90 Inspection Date - 12/19/2016
Inspector - KSHUGAR (364)

081C00009N - **8 Bridge ID**
Unknown (NBI) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

NBI	X
Element	
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	3	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(3) SC- Unstable
Recommended Scour Critical:	(5) Stable w/in footing

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	(K) Closed To All Traffic
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	3 tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	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

86.

Item 113=3 7/5/15 MS

8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES

This is a special inspection to get this structure on schedule along with the other mason county structures and to verify that the bridge is properly closed and barricaded. Road closed signs and barricades are in place at each end of the bridge. See photos. Inspected by A. Greiner & W. K. Shugars

WORK

Action:	-

90 Inspection Date - 9/7/2016
Inspector - KSHUGAR (364)

081C00009N - **8 Bridge ID**
Unknown (NBI) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

NBI	X
Element	
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	3	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(3) SC- Unstable
Recommended Scour Critical:	(5) Stable w/in footing

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	(K) Closed To All Traffic
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	Yes
Field Postings Gross:	3 tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	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

86.

Item 113=3 7/5/15 MS

8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES

This is a special inspection verifying that the bridge is properly closed and barricaded. Road closed signs and barricades are in place at each end of the bridge. See photos. Inspected by A. Greiner & W. K. Shugars

WORK

Action:	-

90 Inspection Date - 8/19/2016
Inspector - AGREINER (154)

081C00009N - **8 Bridge ID**
Special (0-60 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	X

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	3	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
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44B Approach Span Design:	Not Applicable (00)
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107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(3) SC- Unstable
Recommended Scour Critical:	(5) Stable w/in footing

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

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32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
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35 Flare:	No Flare
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50B Curb/Sidewalk Width R:	0.833 ft
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ADMINISTRATIVE

27 Year Built:	1940
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
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37 Historical Significance:	(5) Not Eligible
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CLEARANCES

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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:	3 tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	0	0%	650.12	89%	80	11%	0	0%

The wearing surface has light map cracking and minor popout spalling throughout. A moderate sized longitudinal crack is present along the centerline of bridge for its entire length. Minor to moderate sized longitudinal cracking is present in the wheel paths. These cracks are a little wider near the abutments and become a little thinner as they move toward midspan. Several minor sized transverse cracks are present throughout; one of these minor sized transverse cracks is present near midspan. When the approaches were paved they paved up on the ends of the bridge a little bit. The deck underside is partially obscured by black tar paper, so only small portions of the deck underside are visible. These visible portions of the deck have some minor sized cracking and discoloration. A minor sized transverse crack is present in the deck underside within the eastern 1/3 of the span. This crack appears to be full width. 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
SQ.FT	1	0	0%	1	100%	0	0%	0	0%

See element 12.

107: Steel 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	196	2	1%	89	45%	68	35%	37	19%

A ladder was utilized during this inspection for a closer beam evaluation.

The superstructure consists of eight steel beams which are completely rusted with minor to moderate pitting throughout.

The two center beams (beams 4 and 5 from upstream) are C-channel beams and the remaining beams are small S-shaped beams.

These 2 center C-channel beams are spaced much closer together than the other beams, approximately 14" apart, verses ~ 30". Beam 4 from upstream (the upstream center C-channel beam) has extensive corrosion/deterioration throughout the length of the beam. This beam has heavy corrosion and section loss with several layers of flaking rust in the web and flanges (one of the longitudinal cracks in the above deck surface near the roadway centerline is in close proximity to this beam). For all practical purposes this beam is no longer functioning as intended and should not be considered load bearing. Approximately 7' from the west abutment the width of the bottom flange is ~ 1.5" and typically measures 3.25" wide. Heavy section loss is also present within the flange thickness at this location. "Knife edging" is present at the edge of this flange with the thickness tapering (increasing) towards the web. The web at this location has a large rust through hole. Another rust through hole is present in the web near mid-length. This hole is full height and ~ 4"wide. Heavy corrosion/deterioration is present throughout the length of this beam (beam 4).

Beam 5 (downstream C-channel beam) typically exhibits minor to moderate pitting throughout its length.

Continued in additional notes 1 (896).

Inspection Report with SI&A Data

896: Additional Notes 1									
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%

Continued from element 107.

The upstream beam has a ~ 3' long area of moderate to heavy corrosion near the east abutment.
Beam 3 from upstream has an area of moderate to heavy flaking rust and corrosion in the western end of the web and bottom flange.

Beam 6 from upstream has moderate to heavy flaking corrosion (~4') in the web and flange near the west abutment.

Beam 7 from upstream is slightly bent at the west end with a small notch is the downstream bottom flange ~ 4' from the west abutment.

Beams 7 and 8 from upstream are bowed slightly in the upstream direction. See photos.

1000: Corrosion									
Units	**Total Qty**	**Qty. St. 1**	**% in 1**	**Qty. St. 2**	**% in 2**	**Qty. St. 3**	**% in 3**	**Qty. St. 4**	**% in 4**
FT	195	1	1%	89	46%	68	35%	37	19%

See element 107.

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	115	0	0%	101	88%	14	12%	0	0%

According to previous inspections "Both of the original abutments have been entirely faced with concrete in the past". Both abutments have areas of minor vertical cracking. The west abutments footing is exposed and has areas of honeycombing. A concrete protection apron was poured along this footing in the past (Several sections are spalled or have broke off). Scour and undermining are present along this protection apron/footing. This apron and footing are ~ 24" wide from the front face of the abutment (apron varies in width and a 6'-8' long section is broke off within the upstream half of the footing).
During this inspection the undermining at the upstream end of this apron/footing is ~ 24" horizontally and ~ 12" vertically (during the last inspection the undermining was 30"-36" horizontally and 18" vertically at this location; silted in some.). The undermining tapers down to ~ 1' x1' near mid-length, and then decreases to ~ 6" x 6" or less along the downstream half of the footing. This abutment has had a long history of scour and undermining and repairs should be put into place soon.

The footing of the east abutment is also exposed and has many areas of honeycombing. Minor undermining is present at the downstream end of the east abutments footing; ~2"- 5" of horizontal undermining and ~ 2"- 4" of vertical undermining are present along the downstream half of the footings length.

Smart level measurements were taken at both abutments. Orange lines are painted on both abutments at measurement locations and are as follows: Upstream west wingwall 89.0 (leaning toward stream); Upstream west breastwall 89.2 (leaning toward stream); Downstream west breastwall 89.5 (leaning toward stream); Downstream west wingwall 89.5 (leaning toward stream); Downstream east breastwall 88.7 (leaning toward stream); Downstream east wingwall 89.5 (leaning toward the stream). Measurements consistent with measurements taken during the 5-10-16 & 6-28-16 inspections.

896: Additional Notes 1

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%

Continued from element 215.

A utility line (appears to be a gas line) runs through both abutments at the upstream end. Minor cracking is present in the abutments around this utility line.

Both the upstream and downstream wingwalls of the west abutment have diagonal/vertical cracking that begins at the abutments footing and extends up to the top of the wingwalls. The west downstream wingwalls crack is ~ 3/16" to 1/4" wide (measured ~ 3' off the top of the footing) and grows larger near the top of the wingwall. There are two of these diagonal/vertical cracks in the upstream west wingwall. Typically they measure ~ 1/16" wide. Crack gauges have been installed on all 3 cracks; no change is apparent.

Minor to moderate sized vertical cracking is present at the east upstream abutment/wingwall connection. This cracks is ~ 1/4" wide at the top. Minor vertical cracking is present in the downstream east wingwall/abutment interface. See photos.

Inspection Report with SI&A Data

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.

6000: Scour

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.

220: Re Conc Pile Cap/Ftg

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	115	0	0%	101	88%	14	12%	0	0%

See element 215.

6000: Scour

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	76	0	0%	76	100%	0	0%	0	0%

The bridge railing is made up of 2 1/2 in. painted steel angle that is 2 ft. tall on 15 in. high curbs. See photos.

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	21.03	0	0%	21.03	100%	0	0%	0	0%

The coating is dulling.

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)	76	72	95%	4	5%	0	0%	0	0%

Curbs have areas of random cracking with seepage. See photos.

851: Transitions

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%

A ~ 1' deep by 1' long void is present in the upstream west approach roadway along the edge of the deck. This should be repaired.

853: Utilities

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%

A utility line runs through the upstream end of both abutments. The line is in good condition at this time. See photos.

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 around the abutments. See photos.

