor. See photos.

Inspection Report with SI&A Data

330: Metal Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	66	33	50%	33	50%	0	0%	0	0%

Rail has minor impact damage. Due to condition of downstream curb, several anchor bolts are loose. See photo.

515: Steel Protective Coating

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	0.3	0.3	100%	0	0%	0	0%	0	0%

803: Curb

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	66	33	50%	0	0%	33	50%	0	0%

Downstream curb is heavily scaled on top have exposed steel. See photo.

852: Drains

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

Drains are partially blocked with asphalt overlay. See photos.

855: Debris on Super

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

Heavy siltation under bridge at this time is restricting flow. See photos.

Inspection Report with SI&A Data

858: Channel Alignment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

< none >

859: Vegetation

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

Vegetation needs to be cut and sprayed. See photos.

860: Erosion Ctrl/Prt

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

Gabion baskets appear to be working well at this time. See photo.

7361: DO NOT USE Scour

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	1	100%	0	0%	0	0%	0	0%

Scour is present at the footing of abutment 1. This is not a problem at this time. Need to monitor.

STRUCTURE NOTES

-60.1

INSPECTION NOTES

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Inspection Report with SI&A Data

WORK	
Action:	-

90 Inspection Date - 7/13/2007
Inspector - RROGERS (35)

035B00038N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	5	**62 Culvert:**	N
60 Substructure:	4	**Sufficiency Rating:**	48.1

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	10.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(1) Meets Standards
36B Transitions	(1) Meets Standards
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(7) Above Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(5) Stable w/in footing
Recommended Scour Critical:	(6) Calcs Not Made

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	34 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

16: Re Conc Top Flange

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	745.57	618.82	83%	126.75	17%	0	0%	0	0%

510: Wearing Surfaces

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	635.93	635.93	100%	0	0%	0	0%	0	0%

7359: DO NOT USE Concrete Efflorescenc

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	10.76	10.76	100%	0	0%	0	0%	0	0%

110: Re Conc Opn Girder/Beam

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	132	89	67%	21	16%	22	17%	0	0%

Upstream exterior beam has cracking and shallow cover spalling with exposed steel. Downstream exterior beam has cracking with efflorescence and shallow cover spalling with exposed steel. Interior beams are in good condition.

215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	104	0	0%	102	98%	2	2%	0	0%

Abutments have some cracking and scaling at flowline. Abutment 1 has a large vertical crack at downstream end and abutment 2 has a similar vertical at upstream end. Need to monitor.

Inspection Report with SI&A Data

330: Metal Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	66	66	100%	0	0%	0	0%	0	0%

515: Steel Protective Coating

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	0.3	0.3	100%	0	0%	0	0%	0	0%

803: Curb

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	66	33	50%	0	0%	33	50%	0	0%

Downstream curb is heavily scaled on top have exposed steel.

852: Drains

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

Drains are partially blocked with asphalt overlay.

855: Debris on Super

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

Heavy siltation under bridge at this time is restricting flow.

Inspection Report with SI&A Data

858: Channel Alignment									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
(EA)	1	0	0%	1	100%	0	0%	0	0%

859: Vegetation									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
(EA)	1	0	0%	0	0%	1	100%	0	0%

Vegetation needs to be cut and sprayed.

860: Erosion Ctrl/Prt									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
(EA)	1	0	0%	1	100%	0	0%	0	0%

Gabion baskets appear to be working well at this time.

STRUCTURE NOTES
-60.1

INSPECTION NOTES
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WORK	
Action:	-

90 Inspection Date - 7/1/2005
Inspector - Pontis (1)

035B00038N - **8 Bridge ID**
Initial Inspection -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 33.14 Foot - Single Span Concrete Tee Beam
2 District: 09 **3 County:** Fleming **16 Latitude:** 38°25'17.00" **7 Longitude:** 83°48'18.00"
7 Facility Carried KY-32 **Milepoint:** 7.780
6A Feature Intersected: MUD LICK CREEK
9 Location: 1.2 MI EAST OF JCT KY 170

NBI	X
Element	
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	5	**62 Culvert:**	N
60 Substructure:	4	**Sufficiency Rating:**	49.1

DESIGN

Substandard:	Weight
43A Main Span Material:	(1) Concrete
43B Main Span Design:	(04) Tee Beam
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Unknown (P)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	10.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(1) Meets Standards
36B Transitions	(1) Meets Standards
36C Approach Guardrail:	(1) Meets Standards
36D Approach Guardrail Ends:	(1) Meets Standards
71 Waterway Adequacy:	(7) Above Minimum
72 Approach Alignment:	(8) Equal Desirable Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(5) Stable w/in footing
Recommended Scour Critical:	(6) Calcs Not Made

LOAD RATINGS

63 Operating Type:	(2) Allowable Stress (AS)
64 Operating Rating:	64.0 tons
65 Inventory Type:	(2) Allowable Stress (AS)
66 Inventory Rating:	34.0 tons
Truck Capacity Type I:	28 tons
Truck Capacity Type II:	29 tons
Truck Capacity Type III:	31 tons
Truck Capacity Type IV:	55 tons

GEOMETRIC DATA

48 Max Length Span:	29.856 ft
49 Structure Length:	33.136 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	30°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	1.001 ft
50B Curb/Sidewalk Width R:	1.001 ft
47 Horiz. Clearance:	19.029 ft
51 Width Curb to Curb:	19.029 ft
52 Width Out to Out:	22.500 ft

ADMINISTRATIVE

27 Year Built:	1929
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(01) State Hwy Agency
22 Owner:	(01) State Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

CLEARANCES

10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

POSTINGS

41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	34 tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

:									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
			%		%		%		%

STRUCTURE NOTES
-60.1

INSPECTION NOTES
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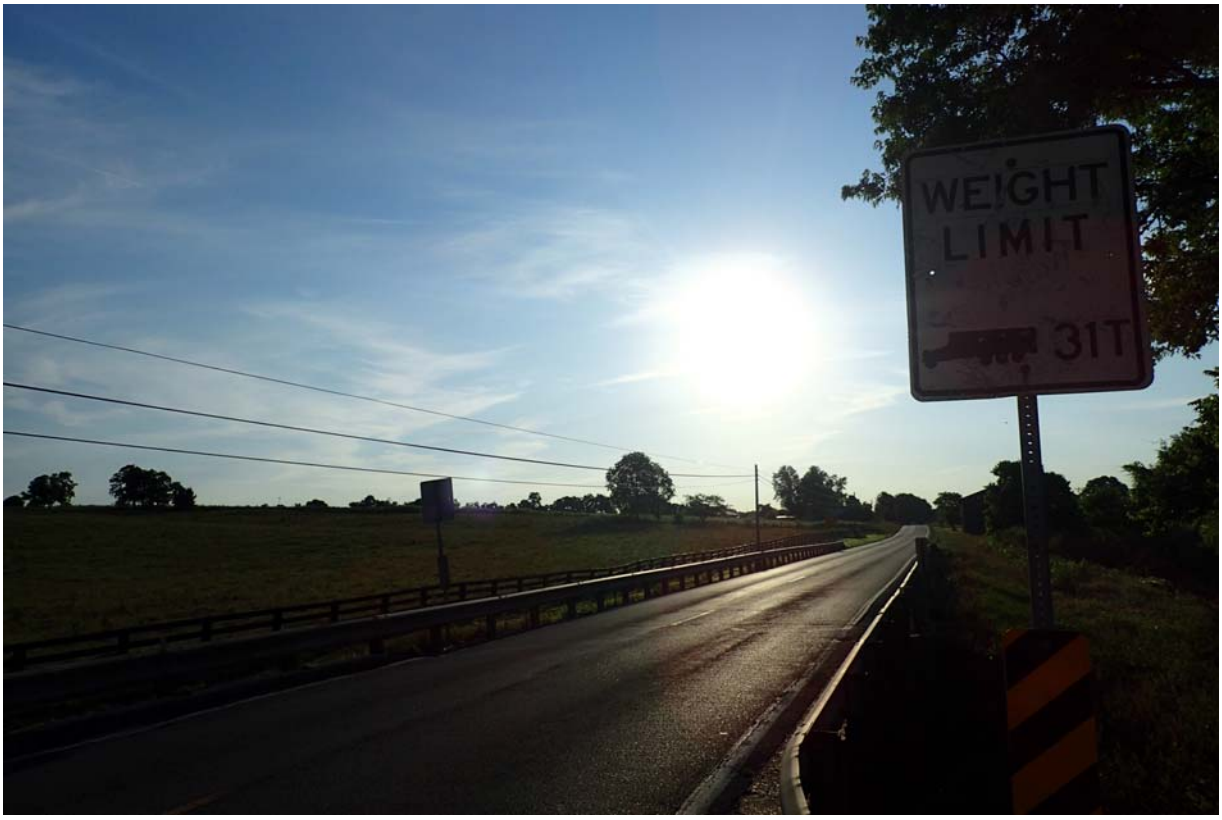
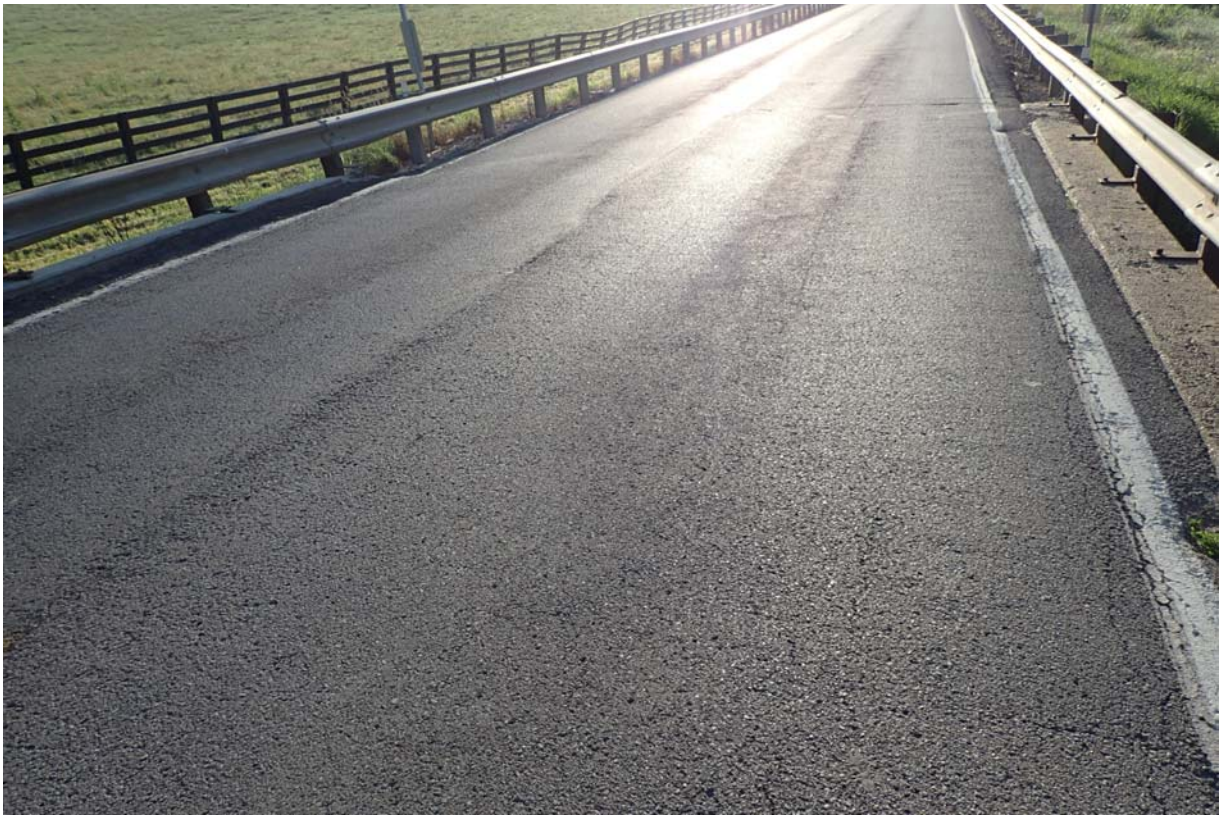
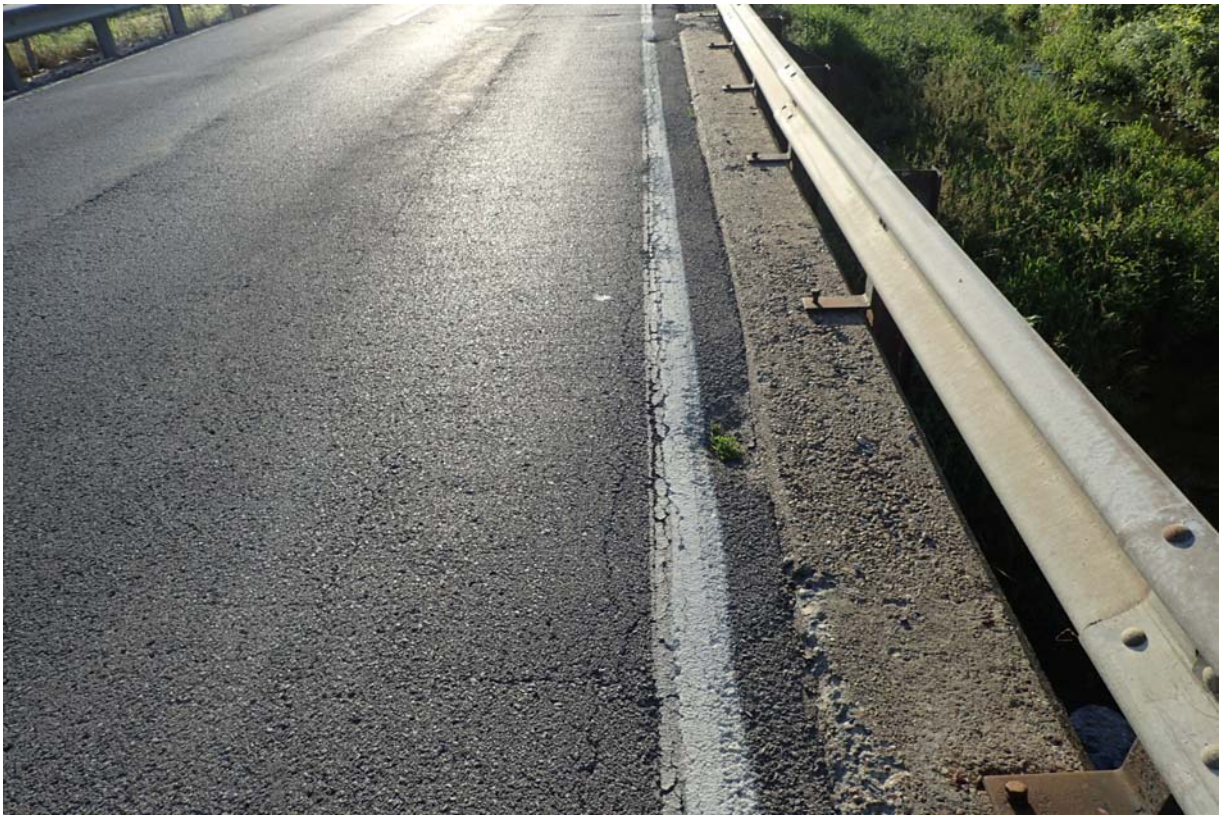
WORK	
Action:	-



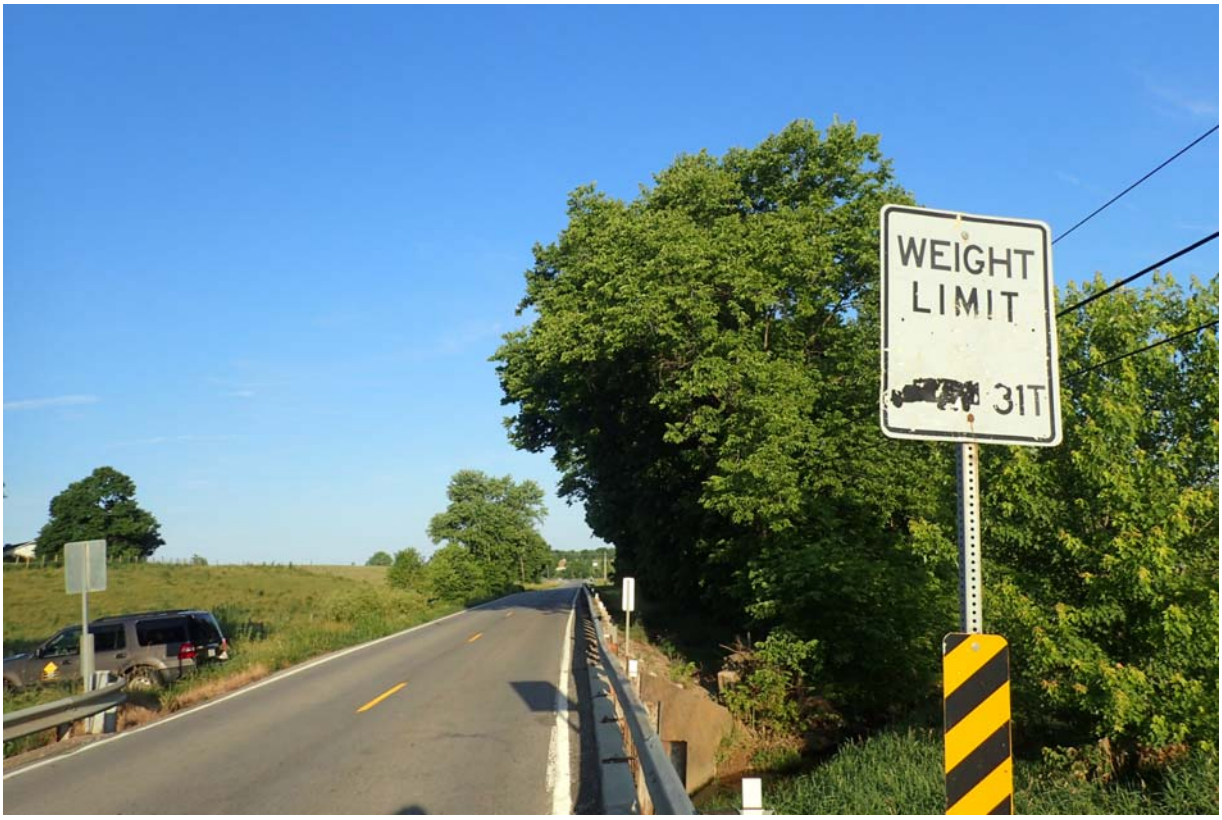
View of the posting sign near abutment 1.



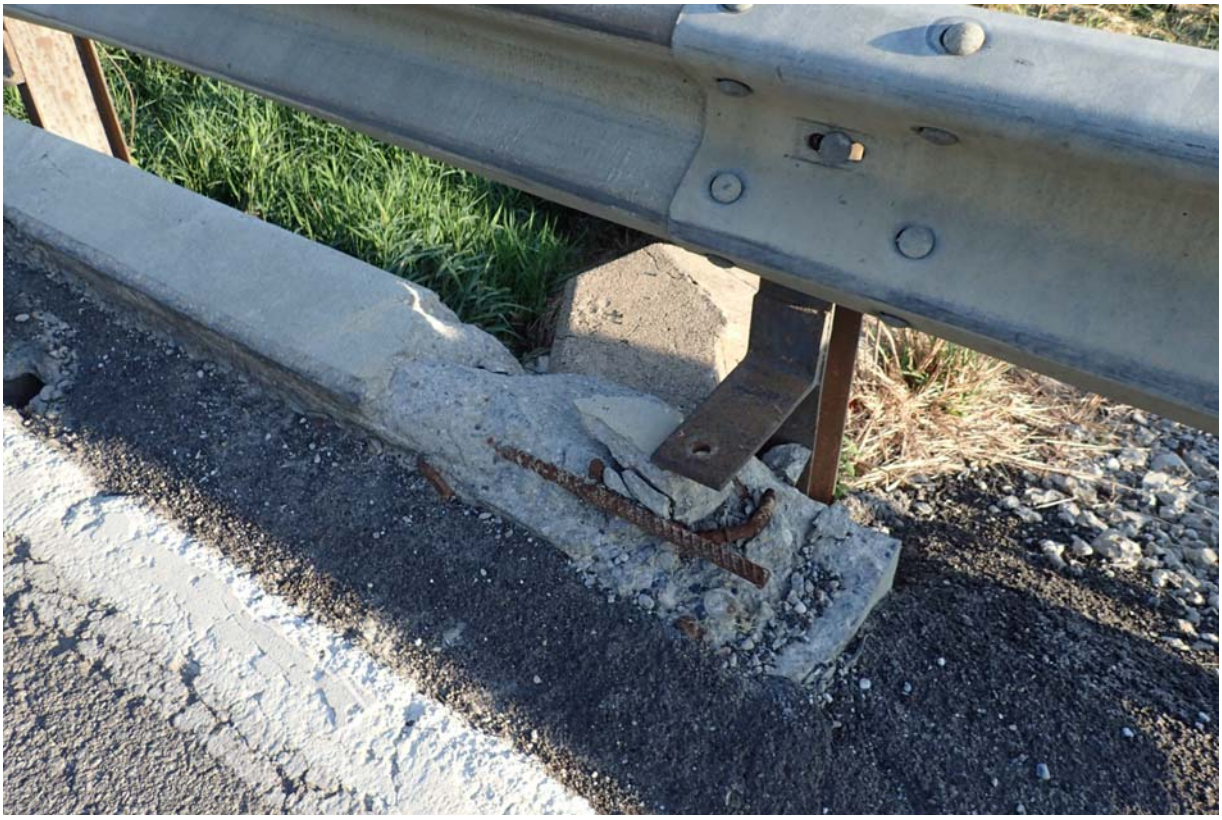
Typical view of the asphalt wearing surface.



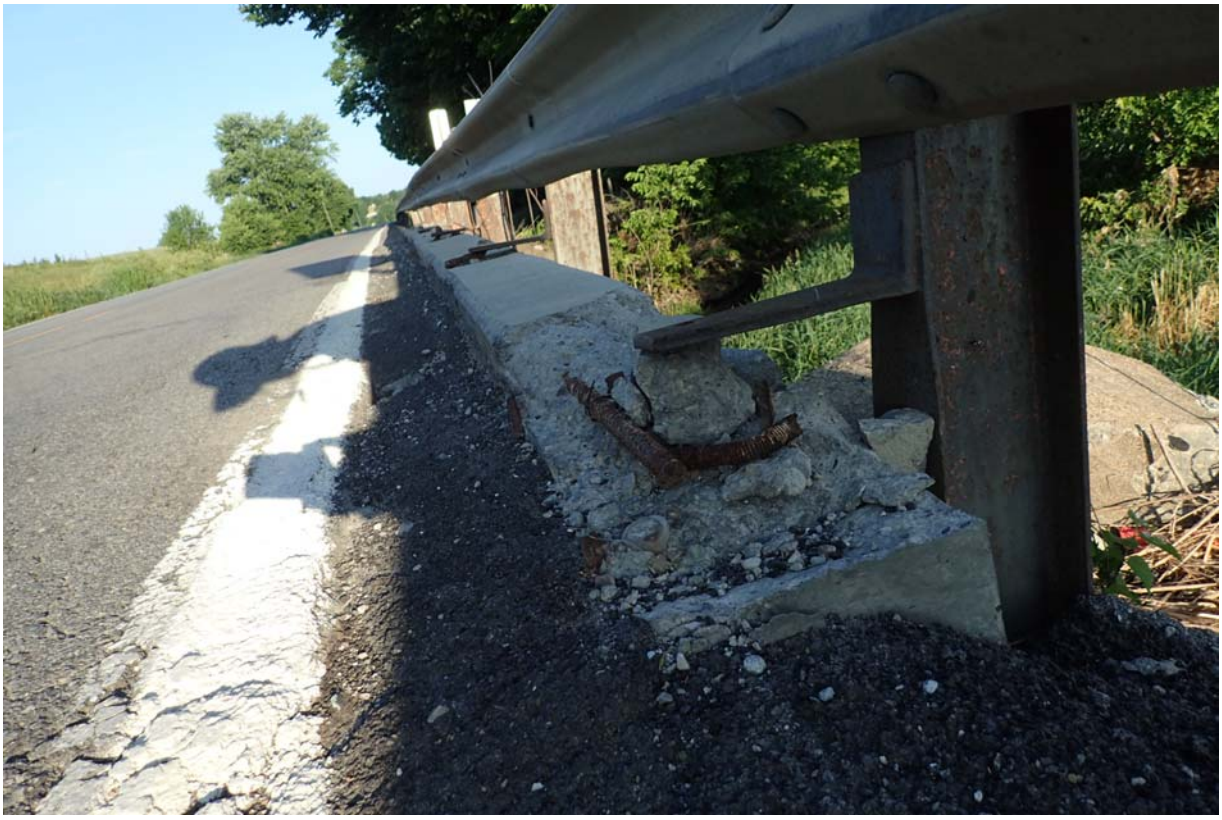
View of minor to moderate scaling/spalling along the downstream curb.



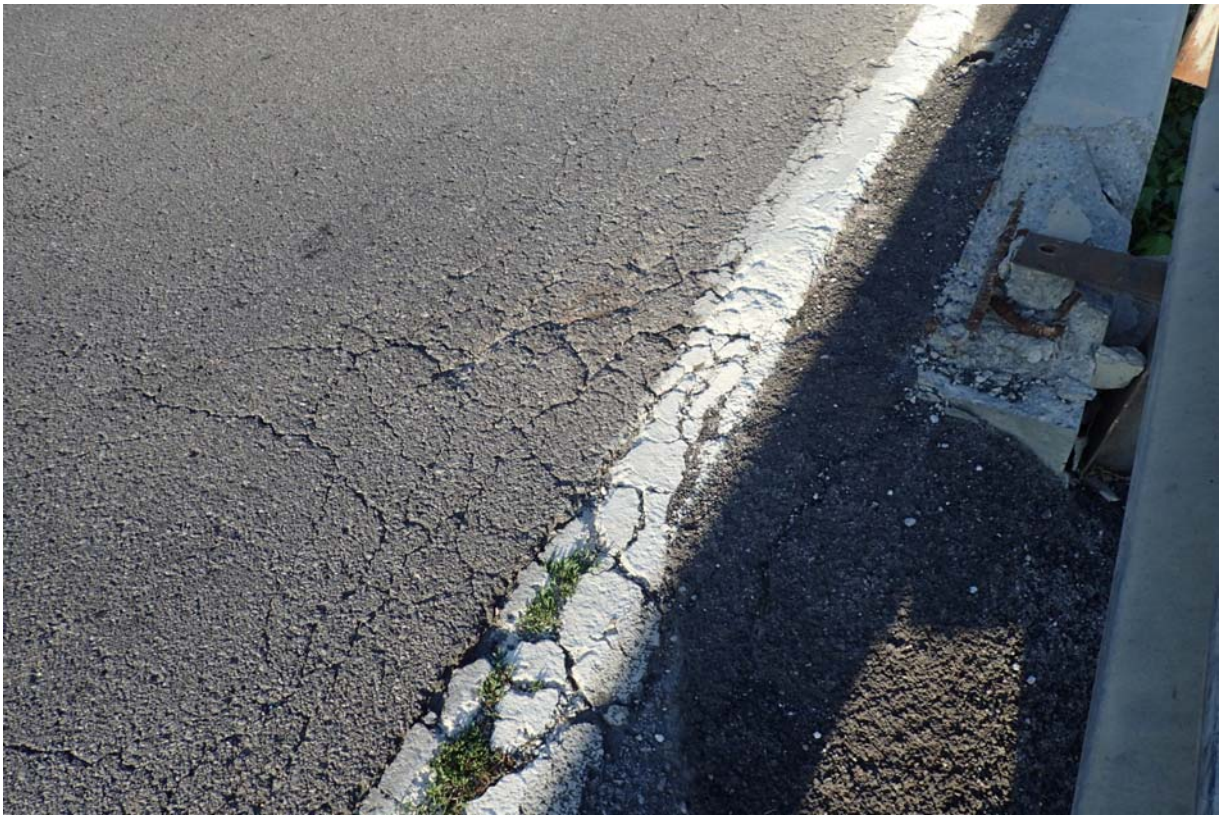
View of the weight limit posting near abutment 2.