Inspection Report with SI&A Data

STRUCTURE NOTES
86. Item 113=3 7/5/15 MS 8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES
This is a special 3 month inspection to monitor the progressing scour/undermining. This structure will remain on a 3 month inspection cycle until repairs are made or until closure is recommended. During this inspection a ladder was utilized for a closer evaluation of the steel beams condition. Measurements were also taken for the purpose of analysis. Inspected by A.Greiner and K.Shugars.

WORK	
Action:	-

90 Inspection Date - 6/28/2016
Inspector - MSWIETERMAN (257)

081C00009N - **8 Bridge ID**
Unknown (NBI) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

NBI	
Element	
Fracture Critical	
Underwater	
Special	X

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	3	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(4) Stable, needs action
Recommended Scour Critical:	(5) Stable w/in footing

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	3 tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	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

86.

Item 113=3 7/5/15 MS

8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES

This is a special 6 month inspection to monitor the progressing scour and undermining.

WORK

Action:	-

90 Inspection Date - 5/10/2016
Inspector - AGREINER (154)

081C00009N - **8 Bridge ID**
Special (0-60 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	X

NBI CONDITION RATINGS

58	Deck:	5	61	Channel:	5
59	Superstructure:	4	62	Culvert:	N
60	Substructure:	3		Sufficiency Rating:	28.5

DESIGN

	Substandard:	Weight
43A	Main Span Material:	(3) Steel
43B	Main Span Design:	(02) Stringer / Girder
45	Number of Spans Main:	1
44A	Approach Span Material:	Not Applicable (0)
44B	Approach Span Design:	Not Applicable (00)
46	Number of Approach Spans:	0
107	Deck Type:	(1) Concrete-Cast-in-Place
108A	Wearing Surface:	(1) Monolithic Concrete
108B	Membrane:	(0) None
108C	Deck Protection:	(0) None
	Overlay Y/N:	No
	Overlay Type:	None
	Overlay Thickness:	in
	Overlay Date:	

APPRAISAL

36A	Bridge Railings:	(0) Substandard
36B	Transitions	(0) Substandard
36C	Approach Guardrail:	(0) Substandard
36D	Approach Guardrail Ends:	(0) Substandard
71	Waterway Adequacy:	(8) Equal Desirable
72	Approach Alignment:	(6) Equal Minimum Crit
92A	Fracture Critical Inspection:	No
92B	Under Water Inspection:	No
113	Scour Critical:	(3) SC- Unstable
	Recommended Scour Critical:	(5) Stable w/in footing

LOAD RATINGS

63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	0.2 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	0.1 tons
	Truck Capacity Type I:	0 tons
	Truck Capacity Type II:	0 tons
	Truck Capacity Type III:	0 tons
	Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48	Max Length Span:	24.417 ft
49	Structure Length:	38.000 ft
32	Approach Roadway:	12.139 ft
33	Median:	(0) No Median
34	Skew:	0°
35	Flare:	No Flare
50A	Curb/Sidewalk Width L:	0.833 ft
50B	Curb/Sidewalk Width R:	0.833 ft
47	Horiz. Clearance:	17.000 ft
51	Width Curb to Curb:	17.000 ft
52	Width Out to Out:	18.660 ft

ADMINISTRATIVE

27	Year Built:	1940
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:	(02) County Hwy Agency
22	Owner:	(02) County 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:	3 tons
	Field Postings Type I:	tons
	Field Postings Type II:	tons
	Field Postings Type III:	tons
	Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	0	0%	650.12	89%	80	11%	0	0%

The wearing surface has light map cracking and minor popout spalling throughout. A moderate sized longitudinal crack is present along centerline of bridge for its entire length. Minor to moderate longitudinal cracking is present in the wheel paths. These cracks are a little wider near the abutments and become a little thinner as they move toward midspan. Several minor sized transverse cracks are present throughout with one these minor sized transverse cracks present near midspan. When the approaches were paved they paved up on the ends of the bridge a little bit. The deck underside is partially obscured by what appears to be black tar paper, so only small portions of the deck underside are visible. These visible portions of the deck have some minor cracking and discoloration. A minor sized transverse crack is present in the deck underside within the eastern 1/3 of the span. This crack appears to be full width. 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
SQ.FT	1	0	0%	1	100%	0	0%	0	0%

See element 12.

107: Steel 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	196	0	0%	89	45%	68	35%	39	20%

The superstructure consists of eight steel beams which are completely rusted with minor to moderate pitting throughout. The two center beams (beams 4 and 5 from upstream) are C-channel beams and the remaining beams are small I beams. These 2 center C-channel beams are spaced much closer together than the other beams, approximately 1 ft. apart, verses 3 ft. apart. Typically the beams exhibit minor to moderate pitting and corrosion. Beam 4 from upstream (the upstream center C-channel beam) has the most advanced deterioration. This beam has heavy corrosion and section loss with several layers of flaking rust in the web and flanges, especially throughout the center of the span. The section loss appears to be ~ 50% or more of the beams section (one of the longitudinal cracks in the above deck surface near the roadway centerline is in close proximity to this beam). The upstream beam has a ~ 3' long area of moderate to heavy corrosion near the east abutment. Beam 3 from upstream has an area of moderate to heavy flaking rust and corrosion in the western end of the bottom flange. Beam 6 from upstream has moderate to heavy flaking corrosion (~4') near the west abutment. Beam 7 from upstream is slightly bent at the west end with a small notch is the downstream bottom flange ~ 4' from the west abutment. See photos.

Inspection Report with SI&A Data

1000: Corrosion

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	196	0	0%	89	45%	68	35%	39	20%

See element 107.

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	115	0	0%	101	88%	14	12%	0	0%

According to previous inspections "Both of the original abutments have been entirely faced with concrete in the past". Both abutments have areas of minor vertical cracking. The west abutments footing is exposed and has areas of honeycombing. A concrete protection apron was poured along this footing in the past (Several sections have broke off). Scour and undermining are present along this protection apron/footing. This apron and footing are ~ 24" wide from the front face of the abutment (the apron varies in width and a 6' long section is broke off within the upstream half of the footing). The undermining at the upstream end of this apron/footing is ~30"-36" horizontally and 18" vertically, it tapers down to ~ 1' x1' near mid-length, and then decreases to ~ 6" x 6" along the downstream half of the footing. This abutment has had a long history of scour and undermining and repairs should be put into place soon. The footing of the east abutment is also exposed and has many areas of honeycombing. Minor undermining is present at the downstream end of the east abutments footing, ~2"- 6" of horizontal undermining and ~ 2"- 4" of vertical undermining are present along the downstream half of the footings length. A utility line (appears to be a gas line) runs through both abutments at the upstream end. Minor cracking is present in the abutments around this utility line. Both the upstream and downstream wingwalls of the west abutment have diagonal/vertical cracking that begins at the abutments footing and extends up to the top of the wingwalls (moderate intensity at upstream wingwall/footing) The west downstream wingwalls crack is ~ 3/16" to 1/4" wide ~ 3' off the top of the footing and grows larger near the top of the wingwall. Minor to moderate vertical cracking is present at the east upstream abutment/wingwall connection. This cracks is ~ 1/4" wide at the top. Minor vertical cracking is present in the downstream east wingwall/abutment interface. 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

6000: Scour

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.

220: Re Conc Pile Cap/Ftg

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	115	0	0%	101	88%	14	12%	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	76	0	0%	76	100%	0	0%	0	0%

The bridge railing is made up of 2 1/2 in. painted steel angle that is 2 ft. tall on 15 in. high curbs. 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	21.03	0	0%	21.03	100%	0	0%	0	0%

The coating is dulling.

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)	76	72	95%	4	5%	0	0%	0	0%

Curbs have areas of random cracking with seepage. See photos.

Inspection Report with SI&A Data

851: Transitions									
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%

A ~ 1' deep by 6" diameter void is present in the upstream west approach roadway along the edge of the deck. This should be repaired.

853: Utilities									
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%

A utility line runs through the upstream end of both abutments. The line is in good condition at this time. See photos.

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 around the abutments. See photos.

STRUCTURE NOTES

86.

Item 113=3 7/5/15 MS

8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES

This is a special 3 month inspection to monitor the progressing scour and undermining. This structure will remain on a 3 month inspection cycle until repairs are made or until closure is recommended. Inspected by A.Greiner and K.Shugars.