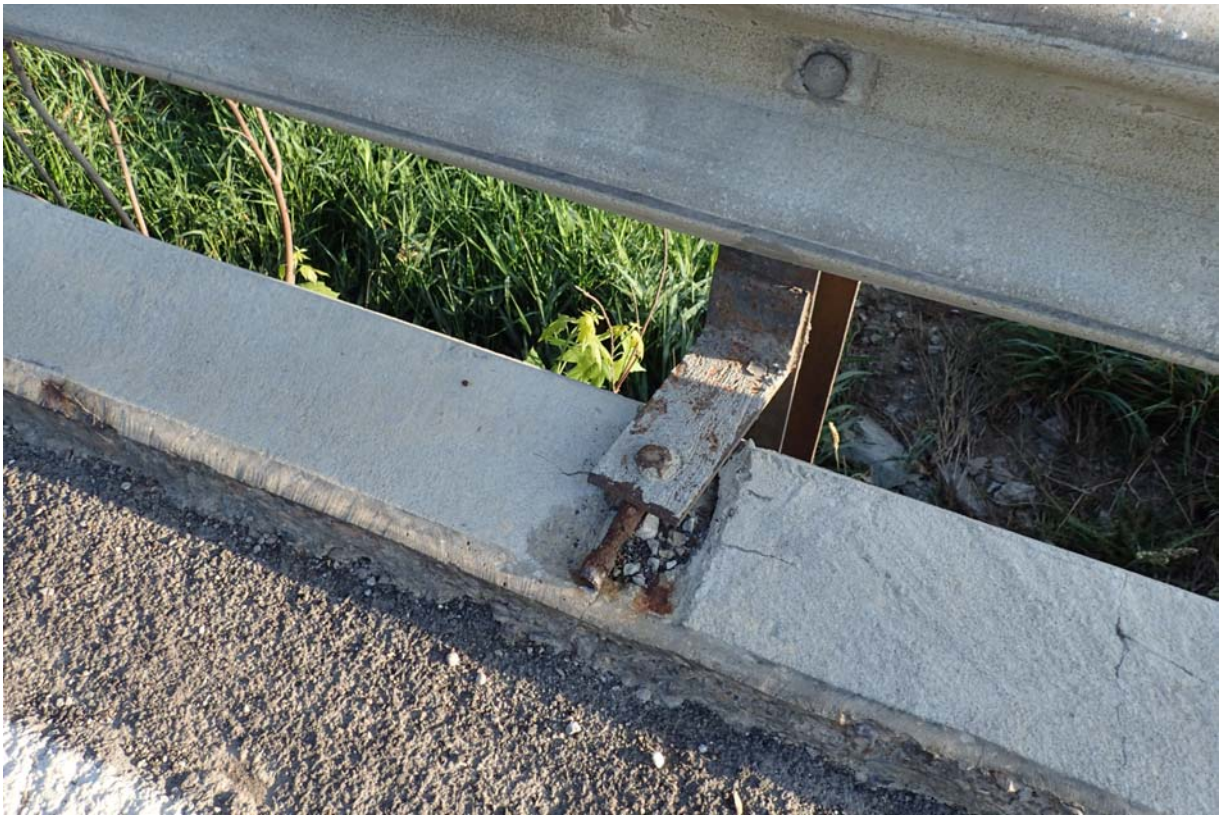
View of broken/spalled area in the downstream curb at abutment 2. Notice the guardrail post is no longer connected



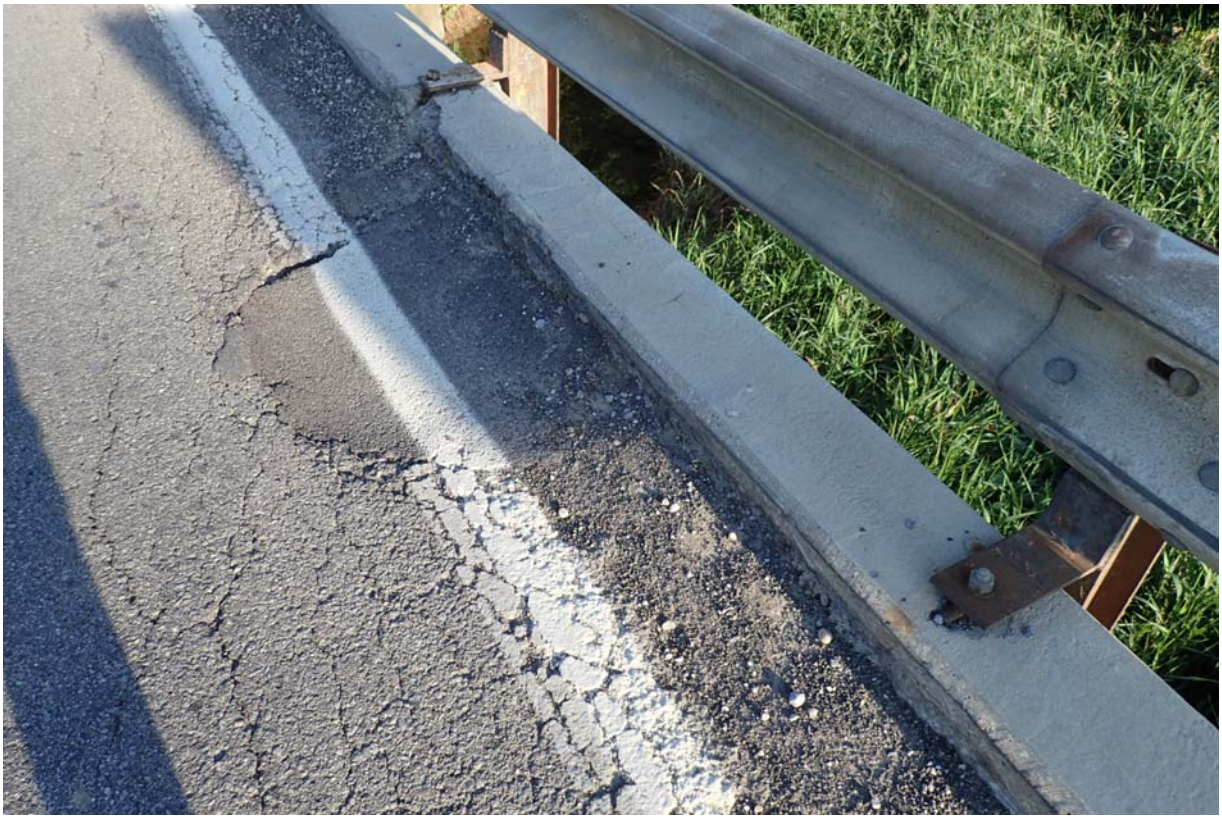
View of broken/spalled area in the downstream curb at abutment 2. Notice the guardrail post is no longer connected.



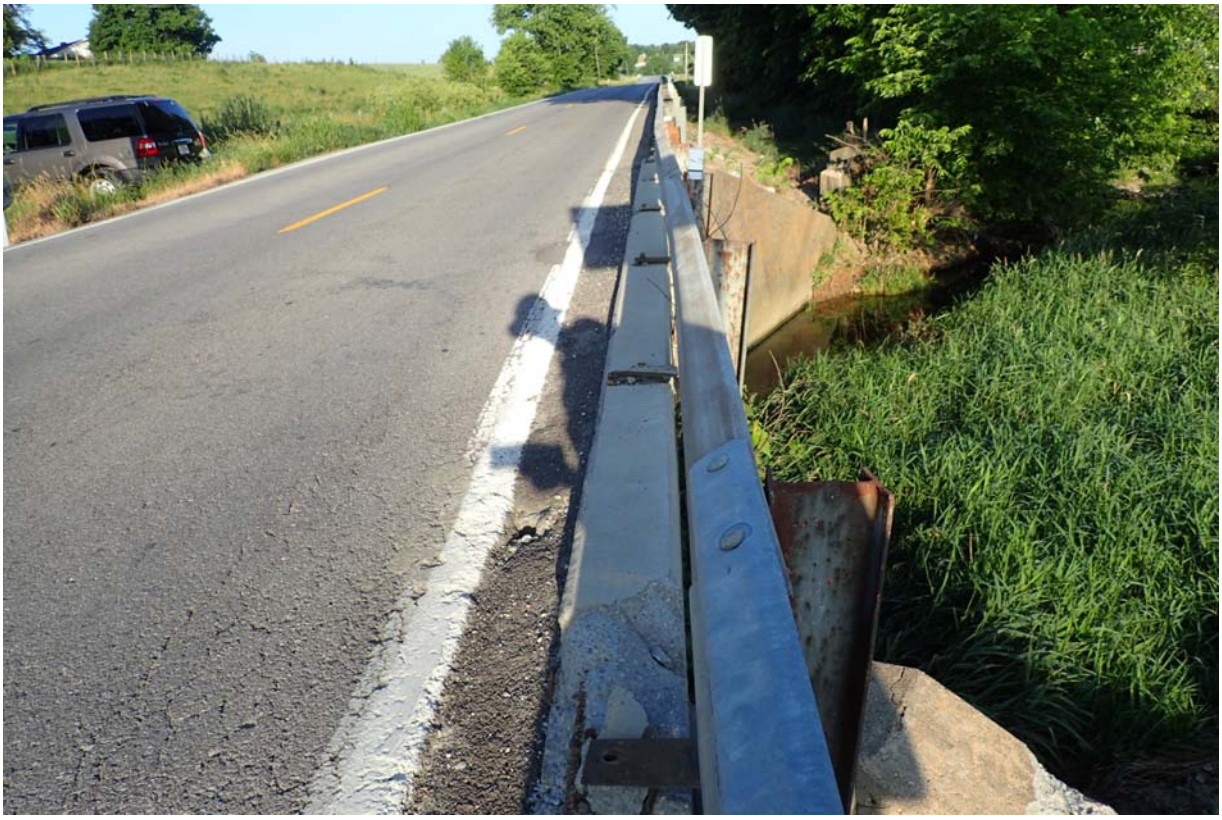
View of rutting and a heavy intensity of cracking along the downstream shoulder of the wearing surface near abutment 2.



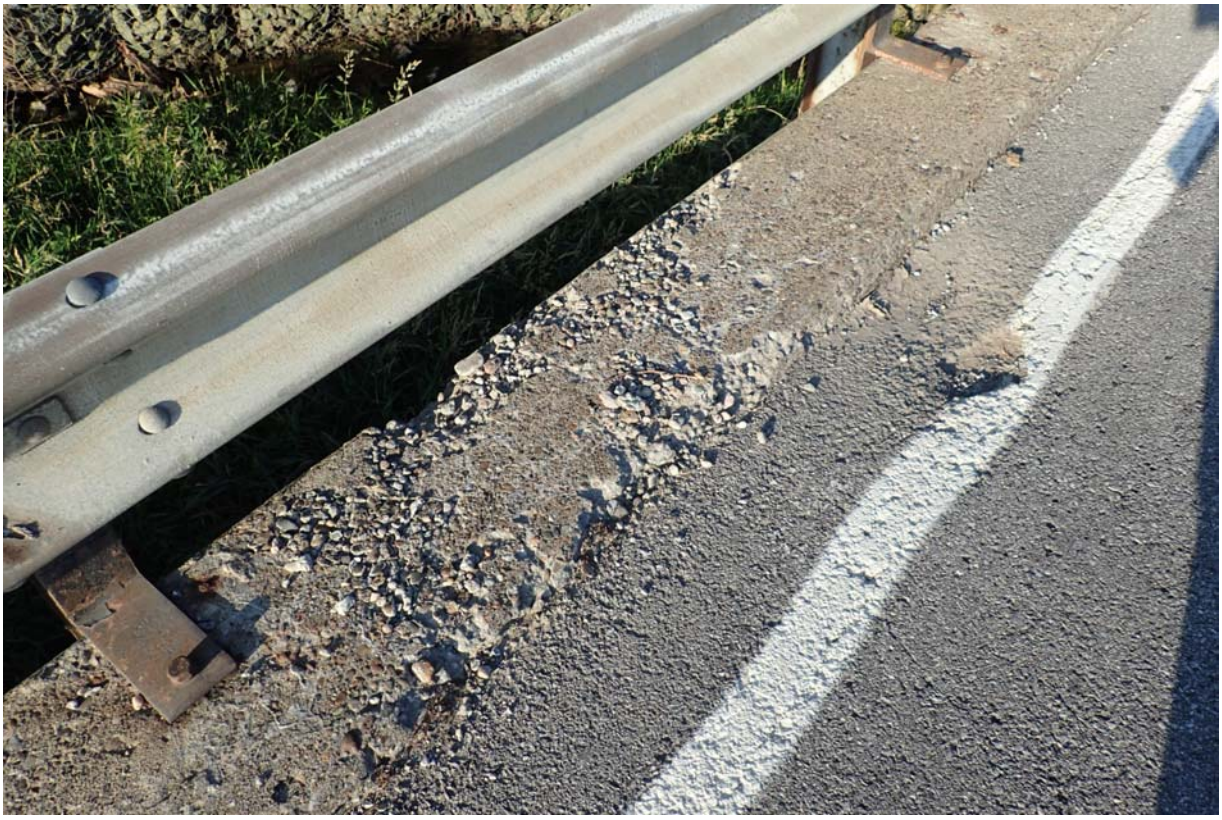
View of disconnected guardrail post 2 from the north in the downstream curb.



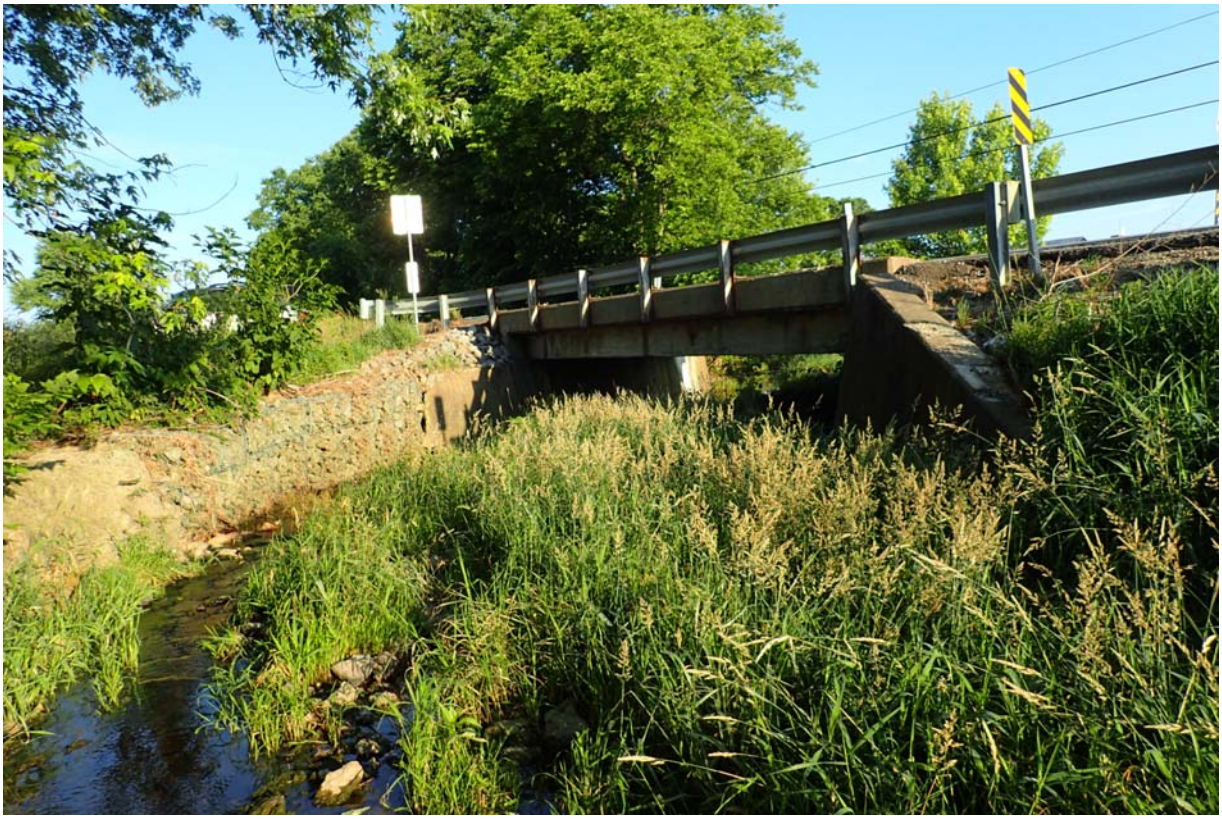
View of rutting, patching, and a heavy intensity of cracking along the downstream shoulder of the wearing surface.



View of the downstream guardrail pushed out from the bridge.

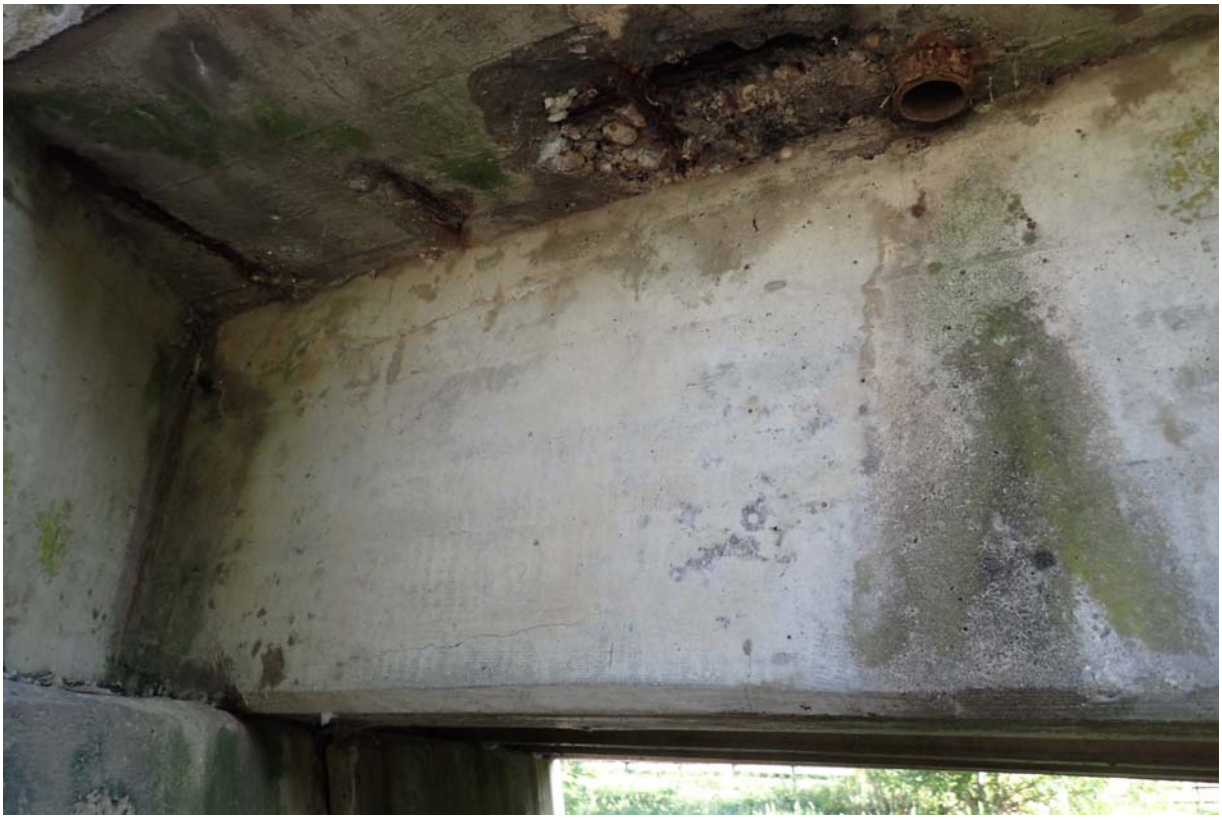


View of moderate spalling in the upstream curb near abutment 2.

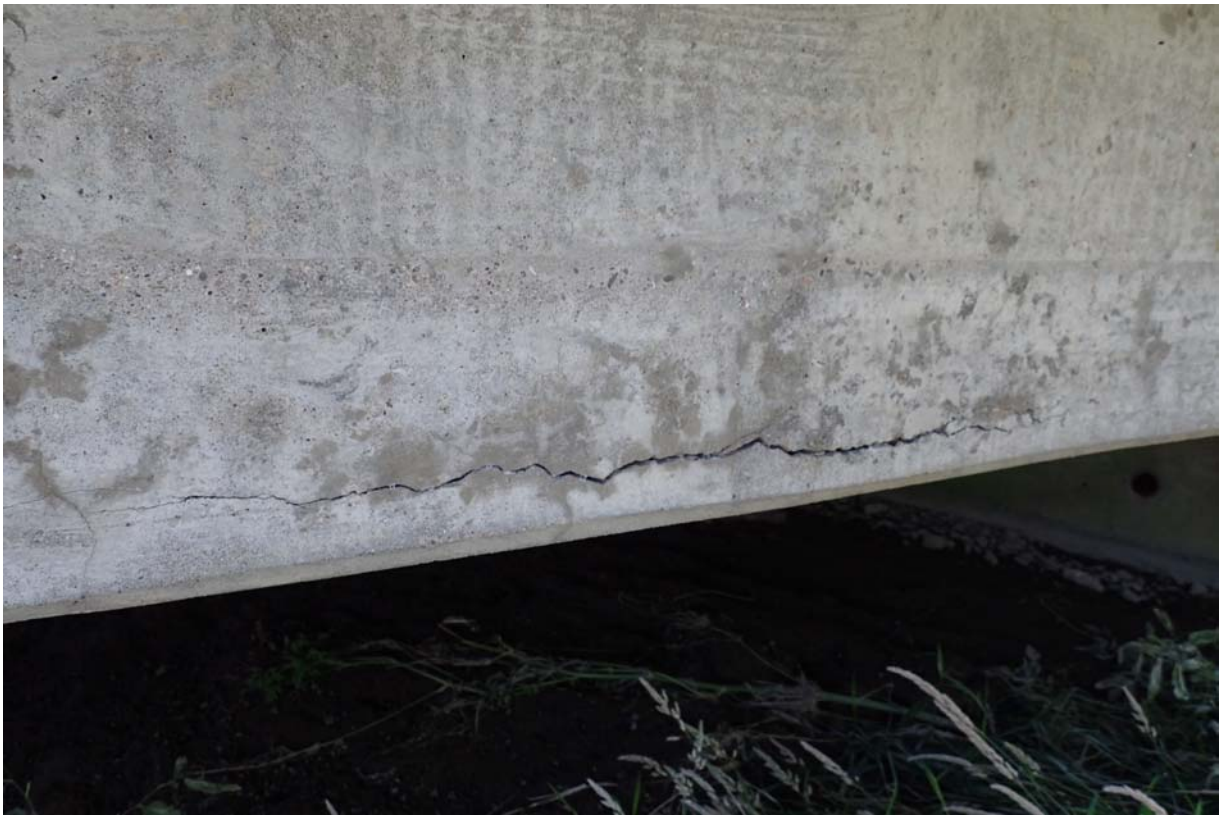


Typical view from upstream.

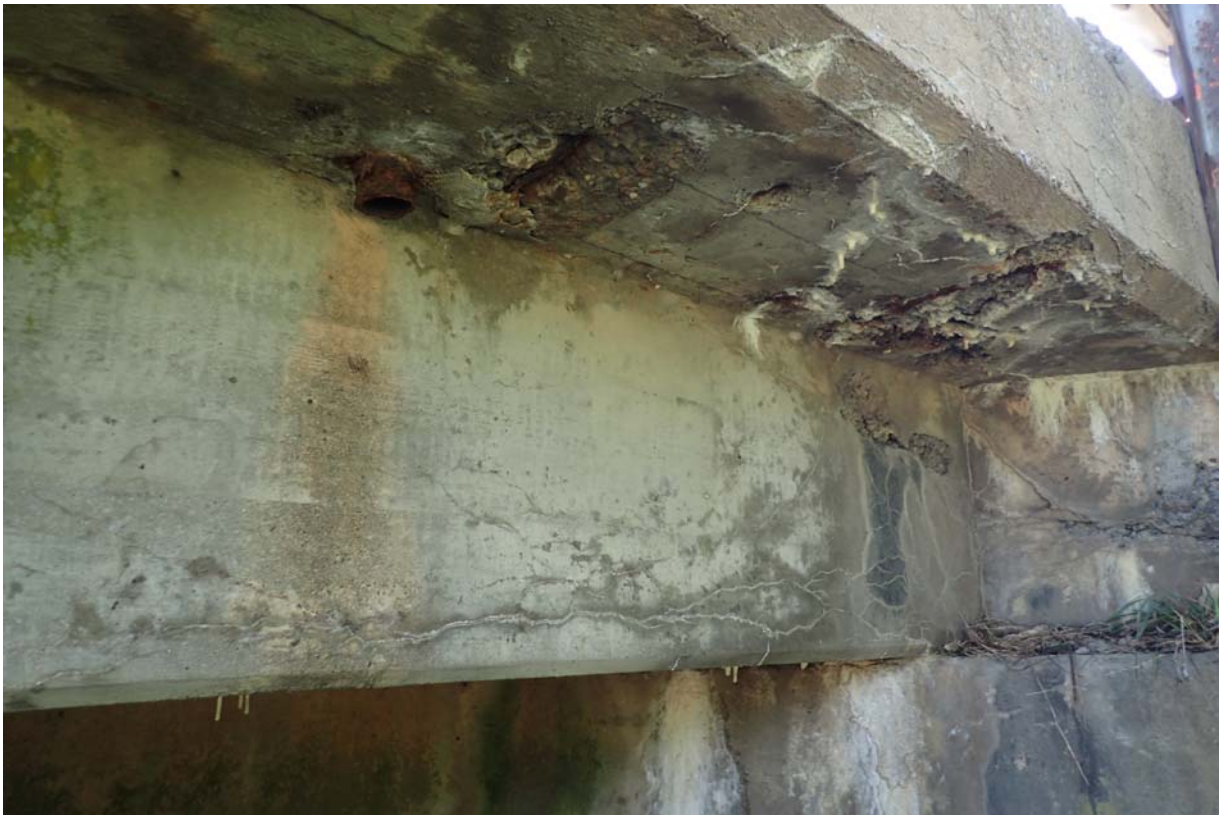
View of moderate spalling and minor sized cracking at the upstream end of abutment 1s wingwall.



View of minor sized cracking in the upstream beam at abutment 1. Notice the moderate spalling with exposed steel in the deck overhang.

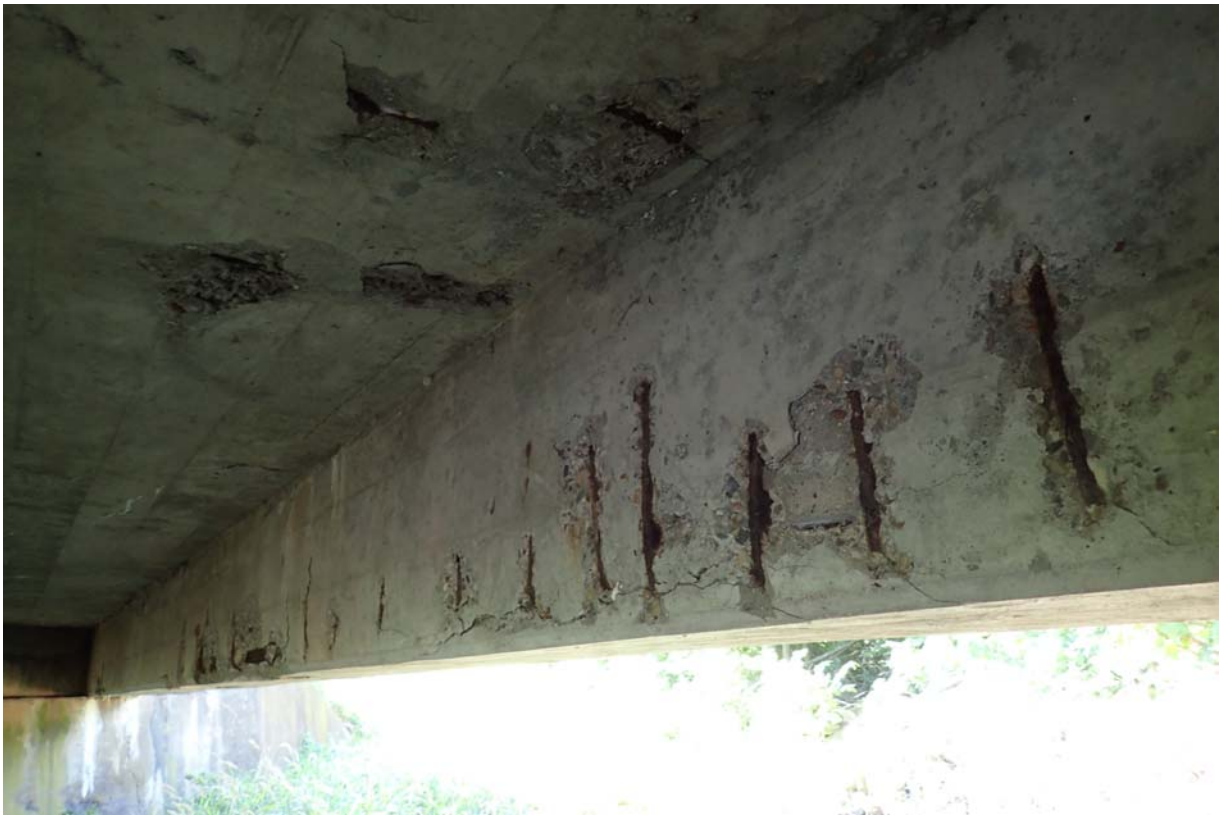


Moderate longitudinal cracking the lower exterior face of the upstream beam near midspan.