WORK

Action:	-

90 Inspection Date - 2/26/2016
Inspector - AGREINER (154)

081C00009N - **8 Bridge ID**
Special (0-60 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	3	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(3) SC- Unstable
Recommended Scour Critical:	(5) Stable w/in footing

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	3 tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	0	0%	650.12	89%	80	11%	0	0%

The wearing surface has light map cracking and minor popout spalling throughout. A moderate sized longitudinal crack is present along centerline of bridge for its entire length. Minor to moderate longitudinal cracking is present in the wheel paths. These cracks are a little wider near the abutments and become a little thinner as they move toward midspan. Several minor sized transverse cracks are present throughout with one these minor sized transverse cracks present near midspan. When the approaches were paved they paved up on the ends of the bridge a little bit. The deck underside is partially obscured by what appears to be black tar paper, so only small portions of the deck underside are visible. These visible portions of the deck have some minor cracking and discoloration. A minor sized transverse crack is present in the deck underside within the eastern 1/3 of the span. This crack appears to be full width. 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
SQ.FT	1	0	0%	1	100%	0	0%	0	0%

See element 12.

107: Steel 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	196	0	0%	89	45%	68	35%	39	20%

The superstructure consists of eight steel beams which are completely rusted with minor to moderate pitting throughout. The two center beams (beams 4 and 5 from upstream) are C-channel beams and the remaining beams are small I beams. These 2 center C-channel beams are spaced much closer together than the other beams, approximately 1 ft. apart, verses 3 ft. apart. Typically the beams exhibit minor to moderate pitting and corrosion. Beam 4 from upstream (the upstream center C-channel beam) has the most advanced deterioration. This beam has heavy corrosion and section loss with several layers of flaking rust in the web and flanges, especially throughout the center of the span. The section loss appears to be ~ 50% or more of the beams section. One of the longitudinal cracks in the above deck surface near the roadway centerline is in close proximity to this beam. The upstream beam has a ~ 3' long area of moderate to heavy corrosion near the east abutment. Beam 3 from upstream has an area of flaking rust in the western end of the bottom flange. Beam 6 from upstream has moderate corrosion (~4') near the west abutment See photos.

Inspection Report with SI&A Data

1000: Corrosion

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	196	0	0%	89	45%	68	35%	39	20%

See element 107.

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	115	0	0%	101	88%	14	12%	0	0%

According to previous inspections "Both of the original abutments have been entirely faced with concrete in the past". Both abutments have areas of minor vertical cracking. The west abutments footing is exposed and has areas of honeycombing. A concrete protection apron was poured along this footing in the past. Scour and undermining are present along this protection apron/ footing. This apron and footing are ~ 24" wide from the front face of the abutment (the apron varies in width and a 6' long section is broke off within the upstream half of the footing). The undermining at the upstream end of this footing is ~30"-36" horizontally and 18" vertically, it tapers down to ~ 1' x1' near mid-length, and then decreases to ~ 6" x 6" along the downstream half of the footing. This abutment has had a long history of scour and undermining and repairs should be put into place soon. The footing of the east abutment is also exposed and has many areas of honeycombing. Minor undermining is present at the downstream end of the east abutments footing, ~2"- 6" of horizontal undermining and ~ 2"- 4" of vertical undermining are present along the downstream half of the footings length. A utility line (appears to be a gas line) runs through both abutments at the upstream end. Minor cracking is present in the abutments around this utility line. Both the upstream and downstream wingwalls of the west abutment have diagonal/vertical cracking that begins at the abutments footing and extends up to the top of the wingwalls. The west downstream wingwalls crack is ~ 3/16" to 1/4" wide ~ 3' off the top of the footing and grows larger near the top of the wingwall. Minor to moderate vertical cracking is present at the east upstream abutment/wingwall connection. This cracks is ~ 1/4" wide at the top. Minor vertical cracking is present in the downstream east wingwall/abutment interface. 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

6000: Scour

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.

220: Re Conc Pile Cap/Ftg

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	115	0	0%	101	88%	14	12%	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	76	0	0%	76	100%	0	0%	0	0%

The bridge railing is made up of 2 1/2 in. painted steel angle that is 2 ft. tall on 15 in. high curbs. 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	21.03	0	0%	21.03	100%	0	0%	0	0%

The coating is dulling.

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)	76	72	95%	4	5%	0	0%	0	0%

Curbs have areas of random cracking with seepage. See photos.

Inspection Report with SI&A Data

851: Transitions									
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%

A ~ 1' deep by 6" diameter void is present in the upstream west approach roadway along the edge of the deck.

853: Utilities									
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%

A utility line runs through the upstream end of both abutments. The line is in good condition at this time. See photos.

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 around the abutments. See photos.

STRUCTURE NOTES

86.

Item 113=3 7/5/15 MS

8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES

This is a special 3 month inspection to monitor the progressing scour and undermining. The scour and undermining continues to progress and repairs are needed in the near future. This structure will remain on a 3 month inspection cycle until repairs are made or until closure is recommended. Inspected by A.Greiner and K.Shugars.

WORK

Action:	-

90 Inspection Date - 12/21/2015
Inspector - AGREINER (154)

081C00009N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	3	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(3) SC- Unstable
Recommended Scour Critical:	(5) Stable w/in footing

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	3 tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	0	0%	650.12	89%	80	11%	0	0%

The wearing surface has light map cracking and minor popout spalling throughout. A moderate sized longitudinal crack is present along centerline of bridge for its entire length. Minor to moderate longitudinal cracking is present in the wheel paths. These cracks are a little wider near the abutments and become a little thinner as they move toward midspan. A minor sized transverse crack is present near midspan. When the approaches were paved they paved up on the ends of the bridge a little bit. The deck underside is partially obscured by what appears to be black tar paper, so only small portions of the deck underside are visible. These visible portions of the deck have some minor cracking and discoloration. 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
SQ.FT	1	0	0%	1	100%	0	0%	0	0%

See element 12.

107: Steel 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	196	0	0%	89	45%	68	35%	39	20%

The superstructure consists of eight steel beams which are completely rusted with minor to moderate pitting throughout. The two center beams (beams 4 and 5 from upstream) are C-channel beams and the remaining beams are small I beams. These 2 center C-channel beams are spaced much closer together than the other beams, approximately 1 ft. apart, verses 3 ft. apart. Typically the beams exhibit minor to moderate pitting and corrosion. Beam 4 from upstream (the upstream center C-channel beam) has the most advanced deterioration. This beam has heavy corrosion and section loss with several layers of flaking rust in the web and flanges, especially throughout the center of the span. The section loss appears to be ~ 50% or more of the beams section. The longitudinal crack in the above deck surface near the roadway centerline is in close proximity to this beam. The upstream beam has a ~ 3' long area of moderate to heavy corrosion near the east abutment. Beam 3 from upstream has an area of flaking rust in the western end of the bottom flange. Beam 6 from upstream has moderate corrosion (~4') near the west abutment See photos.

1000: Corrosion

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	196	0	0%	89	45%	68	35%	39	20%

See element 107.

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	115	0	0%	101	88%	14	12%	0	0%

According to previous inspections "Both of the original abutments have been entirely faced with concrete in the past". Both abutments have areas of minor vertical cracking. The west abutments footing is exposed and has areas of honeycombing. A concrete protection apron was poured along this footing in the past. Scour and undermining are present along this protection apron/ footing. This apron and footing are ~ 24" wide from the front face of the abutment. The undermining is up to 30" horizontally and 18" vertically at the upstream end of the footing, it tapers down to ~ 1' x1' near mid-length, and then decreases to ~ 6" x 6" along the downstream half of the footing. This abutment has had a long history of scour and undermining and repairs should be put into place soon. The footing of the east abutment is also exposed and has many areas of honeycombing. Minor undermining is present at the downstream end of the east abutments footing, ~2"- 6" of horizontal undermining and ~ 2"- 4" of vertical undermining are present along the downstream half of the footings length. A utility line (appears to be a gas line) runs through both abutments at the upstream end. Minor cracking is present in the abutments around this utility line. Both the upstream and downstream wingwalls of the west abutment have diagonal/vertical cracking that begins at the abutments footing and extends up to the top of the wingwalls. The west downstream wingwalls crack is ~ 3/16" wide ~ 3' off the top of the footing and grows larger near the top of the wingwall. Minor to moderate vertical cracking is present at the east upstream abutment/wingwall connection. This cracks is ~ 1/4" wide at the top. Minor vertical cracking is present in the downstream east wingwall/abutment interface. 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.

6000: Scour

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.

220: Re Conc Pile Cap/Ftg

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	115	0	0%	101	88%	14	12%	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	76	0	0%	76	100%	0	0%	0	0%

The bridge railing is made up of 2 1/2 in. painted steel angle that is 2 ft. tall on 15 in. high curbs. 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	21.03	0	0%	21.03	100%	0	0%	0	0%

The coating is dulling.

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)	76	72	95%	4	5%	0	0%	0	0%

Curbs have areas of random cracking with seepage. See photos.

853: Utilities

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%

A utility line runs through the upstream end of both abutments. The line is in good condition at this time. See photos.

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 around the abutments. See photos.

Inspection Report with SI&A Data

STRUCTURE NOTES
86. Item 113=3 7/5/15 MS 8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES
The bridge is posted at 3 tons and both signs are in place at each end of the bridge. The Mason County Judge was contacted on the morning of 12-22-15. He was informed about the progressing scour/undermining at the west abutment and the urgency of needed repairs. Inspected by A.Greiner.

WORK	
Action:	-

90 Inspection Date - 12/8/2014
Inspector - BJONES (302)

081C00009N - **8 Bridge ID**
Initial Inspection -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	5	**61 Channel:**	5
59 Superstructure:	4	**62 Culvert:**	N
60 Substructure:	5	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(4) Stable, Needs Attention

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	3 tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	0	0%	730.12	100%	0	0%	0	0%

The wearing surface has light radio map cracking and minor popout spalling. A minor sized longitudinal crack is present along centerline of bridge for its entire length. Minor to moderate longitudinal cracking is present in the wheel paths. These cracks are a little wider near the abutments and become a little thinner as they move toward midspan. When the approaches were paved they paved up on the ends of the bridge a few feet. See photos.

7358: DO NOT USE Concrete Cracking

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	663	0	0%	663	100%	0	0%	0	0%

The wearing surface has light radio map cracking and minor popout spalling. A minor sized longitudinal crack is present along centerline of bridge for its entire length. Minor to moderate longitudinal cracking is present in the wheel paths. These cracks are a little wider near the abutments and become a little thinner as they move toward midspan. When the approaches were paved they paved up on the ends of the bridge a few feet. See photos.

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	0	0%	10.76	100%	0	0%	0	0%

The wearing surface has light radio map cracking and minor popout spalling. A minor sized longitudinal crack is present along centerline of bridge for its entire length. Minor to moderate longitudinal cracking is present in the wheel paths. These cracks are a little wider near the abutments and become a little thinner as they move toward midspan. When the approaches were paved they paved up on the ends of the bridge a few feet. See photos.

107: Steel 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	196	0	0%	88	45%	98	50%	10	5%

The superstructure consists of eight steel beams which are completely rusted. The two center beams are C-channel beams and the remaining beams are small I beams. These 2 center channel beams are spaced much closer together than the other beams, approximately 1 ft. apart, verses 3 ft. apart. Typically the beams exhibit minor pitting and corrosion. Beam 4 from upstream (the upstream center channel beam) has the most advanced deterioration. This beam has heavy corrosion with several layers of flaking rust in the web and flanges. The longitudinal crack in the wearing surface near the roadway centerline is in close proximity to this beam. Beam 3 from upstream has an area of flaking rust in the western end of the bottom flange. See photos.

Inspection Report with SI&A Data

1000: Corrosion

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	196	0	0%	88	45%	98	50%	10	5%

–

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	115	98	85%	17	15%	0	0%	0	0%

Both of the original abutments have been entirely faced with concrete in the past. Both abutments have areas of minor vertical cracking. The west abutment ft.s footing is exposed and has areas of honeycombing. A concrete protection apron was poured along this footing in the past. Up to 30 in. of horizontal undermining and 18 in. of vertical undermining are present at the upstream of this footing/protection apron. ~ 1 ft. of this undermining is beyond the concrete apron. 6 in.-12 in. of horizontal undermining is typical along this footing from mid-length to the upstream end. The upstream west wingwall has up to 18 in. of horizontal undermining and up to 12 in. of vertical undermining. The footing of the east abutment is also exposed and has many areas of honeycombing. 2 in.-3 in. of horizontal undermining can be probed at the downstream end. A utility line (appears to be a gas line) runs through both abutments at the upstream end. Minor cracking is present in the abutments around this utility line. Both the upstream and downstream wingwall ft.s of the west abutment have diagonal/vertical cracking that Begins at the abutment ft.s footing and extends to the top of the wingwalls. The west downstream wingwall ft.s crack is ~ 3/16 in. wide near the abutment connection and grows larger near the top of the wingwall. Minor vertical cracking is present in the downstream east wingwall/ abutment interface. See photos.

220: Re Conc Pile Cap/Ftg

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	115	0	0%	0	0%	115	100%	0	0%

The west abutment footing is exposed vertically along its entire length and has up to 1.5' of lateral undermining. The east abutment footing is vertically exposed its entire length with no undermining at the time of the inspection. See Photos.

6000: Scour

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	115	0	0%	0	0%	115	100%	0	0%

See parent Element 220 for notes.

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	76	0	0%	76	100%	0	0%	0	0%

The bridge railing is made up of 2 1/2 in. painted steel angle that is 2 ft. high on 15 in. high curbs. 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)	76	72	95%	4	5%	0	0%	0	0%

Curbs have areas of random cracking with seepage. See photos.

853: Utilities

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%

A utility line runs through the upstream end of both abutments. The line is in good condition at this time. See photos.

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 around the abutments. A small tree is growing a See photos.

Inspection Report with SI&A Data

7363: DO NOT USE Steel Section Loss									
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%
Section loss is present within beam 4 from upstream. Accurate measurements are not possible at this time. See photos.									

STRUCTURE NOTES
86. Item 113=3 7/5/15 MS 8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES
Bridge is posted at 3 tons. Both signs are in place at this time. Inspected by B. Jones.

WORK	
Action:	-

90 Inspection Date - 12/18/2013
Inspector - AGREINER (154)

081C00009N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

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:	5	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(4) Stable, Needs Attention

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	3 tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	0	0%	730.12	100%	0	0%	0	0%

The wearing surface has light radio map cracking and minor popout spalling. A minor sized longitudinal crack is present along centerline of bridge for its entire length. Minor to moderate longitudinal cracking is present in the wheel paths. These cracks are a little wider near the abutments and become a little thinner as they move toward midspan. When the approaches were paved they paved up on the ends of the bridge a few feet. See photos.

7358: DO NOT USE Concrete Cracking

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	663	0	0%	663	100%	0	0%	0	0%

The wearing surface has light radio map cracking and minor popout spalling. A minor sized longitudinal crack is present along centerline of bridge for its entire length. Minor to moderate longitudinal cracking is present in the wheel paths. These cracks are a little wider near the abutments and become a little thinner as they move toward midspan. When the approaches were paved they paved up on the ends of the bridge a few feet. See photos.

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	0	0%	10.76	100%	0	0%	0	0%

The wearing surface has light radio map cracking and minor popout spalling. A minor sized longitudinal crack is present along centerline of bridge for its entire length. Minor to moderate longitudinal cracking is present in the wheel paths. These cracks are a little wider near the abutments and become a little thinner as they move toward midspan. When the approaches were paved they paved up on the ends of the bridge a few feet. See photos.

107: Steel 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	196	0	0%	162.43	83%	28.15	14%	5.41	3%

The superstructure consists of eight steel beams which are completely rusted. The two center beams are C-channel beams and the remaining beams are small I beams. These 2 center channel beams are spaced much closer together than the other beams, approximately 1 ft. apart, verses 3 ft. apart. Typically the beams exhibit minor pitting and corrosion. Beam 4 from upstream (the upstream center channel beam) has the most advanced deterioration. This beam has heavy corrosion with several layers of flaking rust in the web and flanges. The longitudinal crack in the wearing surface near the roadway centerline is in close proximity to this beam. Beam 3 from upstream has an area of flaking rust in the western end of the bottom flange. See photos.

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%

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	115	98	85%	17	15%	0	0%	0	0%

Both of the original abutments have been entirely faced with concrete in the past. Both abutments have areas of minor vertical cracking. The west abutment ft.s footing is exposed and has areas of honeycombing. A concrete protection apron was poured along this footing in the past. Up to 30 in. of horizontal undermining and 18 in. of vertical undermining are present at the upstream of this footing/protection apron. ~ 1 ft. of this undermining is beyond the concrete apron. 6 in.-12 in. of horizontal undermining is typical along this footing from mid-length to the upstream end. The upstream west wingwall has up to 18 in. of horizontal undermining and up to 12 in. of vertical undermining. The footing of the east abutment is also exposed and has many areas of honeycombing. 2 in.-3 in. of horizontal undermining can be probed at the downstream end. A utility line (appears to be a gas line) runs through both abutments at the upstream end. Minor cracking is present in the abutments around this utility line. Both the upstream and downstream wingwall ft.s of the west abutment have diagonal/vertical cracking that Begins at the abutment ft.s footing and extends to the top of the wingwalls. The west downstream wingwall ft.s crack is ~ 3/16 in. wide near the abutment connection and grows larger near the top of the wingwall. Minor vertical cracking is present in the downstream east wingwall/ abutment interface. 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	76	0	0%	76	100%	0	0%	0	0%

The bridge railing is made up of 2 1/2 in. painted steel angle that is 2 ft. high on 15 in. high curbs. 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%

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)	76	72	95%	4	5%	0	0%	0	0%

Curbs have areas of random cracking with seepage. See photos.