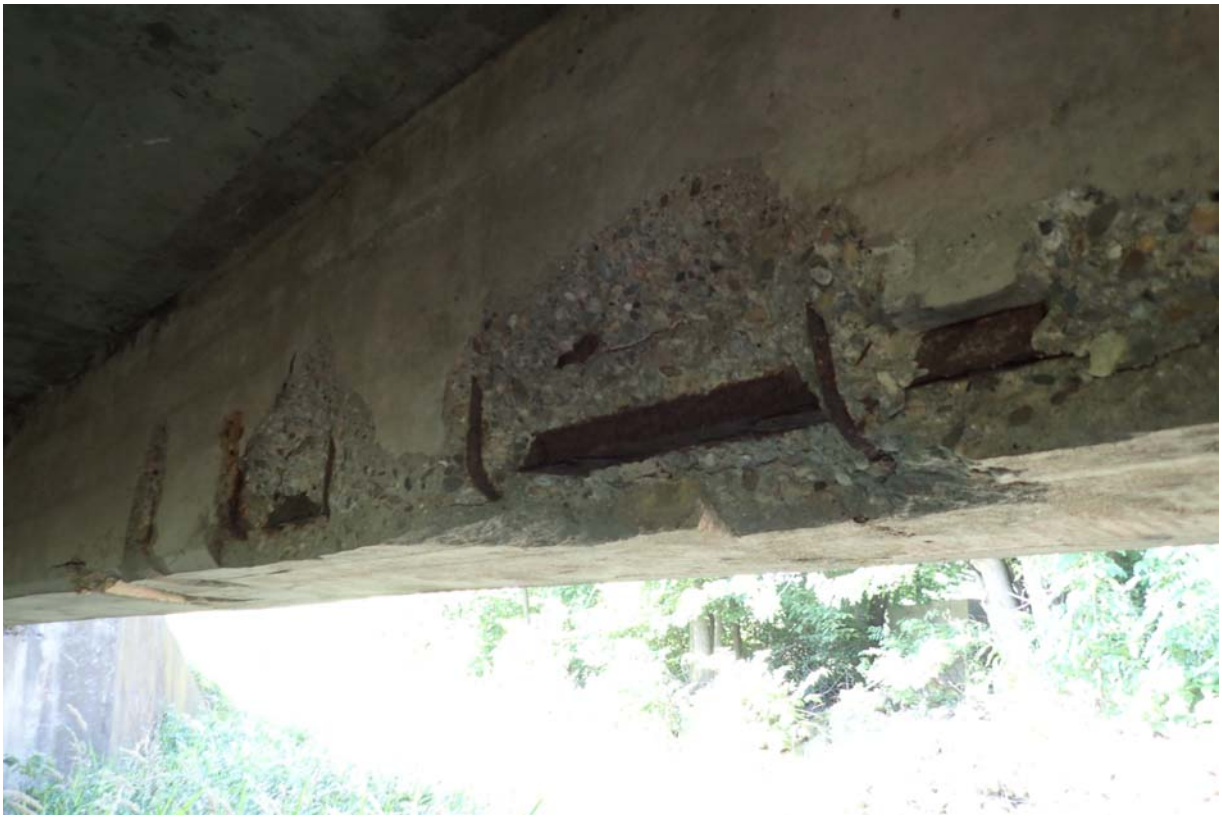


View of minor sized heavy intensity of cracking in the exterior face of the upstream beam and diaphragm at abutment 2. Notice the moderate to heavy spalling in the upstream deck overhang.

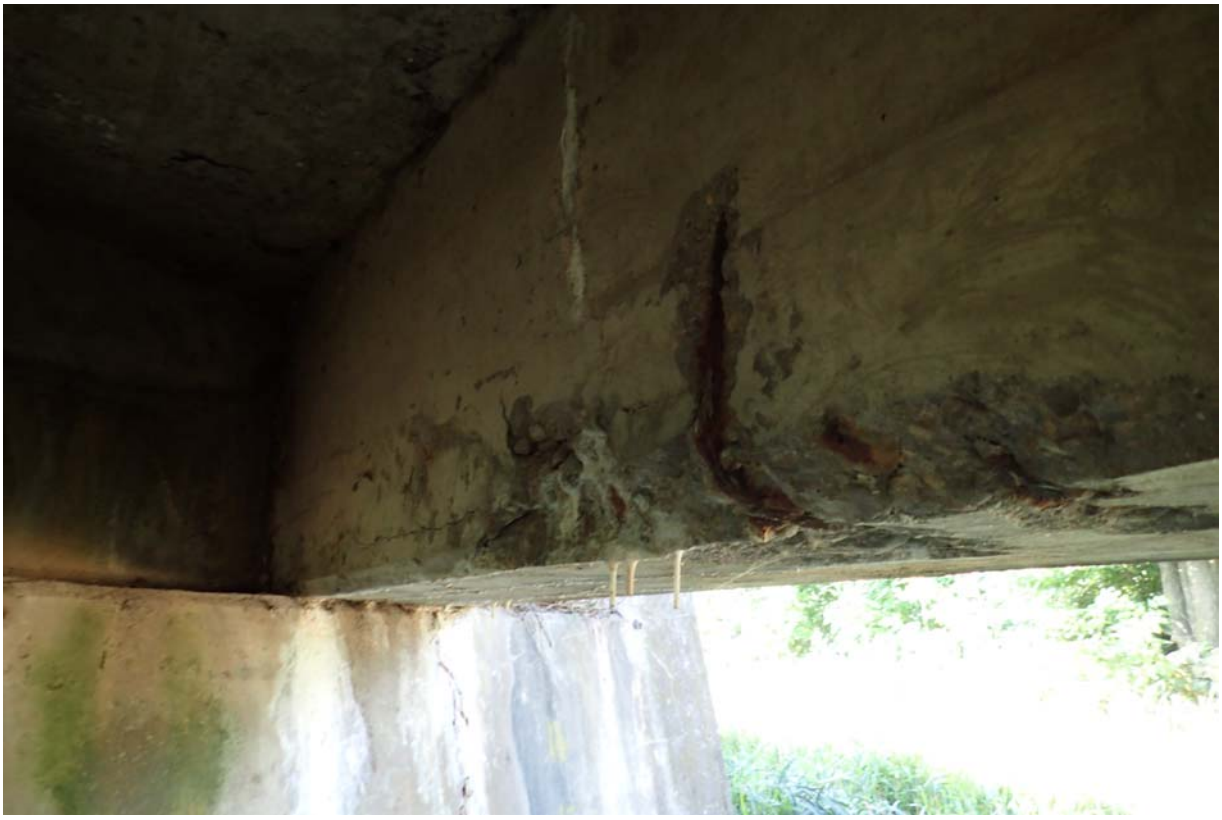
View of a 3/16" wide vertical crack in abutment 2 below the upstream beam.



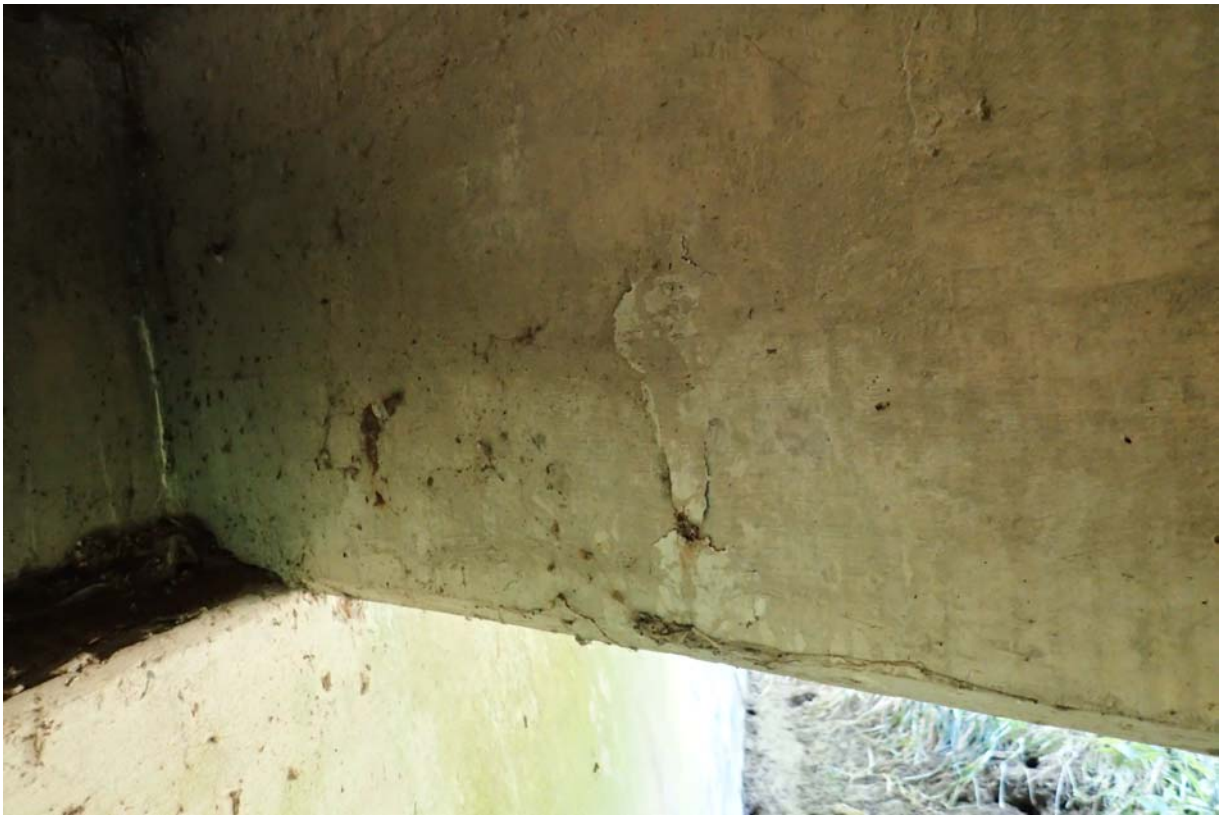
View of several small to medium sized spalls along the interior face of the upstream beam.



View of heavy spalling with exposed steel in the interior face of the upstream beam near midspan. Notice the exposed longitudinal reinforcement.

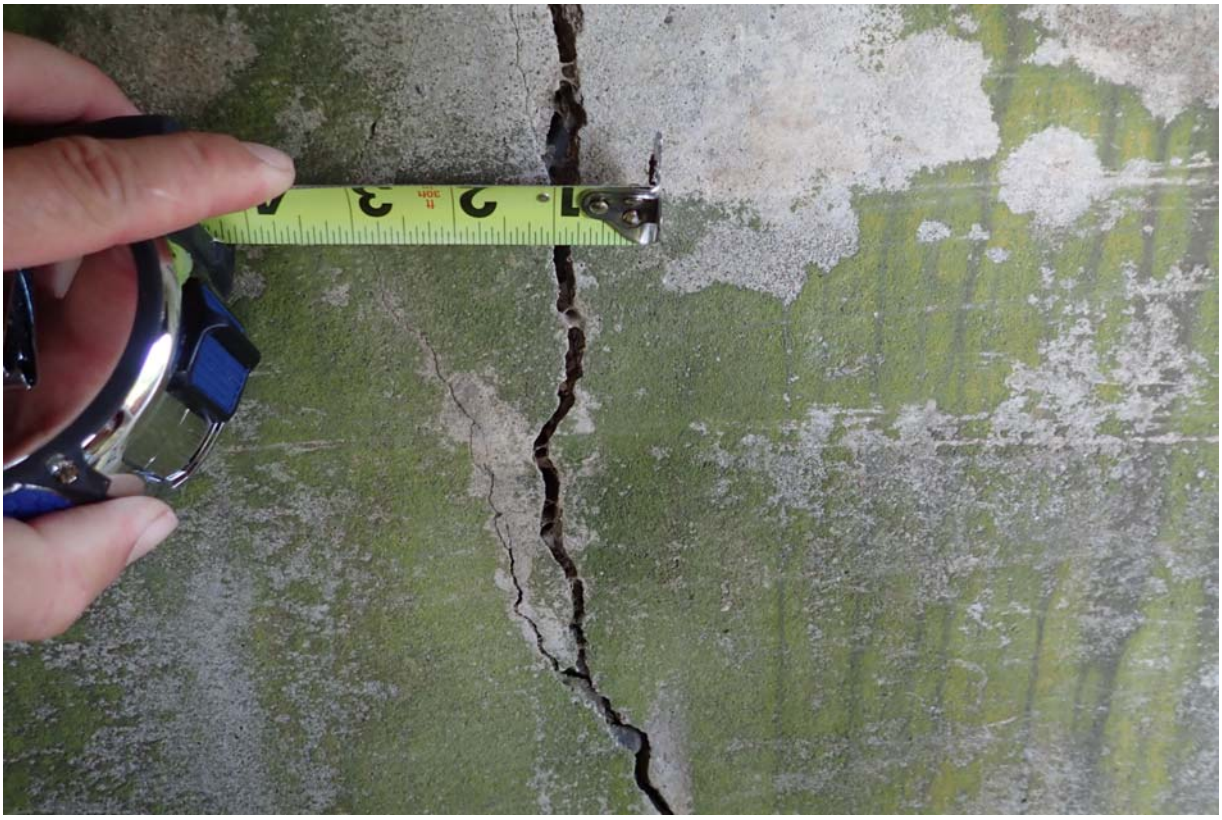


View of moderate cracking and spalling with exposed steel in the interior face of the upstream beam near abutment 2.

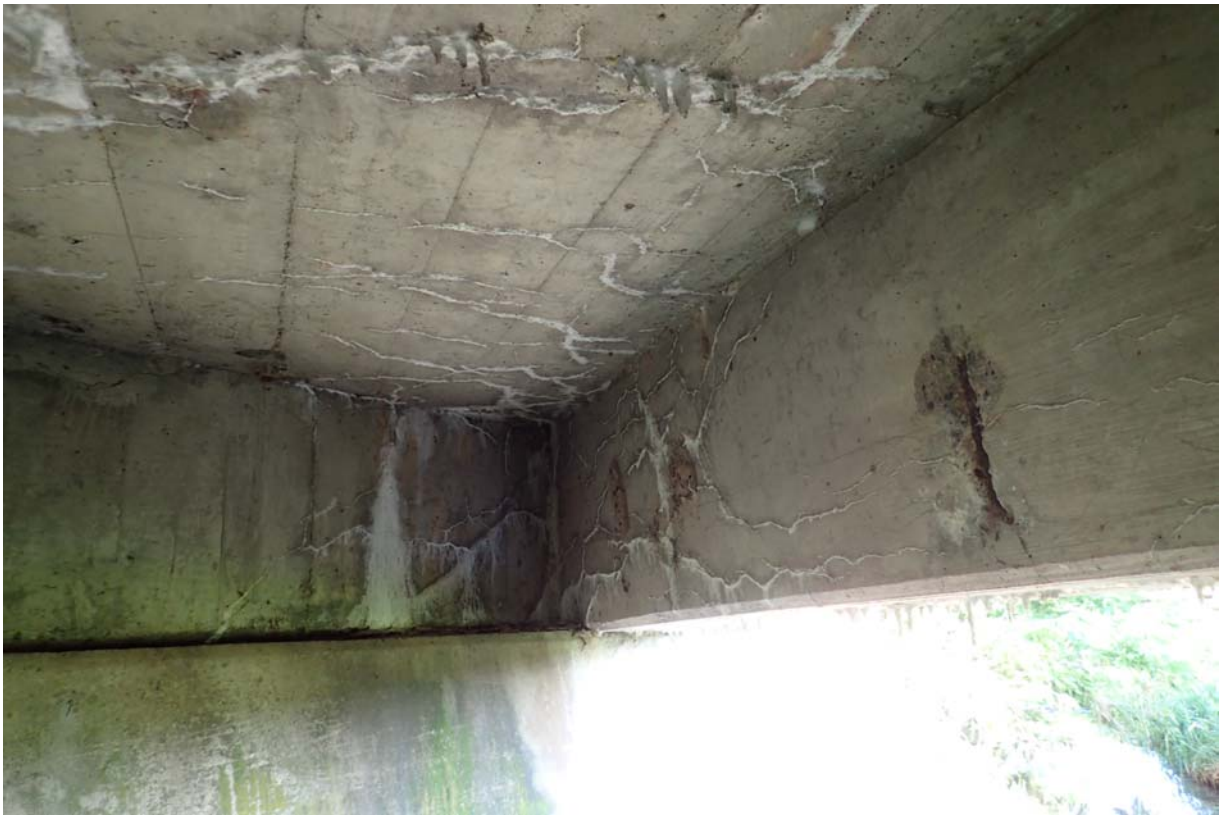


View of minor delamination cracking in the downstream face of beam 2 from upstream near abutment 2.