853: Utilities

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%

A utility line runs through the upstream end of both abutments. The line is in good condition at this time. See photos.

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 around the abutments. A small tree is growing aSee 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	0	0%	1	100%	0	0%	0	0%

The west abutment ft.s footing is exposed. A concrete protection apron was poured along this footing in the past. Up to 30 in. of horizontal undermining and 18 in. of vertical undermining are present at the upstream of this footing/protection apron. ~ 1 ft. of this undermining is beyond the concrete apron. 6 in.-12 in. of horizontal undermining is typical along this footing from mid-length to the upstream end. The upstream west wingwall has up to 18 in. of horizontal undermining and up to 12 in. of vertical undermining. The footing of the east abutment is also exposed. 2 in.-3 in. of horizontal undermining can be probed at the downstream end. See photos.

Inspection Report with SI&A Data

7363: DO NOT USE Steel Section Loss									
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%
Section loss is present within beam 4 from upstream. Accurate measurements are not possible at this time. See photos.									

STRUCTURE NOTES
86. Item 113=3 7/5/15 MS 8/23/2016 Closure memo due to the load rating of the superstructure. DGA

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

WORK	
Action:	-

90 Inspection Date - 12/13/2012
Inspector - RROGERS (35)

081C00009N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

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:	5	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum 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:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	3 tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	0	0%	730.12	100%	0	0%	0	0%

Wearing surface has areas of cracking and minor popout spalling. Longitudinal cracking is present along centerline of bridge. New asphalt has been placed at ends of bridge and approach roadway. See photos.

7358: DO NOT USE Concrete Cracking

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	663	0	0%	663	100%	0	0%	0	0%

Wearing surface has areas of cracking and minor popout spalling. Longitudinal cracking is present along centerline of bridge. New asphalt has been placed at ends of bridge and approach roadway. See photos.

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	0	0%	10.76	100%	0	0%	0	0%

Wearing surface has areas of cracking and minor popout spalling. Longitudinal cracking is present along centerline of bridge. New asphalt has been placed at ends of bridge and approach roadway. See photos.

107: Steel 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	196	0	0%	161	82%	30	15%	5	3%

Bridge has eight beams which are all 100% rusty. The two center beams are made of channel, with the remainder beams being small I beams. The 2 center channel beams are spaced much closer together than the other beams, approximately 1 ft. apart, verses 3 ft. apart with the I beams. All beams have some minor pitting and corrosion through out. The upstream center channel beam is much worse than all the others. The entire beam length has heavy corrosion, flaking corrosion, and some section loss. See photos.

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%

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	115	98	85%	17	15%	0	0%	0	0%

Both of the original abutments have been entirely faced with concrete in the past. Both abutments have areas with minor vertical cracking. The west abutment has scour with up to 30 in. of undermining and up to 1 ft. of undermining beyond the concrete apron on the upstream side of the abutment. The upstream west wingwall has up to 1.5 ft. of undermining. A utility line that appears to be a gas line runs through both abutments at the upstream end. Minor cracking is present in the abutments where this utility runs through the abutment. Both the upstream and downstream wingwall ft.s of the west abutment have diagonal/vertical cracking with the cracking on the downstream wing wall being up to 1/4 in.. Beginning from the abutment ft.s footing to the top of the wingwalls, which could indicate some settlement. This will need to be monitored. Minor vertical cracking is present in the downstream east wingwall/abutment transition. 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	76	0	0%	76	100%	0	0%	0	0%

Railing is made up of 2 1/2 in. painted steel angle 2 ft. high on 15 in. high curbs. 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%

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)	76	72	95%	4	5%	0	0%	0	0%

Curbs have areas of random cracking with seepage. See photos.

853: Utilities

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%

A utility line runs through the upstream end of both abutments. The line is in good condition at this time. See photos.

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 around abutments. 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	0	0%	1	100%	0	0%	0	0%

The west abutment has scour with up to 30 ft. ft. of undermining and up to 1 ft. of undermining beyond the concrete apron on the upstream side of the abutment. The upstream west wingwall has up to 1.5 ft. of undermining. This needs to be monitored. See photos.

7363: DO NOT USE Steel Section Loss

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 upstream center channel beam has flaking corrosion with measurable section loss. See photos.

Inspection Report with SI&A Data

STRUCTURE NOTES
86. Item 113=3 7/5/15 MS 8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES
Bridge is posted at 3 tons. Both signs are in place at this time. See photos. Inspected by R.Rogers

WORK	
Action:	-

90 Inspection Date - 12/7/2011
Inspector - BCOMBS (217)

081C00009N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

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:	6	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum 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:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck									
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	730.12	0	0%	730.12	100%	0	0%	0	0%

Wearing surface has areas of cracking and minor popout spalling. Longitudinal cracking is present along centerline of bridge. Large spalled area at east end of deck needs to be patched. Rough transition at the west abutment needs an asphalt wedge. See photos.

7358: DO NOT USE Concrete Cracking									
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	663	0	0%	663	100%	0	0%	0	0%

Wearing surface has areas of cracking and minor popout spalling. Longitudinal cracking is present along centerline of bridge. Large spalled area at east end of deck needs to be patched. Rough transition at the west abutment needs an asphalt wedge. See photos.

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	0	0%	10.76	100%	0	0%	0	0%

Wearing surface has areas of cracking and minor popout spalling. Longitudinal cracking is present along centerline of bridge. Large spalled area at east end of deck needs to be patched. Rough transition at the west abutment needs an asphalt wedge. See photos.

107: Steel 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	196	0	0%	161	82%	30	15%	5	3%

Bridge has eight beams which are all 100% rusty. The two center beams are made of channel, with the remainder beams being small I beams. The 2 center channel beams are spaced much closer together than the other beams, approximately 1 ft. apart, verses 3 ft. apart with the I beams. All beams have some minor pitting and corrosion through out. The upstream center channel beam is much worse than all the others. The entire beam length has heavy corrosion, flaking corrosion, and some section loss. See photos.

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%

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	115	98	85%	17	15%	0	0%	0	0%

Both of the original abutments have been entirely faced with concrete in the past. Both abutments have areas with minor vertical cracking. The west abutment has scour with up to 3 ft. of undermining and up to 1 ft. of undermining beyond the concrete apron on the upstream side of the abutment. The upstream west wingwall has up to 1.5 ft. of undermining. A utility line that appears to be a gas line runs through both abutments at the upstream end. Minor cracking is present in the abutments where this utility runs through the abutment. Both the upstream and downstream wingwall ft.s of the west abutment have diagonal/vertical cracking with the cracking on the downstream wing wall being up to 1/4 in.. Beginning from the abutment ft.s footing to the top of the wingwalls, which could indicate some settlement. This will need to be monitored. Minor vertical cracking is present in the downstream east wingwall/abutment transition. 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	76	0	0%	76	100%	0	0%	0	0%

Railing is made up of 2 1/2 in. painted steel angle 2 ft. high on 15 in. high curbs. 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%

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)	76	72	95%	4	5%	0	0%	0	0%

Curbs have areas of random cracking with seepage. See photos.

853: Utilities

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%

A utility line runs through the upstream end of both abutments. The line is in good condition at this time. See photos.

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 around abutments. 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	0	0%	1	100%	0	0%	0	0%

The west abutment has scour with up to 3 ft. of undermining and up to 1 ft. of undermining beyond the concrete apron on the upstream side of the abutment. The upstream west wingwall has up to 1.5 ft. of undermining. This needs to be monitored. See photos.

7363: DO NOT USE Steel Section Loss

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 upstream center channel beam has flaking corrosion with measurable section loss. See photos.

Inspection Report with SI&A Data

STRUCTURE NOTES
86. Item 113=3 7/5/15 MS 8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES
Bridge is posted at 3 tons. Both signs are in place at this time. See photos. Inspected by A.Greiner and B.Combs.

WORK	
Action:	-

90 Inspection Date - 12/1/2010
Inspector - RROGERS (35)

081C00009N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

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:	6	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum 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:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	Unknown
Signs Posted Non-Cardinal:	Unknown
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	0	0%	730.12	100%	0	0%	0	0%

Wearing surface has areas of cracking and spalling. Longitudinal cracking is present along centerline of bridge. Large spalled area at east end of deck needs to be patched. See photos.

7358: DO NOT USE Concrete Cracking

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	663	0	0%	663	100%	0	0%	0	0%

Wearing surface has areas of cracking and spalling. Longitudinal cracking is present along centerline of bridge. Large spalled area at east end of deck needs to be patched. See photos.

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	0	0%	10.76	100%	0	0%	0	0%

Wearing surface has areas of cracking and spalling. Longitudinal cracking is present along centerline of bridge. Large spalled area at east end of deck needs to be patched. See photos.

107: Steel 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	196	0	0%	161	82%	30	15%	5	3%

Bridge has eight beams which are all 100% rusty. The two center beams are made of channel, with the remainder beams being small I beams. The 2 center channel beams are spaced much closer together than the other beams, approximately 1 ft. apart, verses 3 ft. apart with the I beams. All beams have some minor pitting and corrosion through out. The upstream center channel beam is much worse than all the others. The entire beam length has heavy corrosion, pack rust, and some section loss. See photos.

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%

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	115	98	85%	17	15%	0	0%	0	0%

Both of the original abutments have been entirely faced with concrete in the past. Both abutments have areas with minor vertical cracking. The upstream wingwall of the west abutment has scour with possibly 6 in. of undermining beyond the concrete apron. A utility line runs through both abutments at the upstream end. Both the upstream and downstream wingwall ft.s of west abutment have diagonal/vertical cracking. Beginning from the abutment ft.s footing to the top of the wingwalls, which would indicate some settlement. This will need to be monitored. 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	76	0	0%	76	100%	0	0%	0	0%

Railing is made up of 2 1/2 in. painted steel angle 2 ft. high on 15 in. high curbs. 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%

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)	76	72	95%	4	5%	0	0%	0	0%

Curbs have areas of random cracking with seepage. See photos.

853: Utilities

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%

A utility line runs through the upstream end of both abutments. The line is in good condition at this time. See photos.

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 around abutments. 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	0	0%	1	100%	0	0%	0	0%

The upstream wingwall of the west abutment has scour with up to 6 in. of undermining beyond the concrete apron. This needs to be monitored. See photos.

7363: DO NOT USE Steel Section Loss

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 upstream center channel beam has corrosion with some measurable section loss. See photos.

Inspection Report with SI&A Data

STRUCTURE NOTES
86. Item 113=3 7/5/15 MS 8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES
Bridge is posted at 3 tons. Both signs are in place at this time. See photos. Inspected by R.Rogers & A.Greiner.

WORK	
Action:	-

90 Inspection Date - 12/2/2009
Inspector - RROGERS (35)

081C00009N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

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:	6	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum 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:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	3 tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck									
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	730.12	0	0%	730.12	100%	0	0%	0	0%

East end of deck has a 3X4 area that has been patched with asphalt. Deck has areas of cracking throughout. See photos.

7358: DO NOT USE Concrete Cracking									
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	663	0	0%	663	100%	0	0%	0	0%

East end of deck has a 3X4 area that has been patched with asphalt. Deck has areas of cracking throughout. See photos.

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	0	0%	10.76	100%	0	0%	0	0%

East end of deck has a 3X4 area that has been patched with asphalt. Deck has areas of cracking throughout. See photos.

107: Steel 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	196	0	0%	161	82%	30	15%	5	3%

Bridge has eight beams which are all 100% rusty. The two center beams are made of channel, with the remainder beams being small I beams. The 2 center channel beams are spaced much closer together than the other beams, approximately 1 ft. apart, verses 3 ft. apart with the I beams. All beams have some minor pitting and corrosion throughout. The upstream center channel beam is much worse than all the others. The entire beam length has heavy corrosion, pack rust, and some section loss. See photos.

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%

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	115	98	85%	17	15%	0	0%	0	0%

Both of the original abutments have been entirely faced with concrete in the past. Both abutments have areas with minor vertical cracking. The upstream wingwall of the west abutment has scour with possibly 6 in. of undermining beyond the concrete apron. A utility line runs through both abutments at the upstream end. 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	76	0	0%	76	100%	0	0%	0	0%

Railing is made up of 2 1/2 in. painted steel angle 2 ft. high on 15 in. high curbs. 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)	76	72	95%	4	5%	0	0%	0	0%

Curbs have areas of random cracking with seepage. See photos.

Inspection Report with SI&A Data

853: Utilities									
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%

A utility line runs through the upstream end of both abutments. The line is in good condition at this time. See photos.

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 around abutments. 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	0	0%	1	100%	0	0%	0	0%

The upstream wingwall of the west abutment has scour with up to 6 in. of undermining beyond the concrete apron. This needs to be monitored. See photos.

7363: DO NOT USE Steel Section Loss									
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 upstream most center channel beam has corrosion with some measurable section loss. See photos.

Inspection Report with SI&A Data

STRUCTURE NOTES
86. Item 113=3 7/5/15 MS 8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES
Bridge is posted at 3 tons. Both signs are in place at this time. See photos. Inspected by J.Callahan & A.Greiner.

WORK	
Action:	-

90 Inspection Date - 12/2/2008
Inspector - RROGERS (35)

081C00009N - **8 Bridge ID**
Substandard (12 months) -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

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:	6	Sufficiency Rating:	28.5

DESIGN

	Substandard:	Weight
43A	Main Span Material:	(3) Steel
43B	Main Span Design:	(02) Stringer / Girder
45	Number of Spans Main:	1
44A	Approach Span Material:	Not Applicable (0)
44B	Approach Span Design:	Not Applicable (00)
46	Number of Approach Spans:	0
107	Deck Type:	(1) Concrete-Cast-in-Place
108A	Wearing Surface:	(1) Monolithic Concrete
108B	Membrane:	(0) None
108C	Deck Protection:	(0) None
	Overlay Y/N:	No
	Overlay Type:	None
	Overlay Thickness:	in
	Overlay Date:	

APPRAISAL

36A	Bridge Railings:	(0) Substandard
36B	Transitions	(0) Substandard
36C	Approach Guardrail:	(0) Substandard
36D	Approach Guardrail Ends:	(0) Substandard
71	Waterway Adequacy:	(8) Equal Desirable
72	Approach Alignment:	(6) Equal Minimum Crit
92A	Fracture Critical Inspection:	No
92B	Under Water Inspection:	No
113	Scour Critical:	(8) Stable above footing
	Recommended Scour Critical:	(6) Calcs Not Made

LOAD RATINGS

63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	0.2 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	0.1 tons
	Truck Capacity Type I:	0 tons
	Truck Capacity Type II:	0 tons
	Truck Capacity Type III:	0 tons
	Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48	Max Length Span:	24.417 ft
49	Structure Length:	38.000 ft
32	Approach Roadway:	12.139 ft
33	Median:	(0) No Median
34	Skew:	0°
35	Flare:	No Flare
50A	Curb/Sidewalk Width L:	0.833 ft
50B	Curb/Sidewalk Width R:	0.833 ft
47	Horiz. Clearance:	17.000 ft
51	Width Curb to Curb:	17.000 ft
52	Width Out to Out:	18.660 ft

ADMINISTRATIVE

27	Year Built:	1940
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:	(02) County Hwy Agency
22	Owner:	(02) County 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:	Unknown
	Signs Posted Non-Cardinal:	Unknown
	Field Postings Gross:	tons
	Field Postings Type I:	tons
	Field Postings Type II:	tons
	Field Postings Type III:	tons
	Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	0	0%	730.12	100%	0	0%	0	0%

Deck all along the forward edge has cracking and spalling that has been patched with asphalt. Right forward has one patched area 3 ft.x4 ft.. See #358 deck cracking. See photos.

7358: DO NOT USE Concrete Cracking

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	663	0	0%	663	100%	0	0%	0	0%

Deck all along the forward edge has cracking and spalling that has been patched with asphalt. Right forward has one patched area 3 ft.x4 ft.. See #358 deck cracking. See photos.

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	0	0%	10.76	100%	0	0%	0	0%

Deck all along the forward edge has cracking and spalling that has been patched with asphalt. Right forward has one patched area 3 ft.x4 ft.. See #358 deck cracking. See photos.

107: Steel 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	196	0	0%	161	82%	30	15%	5	3%

Bridge has eight beams which are all 100% rusty. The two inside beams are made of channel, the remainder are small I-beams. The two center beams are much closer together than the other beams; approximately 1 ft. apart verses 3 ft. (as estimated visually). Could the I-beams be A588 weathering steel? Would need to check the plans to make sure. Third beam from right has some minor thin rust scale on the bottom of bottom flange; this is indicative of weathering steel. All beams have some minor pitting and slight section loss to webs and flanges here and there through out. The 4th from right (which is a channel) is much worse than all the others. The entire beam except up next to abutments has heavy rust scale, rust flaking, a lot of section loss with thin flanges and web. Holes would show up near mid span if all the rust was cleaned off. See photos.