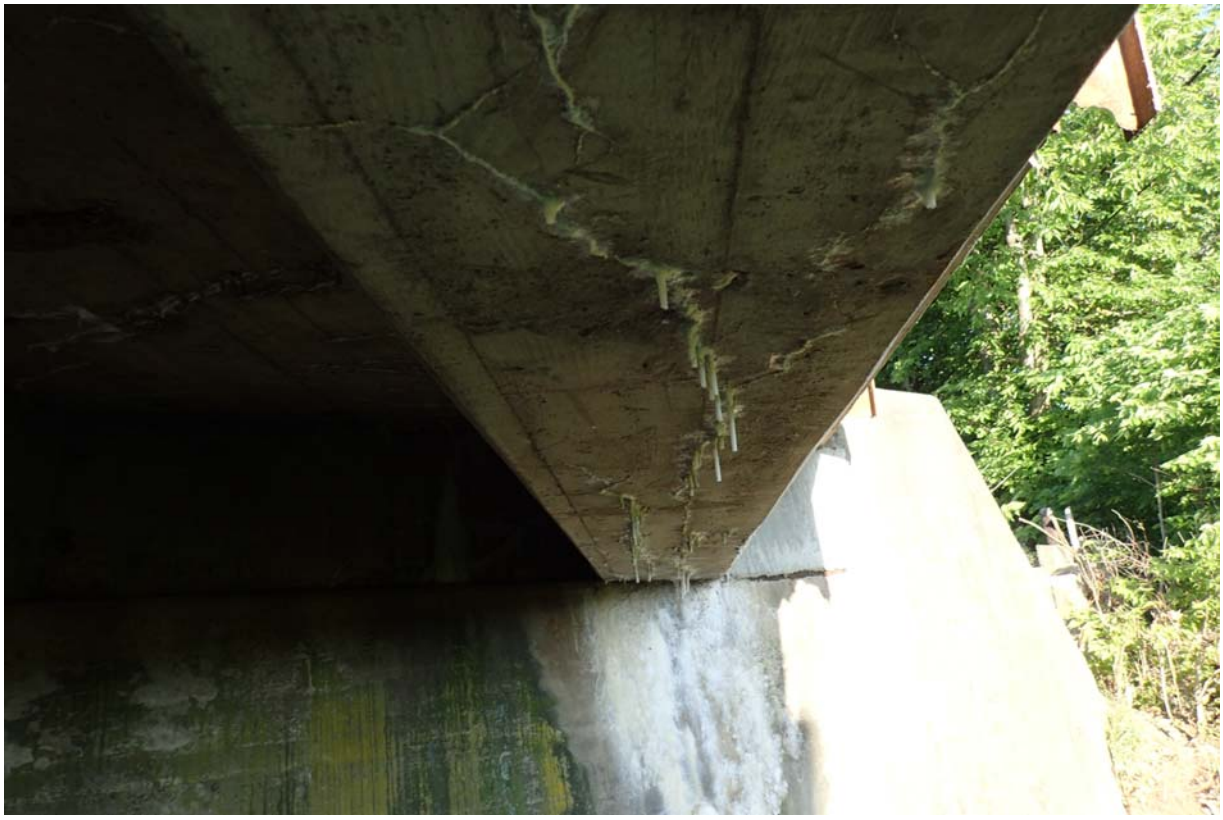
View of a 3/16" wide (typically) crack in abutment 1 below beam 3 from upstream.



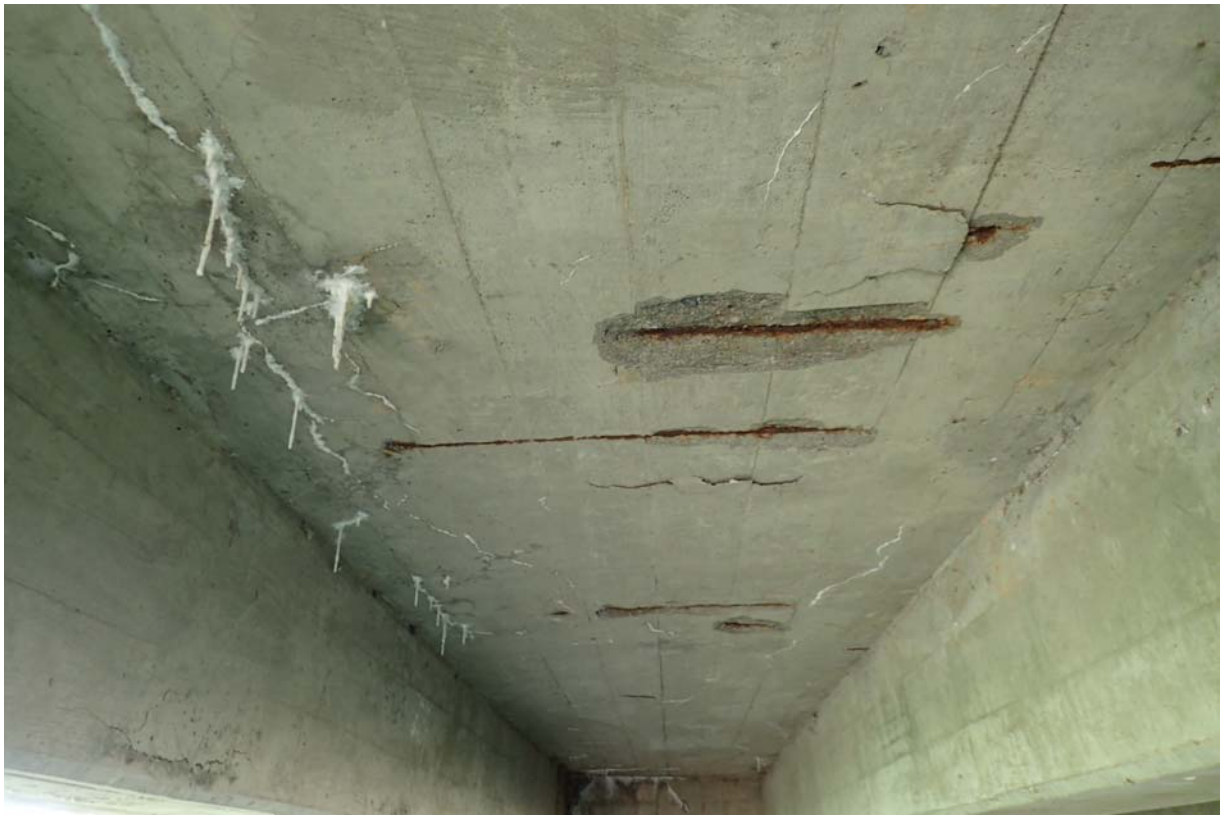
View of a 3/16" wide (typically) crack in abutment 1 below beam 3 from upstream.



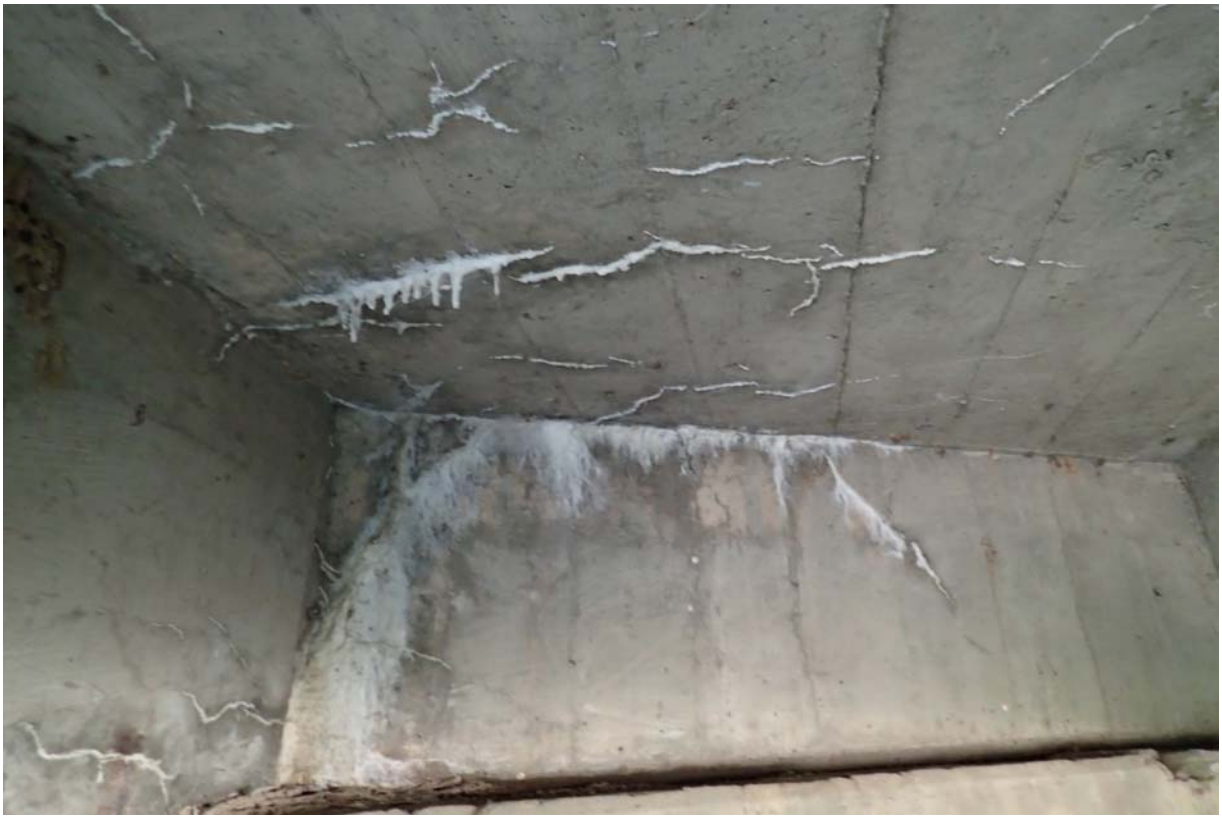
View of a heavy intensity of minor sized cracking with efflorescence in the deck, downstream beam, and diaphragm at/near abutment 1.



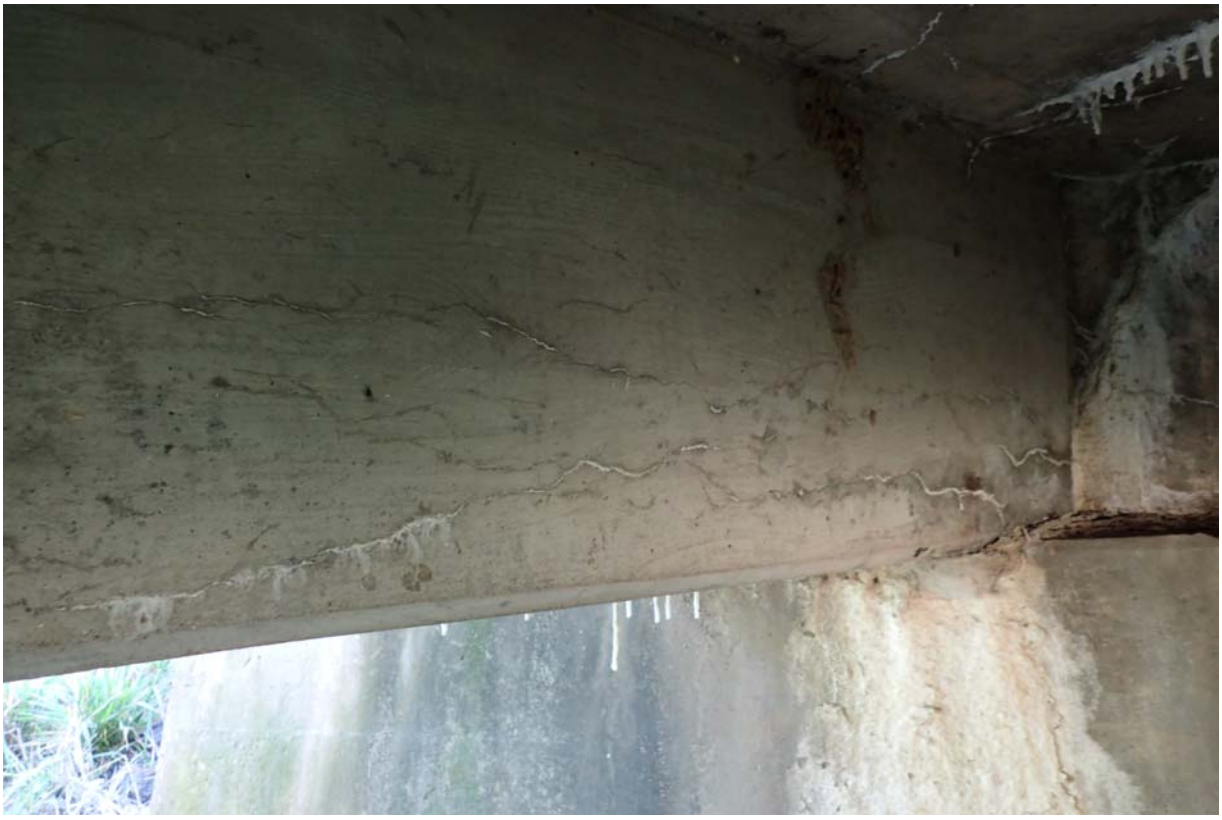
View of cracking with efflorescence in the underside of the downstream beam near abutment 1.