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%

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	115	98	85%	17	15%	0	0%	0	0%

Both of the original abutments have been entirely faced with concrete in the past. Right forward corner has a long diagonal crack with seepage and left forward edge has a small vertical crack with minor seepage. The entire width of rear abutment the spread footer is exposed with minor undermining. This is only a few inches deep going back a few inches. No repairs are needed at this time, but should monitor.

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	76	0	0%	76	100%	0	0%	0	0%

Railing is made up of 2 1/2 in. painted steel angle 2 ft. high on 15 in. high curbs. Originally at each end was a 28 in. turndown angle; all these angles are missing except the right forward.

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%

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)	76	72	95%	4	5%	0	0%	0	0%

Curbs=Bridge has 15 in. curbs 10 in. wide. Right curb the inside face near rear has a 4 ft. long area of random cracking with seepage.

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%	1	100%	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	0	0%	1	100%	0	0%	0	0%

Right rear wing up next to abutment and the entire width of rear abutment has some scour starting back under the footer. This is not serious at this time but to be safe it should be scheduled to face with concrete.

7363: DO NOT USE Steel Section Loss

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%

See Element 106 notes.

STRUCTURE NOTES

86.

Item 113=3 7/5/15 MS

8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES

Bridge is posted at 3 tons. Both signs are in place at this time. See photos.

Inspection Report with SI&A Data

WORK	
Action:	-

90 Inspection Date - 11/30/2007
Inspector - ERICHMOND (81)

081C00009N - **8 Bridge ID**
Standard -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

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:	6	**Sufficiency Rating:**	32.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(6) Calcs Not Made

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	Unknown
Signs Posted Non-Cardinal:	Unknown
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	0	0%	730.12	100%	0	0%	0	0%

Deck all along the forward edge has cracking and spalling that has been patched with asphalt. Right forward has one patched area 3 ft.x4 ft.. See #358 deck cracking.

7358: DO NOT USE Concrete Cracking

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	663	0	0%	663	100%	0	0%	0	0%

Deck all along the forward edge has cracking and spalling that has been patched with asphalt. Right forward has one patched area 3 ft.x4 ft.. See #358 deck cracking.

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	0	0%	10.76	100%	0	0%	0	0%

Deck all along the forward edge has cracking and spalling that has been patched with asphalt. Right forward has one patched area 3 ft.x4 ft.. See #358 deck cracking.

107: Steel 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	196	0	0%	161	82%	30	15%	5	3%

Bridge has eight beams which are all 100% rusty. The two inside beams are made of channel, the remainder are small I-beams. The two center beams are much closer together than the other beams; approximately 1 ft. apart verses 3 ft. (as estimated visually). Could the I-beams be A588 weathering steel? Would need to check the plans to make sure. Third beam from right has some minor thin rust scale on the bottom of bottom flange; this is indicative of weathering steel. All beams have some minor pitting and slight section loss to webs and flanges here and there through out. The 4th from right (which is a channel) is much worse than all the others. The entire beam except up next to abutments has heavy rust scale, rust flaking, a lot of section loss with thin flanges and web. Holes would show up near mid span if all the rust was cleaned off.

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%

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	115	98	85%	17	15%	0	0%	0	0%

Both of the original abutments have been entirely faced with concrete in the past. Right forward corner has a long diagonal crack with seepage and left forward edge has a small vertical crack with minor seepage. The entire width of rear abutment the spread footer is exposed with minor undermining. This is only a few inches deep going back a few inches. No repairs are needed at this time, but should monitor.

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	76	0	0%	76	100%	0	0%	0	0%

Railing is made up of 2 1/2 in. painted steel angle 2 ft. high on 15 in. high curbs. Originally at each end was a 28 in. turndown angle; all these angles are missing except the right forward.

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%

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)	76	72	95%	4	5%	0	0%	0	0%

Curbs=Bridge has 15 in. curbs 10 in. wide. Right curb the inside face near rear has a 4 ft. long area of random cracking with seepage.

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%	1	100%	0	0%	0	0%

When convenient brush growing around bridge should be cut.

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	0	0%	1	100%	0	0%	0	0%

Right rear wing up next to abutment and the entire width of rear abutment has some scour starting back under the footer. This is not serious at this time but to be safe it should be scheduled to face with concrete.

7363: DO NOT USE Steel Section Loss

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%

See Element 106 notes.

Inspection Report with SI&A Data

STRUCTURE NOTES
86. Item 113=3 7/5/15 MS 8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES
Bridge is properly posted at 3 tons.

WORK	
Action:	-

90 Inspection Date - 11/17/2006
Inspector - TFARMER (10)

081C00009N - **8 Bridge ID**
Standard -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

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:	6	**Sufficiency Rating:**	28.5

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(6) Calcs Not Made

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	Unknown
Signs Posted Non-Cardinal:	Unknown
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	606	83%	124.12	17%	0	0%	0	0%

Some fill settlement at the east approach is present and causing some pavement failure. This needs to be corrected. Deck surface has cracking throughout with patched areas at the east approach.

7358: DO NOT USE Concrete Cracking

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	112.71	0	0%	112.71	100%	0	0%	0	0%

Some fill settlement at the east approach is present and causing some pavement failure. This needs to be corrected. Deck surface has cracking throughout with patched areas at the east approach.

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%

Some fill settlement at the east approach is present and causing some pavement failure. This needs to be corrected. Deck surface has cracking throughout with patched areas at the east approach.

107: Steel 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	196	0	0%	161	82%	35	18%	0	0%

All but one beam (actually, a channel) appears to be weathering steel, and is coated with rust. However, the channel not of weathering steel is heavily rusted and flaking, with up to 50% section loss (as estimated visually). Otherwise, the remaining beams have some areas of pitting and flaking on a more minor scale. Beams need to be cleaned and painted.

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%

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	115	98	85%	17	15%	0	0%	0	0%

Abutments have cracking and scaling. Footing of abutment one has some minor undermining present. Need to monitor.

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	76	0	0%	76	100%	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)	76	76	100%	0	0%	0	0%	0	0%

Inspection Report with SI&A Data

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%

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	0	0%	1	100%	0	0%	0	0%

Erosion at the upstream end of west abutment has progressed since the last inspection. This should be corrected as soon as possible.

7363: DO NOT USE Steel Section Loss									
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%

See Element 106 notes.

STRUCTURE NOTES

86.

Item 113=3 7/5/15 MS

8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES

Bridge is properly posted at 3 tons.

WORK

Action:	-

90 Inspection Date - 12/28/2005
Inspector - RROGERS (35)

081C00009N - **8 Bridge ID**
Initial Inspection -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

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:	5	**Sufficiency Rating:**	32

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(8) Stable above footing
Recommended Scour Critical:	(6) Calcs Not Made

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
51 Width Curb to Curb:	17.000 ft
52 Width Out to Out:	18.660 ft

ADMINISTRATIVE

27 Year Built:	1940
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:	(02) County Hwy Agency
22 Owner:	(02) County 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:	Unknown
Signs Posted Non-Cardinal:	Unknown
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

Inspection Report with SI&A Data

12: Re Concrete Deck

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	730.12	606	83%	124.12	17%	0	0%	0	0%

Patched areas and/or spalls/delaminations exist in the deck surface. The combined area of distress is more than 10% but 25% or less of the total deck area.

107: Steel 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	312	0	0%	0	0%	312	100%	0	0%

Beams are rusted and flaking with section loss especially bottom flange. Beams need to be cleaned and painted.

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%

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	115	103	90%	9	8%	3	3%	0	0%

Abutments have cracking and scaling. Footing of abutment one has some minor undermining present. Need to monitor.

STRUCTURE NOTES

86.