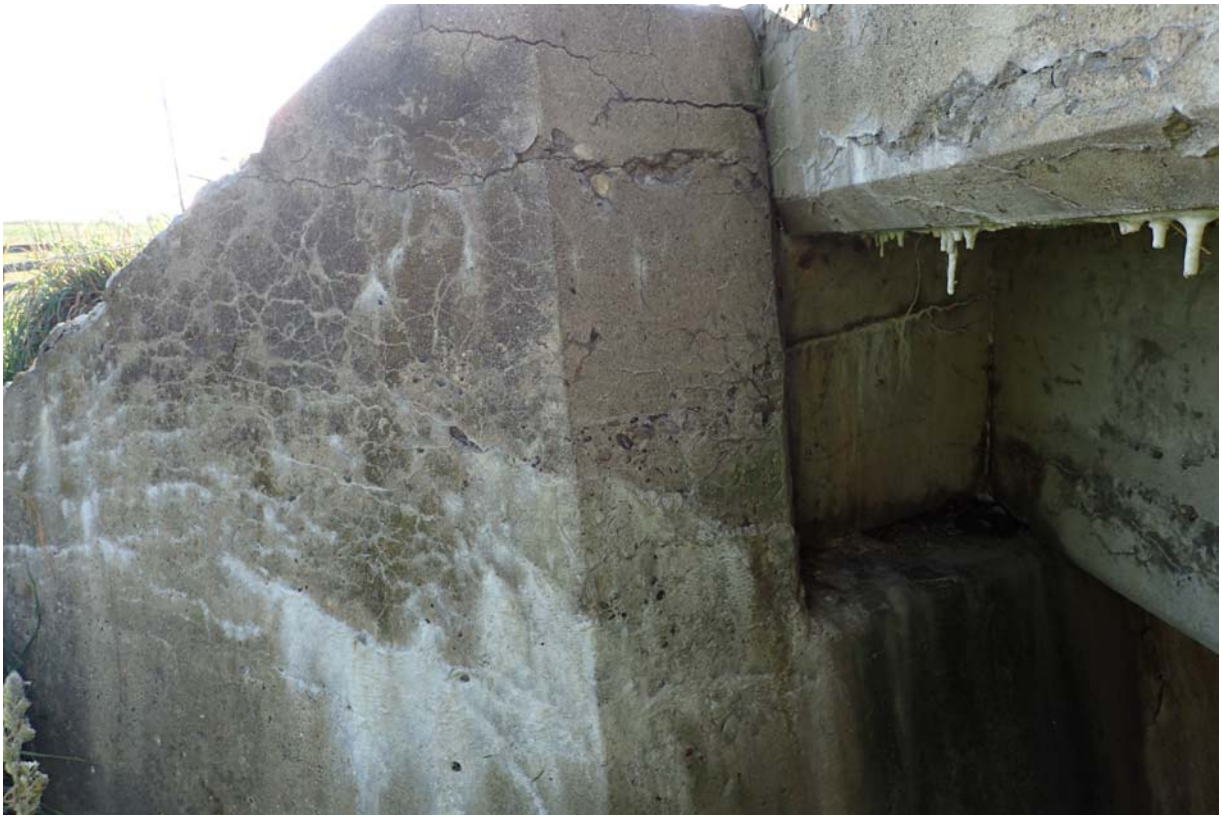
View of scattered cracking with efflorescence and spalling with exposed steel in the deck underside between beams 3 and 4 from upstream.



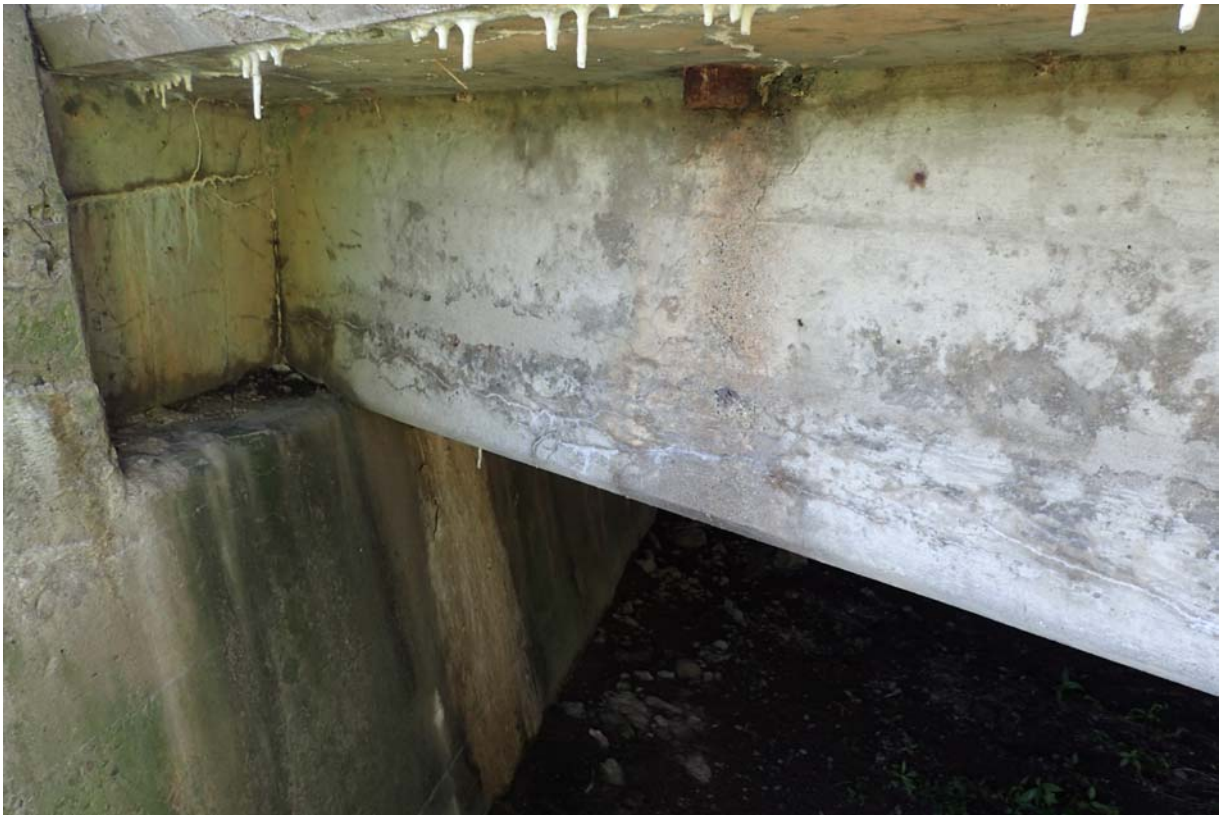
View of moderate to heavy intensity of minor sized cracking with efflorescence in the deck underside and diaphragm between beams 3 and 4 from upstream at abutment 2.



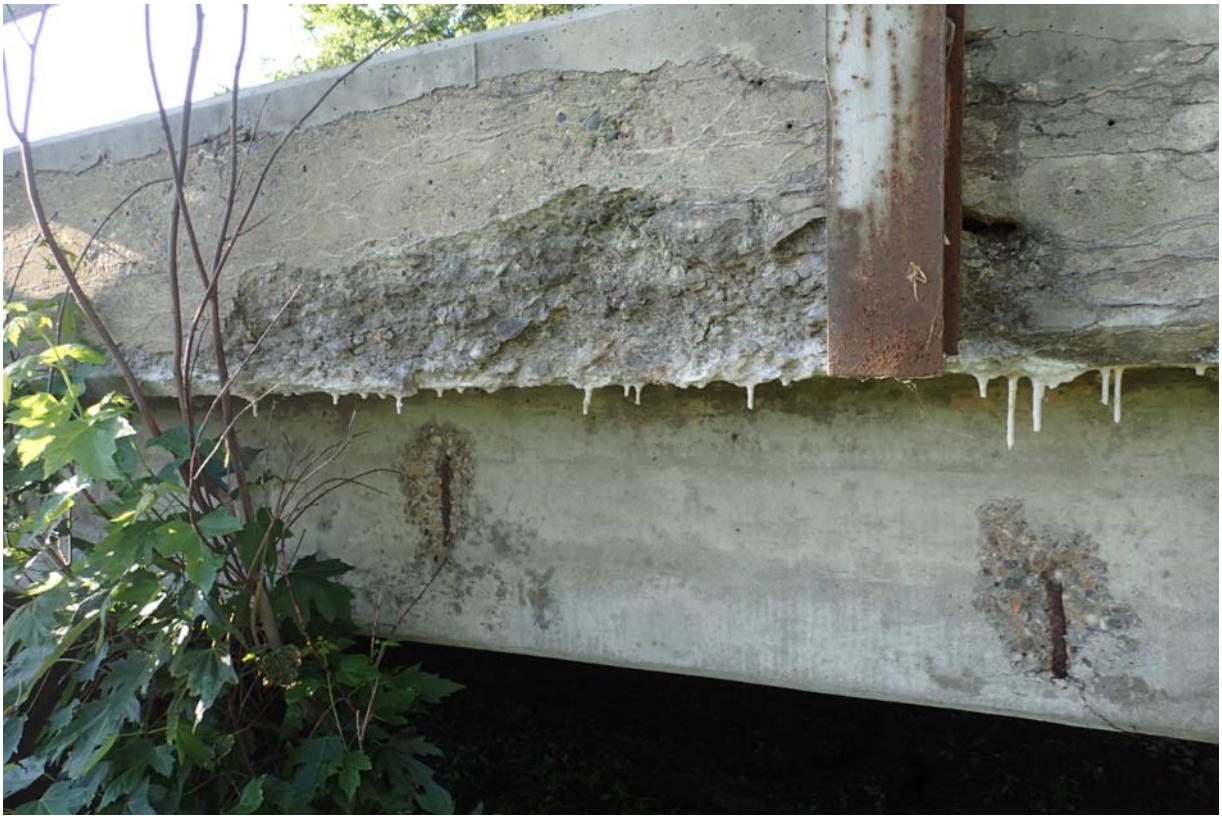
View of minor sized cracking of moderate intensity in the interior face of the downstream beam near abutment 2.



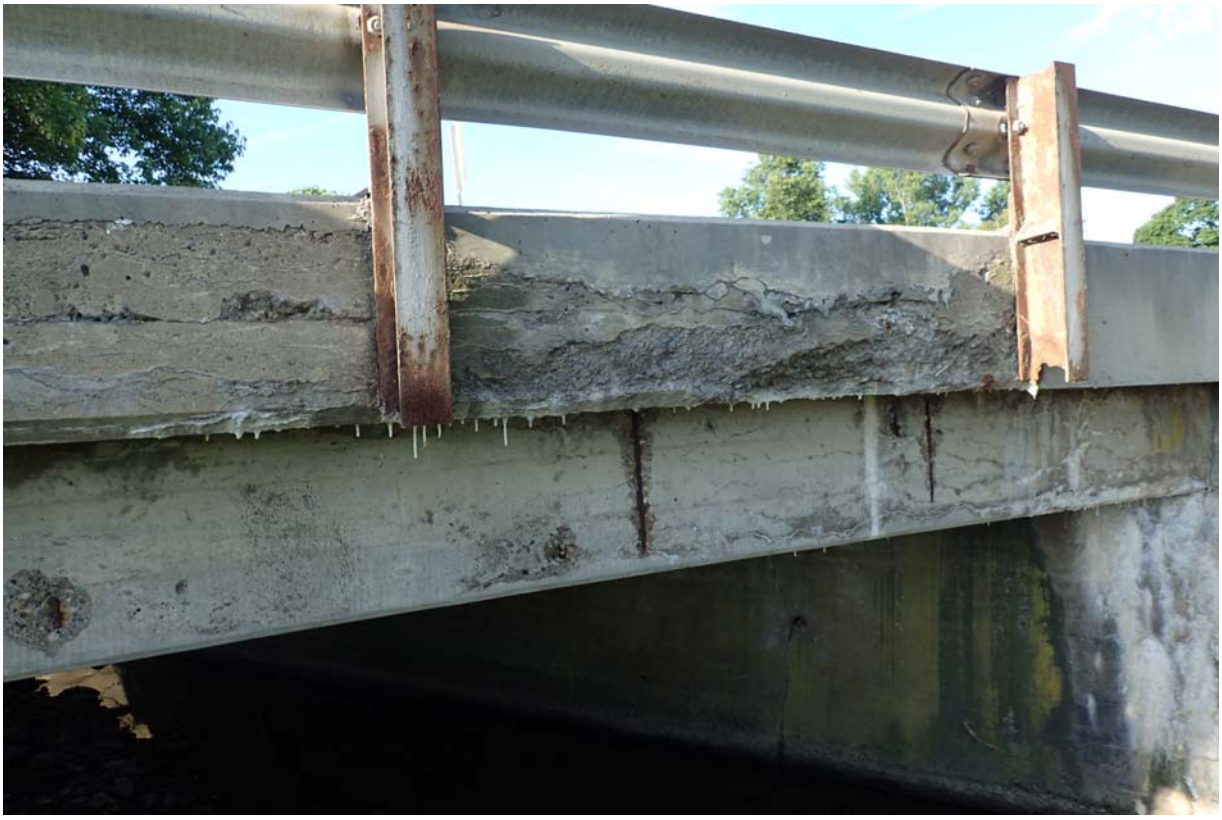
View of minor to moderate sized cracking (heavy intensity) at the downstream end of abutment 2.



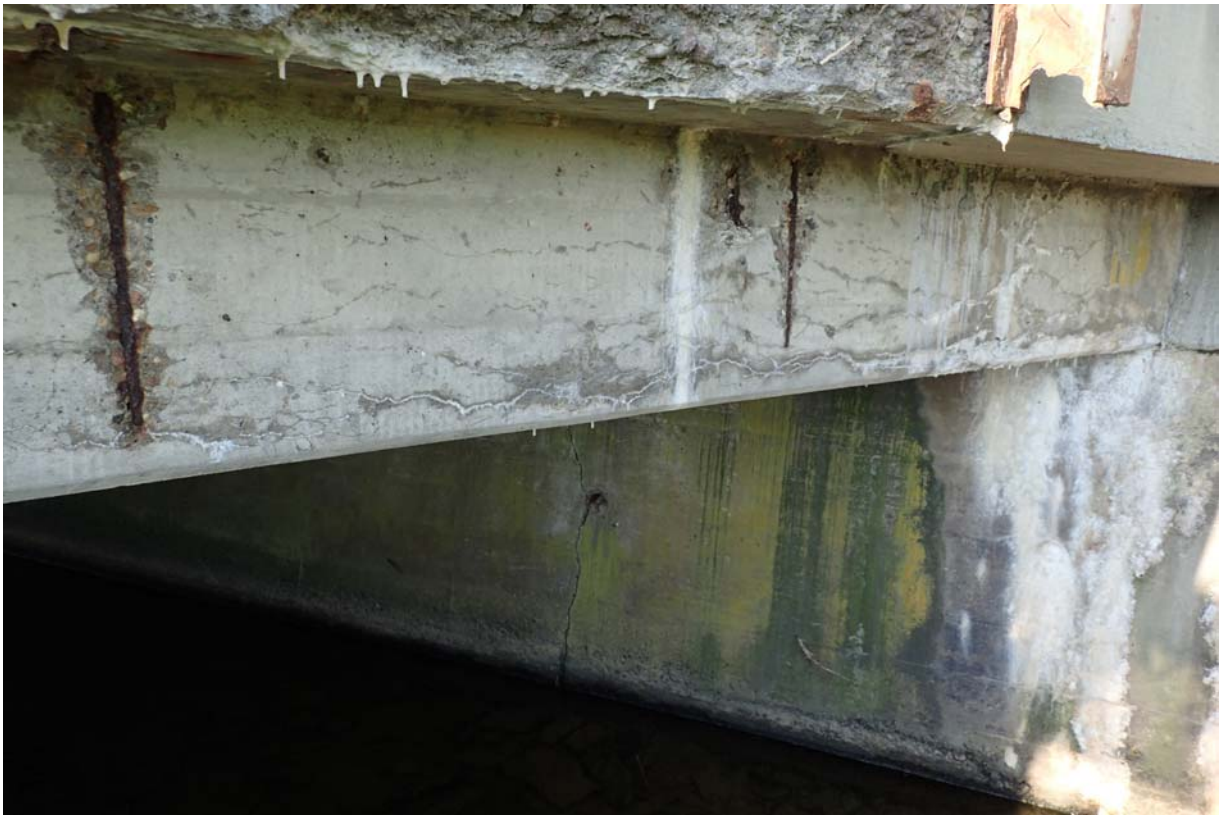
View of minor sized cracking of moderate intensity in the exterior face of the downstream beam near abutment 2.



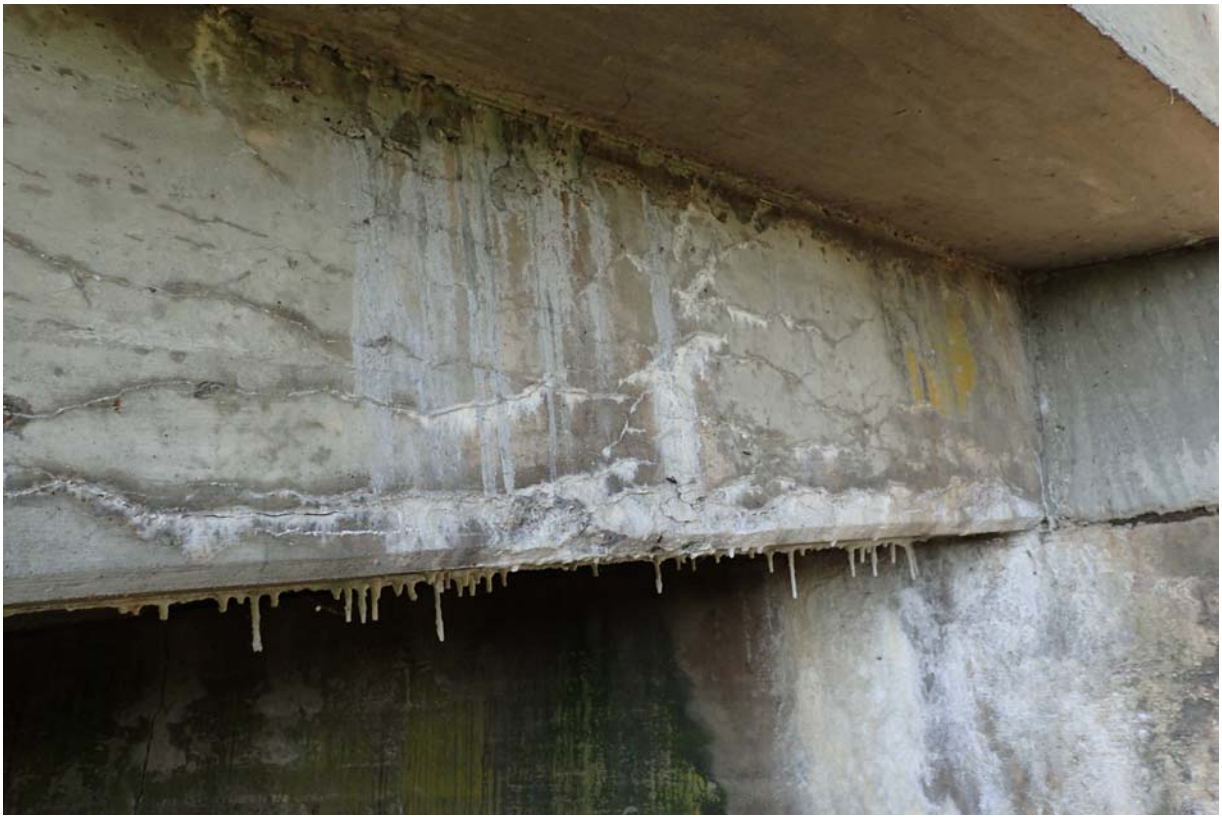
View of heavy spalling in the downstream deck overhang near guardrail post 4 from the south. Notice the moderate spalls with exposed steel in the beam.



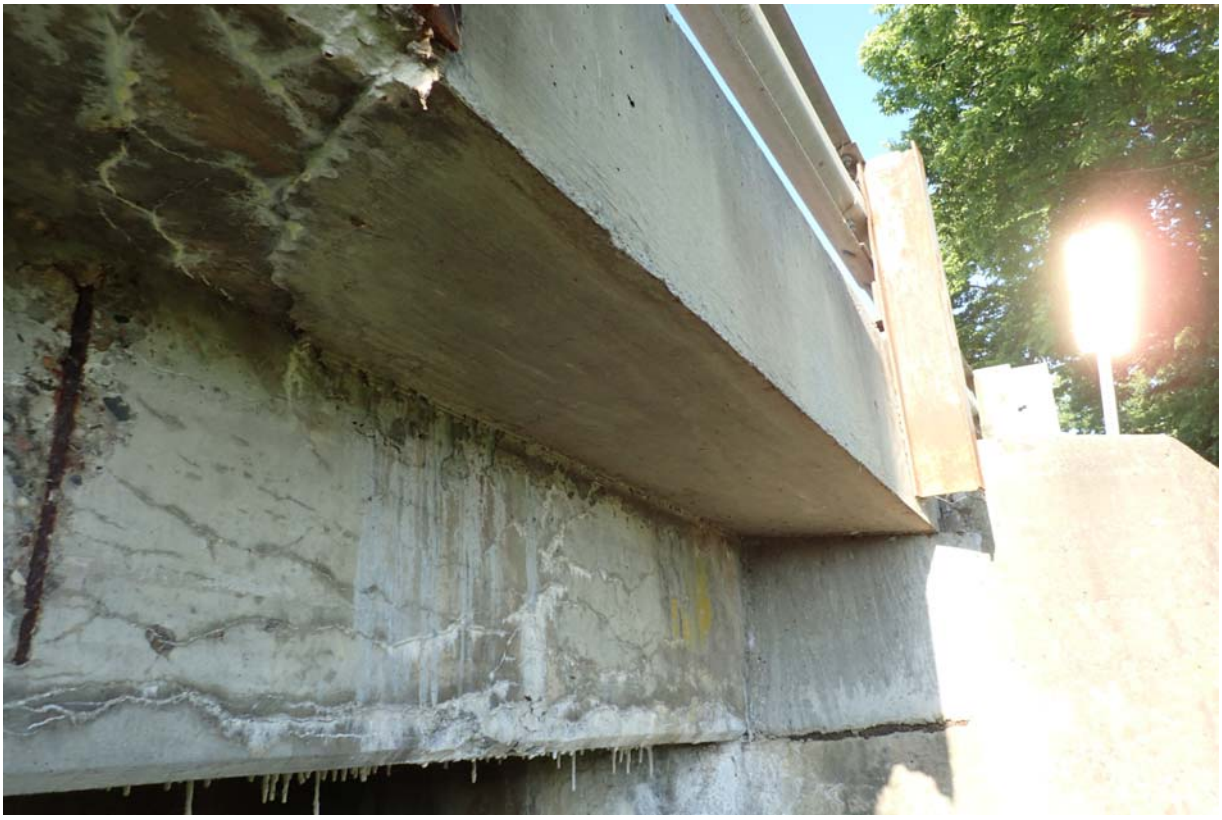
View of heavy spalling in the downstream deck overhang between guardrail posts 2 and 3 from the south. Notice the moderate spalls with exposed steel in the beam.



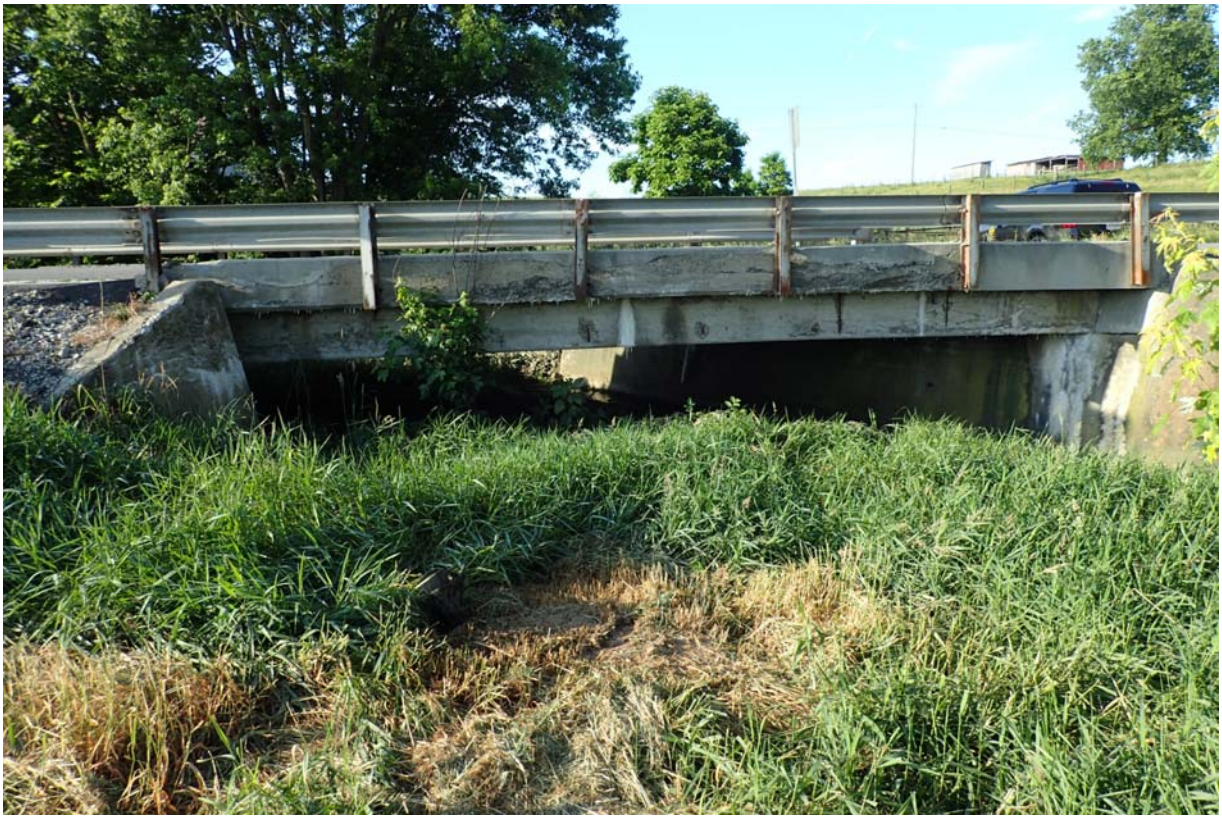
View of minor sized cracking of moderate-heavy intensity in the exterior face of the downstream beam near abutment 1. Notice the shallow spalling with exposed steel in the beam.



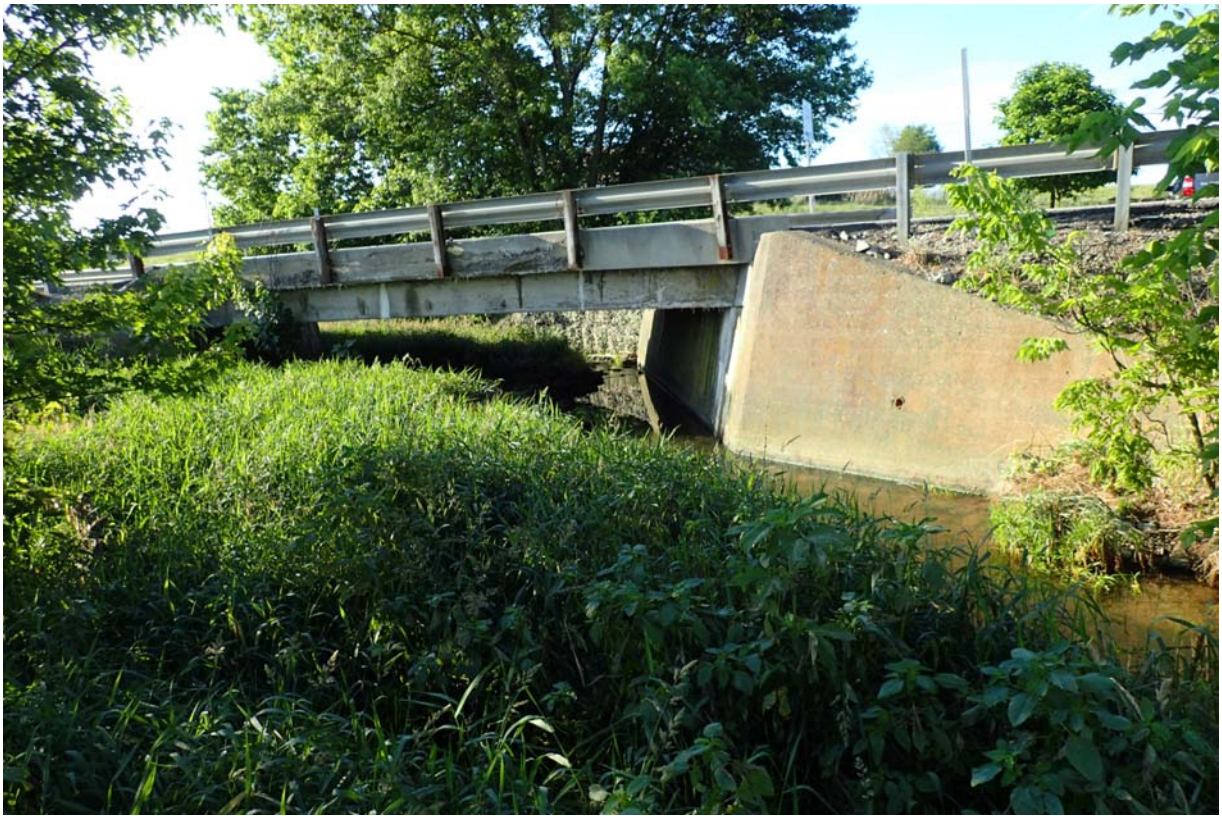
View of minor sized cracking of moderate-heavy intensity in the exterior face of the downstream beam near abutment 1.



View of a patched area in the downstream overhang near abutment 1.



View from downstream.



View from downstream. Notice that all the normal flow is along abutment 1.