Item 113=3 7/5/15 MS

8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES

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Inspection Report with SI&A Data

WORK	
Action:	-

90 Inspection Date - 12/1/2004
Inspector - RROGERS (35)

081C00009N - **8 Bridge ID**
Initial Inspection -**Primary Inspection Type**

Inspection Report with SI&A Data

Structure Description: 39.04 Foot - Single Span Steel Stringer/Multi-beam or Girder
2 District: 09 **3 County:** Mason **16 Latitude:** 38°38'01.00" **7 Longitude:** 83°43'03.00"
7 Facility Carried KENNEDY CREEK RD **Milepoint:** 0.190
6A Feature Intersected: KENNEDY CREEK
9 Location: .05 MI E OF JCT KY 1449

NBI	X
Element	
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS

58 Deck:	6	**61 Channel:**	5
59 Superstructure:	5	**62 Culvert:**	N
60 Substructure:	5	**Sufficiency Rating:**	-1

DESIGN

Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	1
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	0.000 in
Overlay Date:	

APPRAISAL

36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(8) Equal Desirable
72 Approach Alignment:	(6) Equal Minimum Crit
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	No
113 Scour Critical:	(4) Stable, needs action
Recommended Scour Critical:	(6) Calcs Not Made

LOAD RATINGS

63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	0.2 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	0.1 tons
Truck Capacity Type I:	0 tons
Truck Capacity Type II:	0 tons
Truck Capacity Type III:	0 tons
Truck Capacity Type IV:	0 tons

GEOMETRIC DATA

48 Max Length Span:	24.417 ft
49 Structure Length:	38.000 ft
32 Approach Roadway:	12.139 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	0.833 ft
50B Curb/Sidewalk Width R:	0.833 ft
47 Horiz. Clearance:	17.000 ft
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ADMINISTRATIVE

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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:	3 tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	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
86. Item 113=3 7/5/15 MS 8/23/2016 Closure memo due to the load rating of the superstructure. DGA

INSPECTION NOTES
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WORK	
Action:	-

East 3 tons posting.

Moderate longitudinal cracking at the east end of the deck.

Moderate longitudinal cracking at the east end of the deck along the centerline.

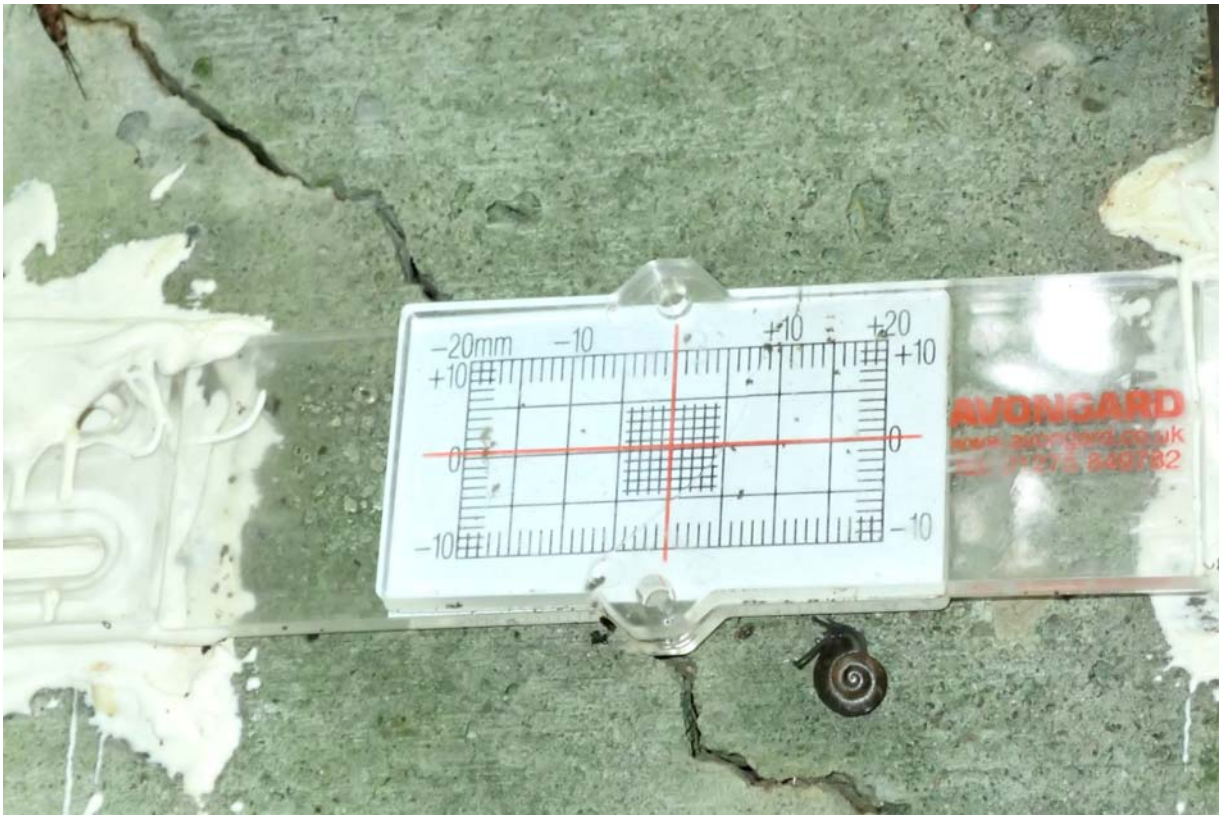
Moderate longitudinal cracking at the west end of the deck.

1' x 1' void at the upstream west end of the deck.

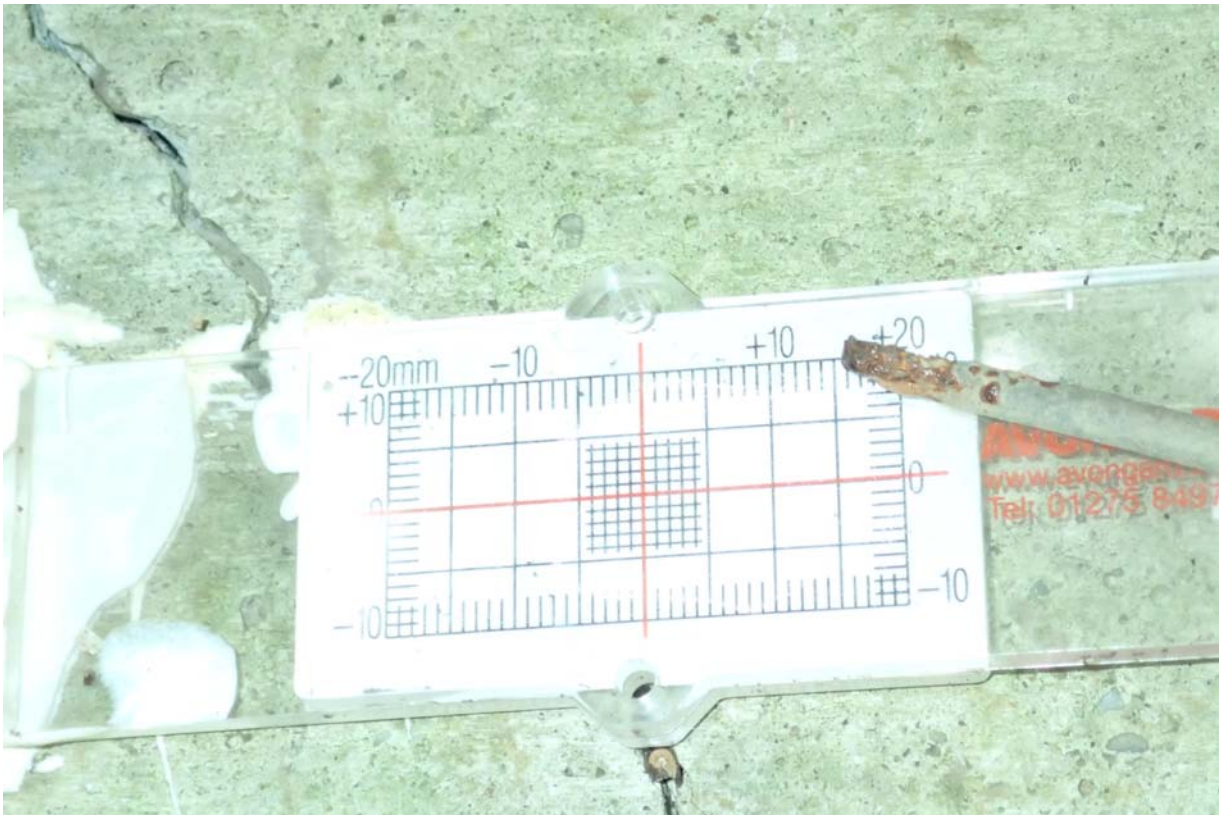
West 3 tons posting.

Upstream view.

Moderate sized (1/16" typical) diagonal cracking in the upstream west wingwall.



View of the crack gauge on the forward crack (toward stream) in the upstream west wingwall.



View of the crack gauge on the rear crack in the upstream west wingwall.

Moderate to heavy intensity of minor sized cracking and moderate spalling at the upstream west abutment/wingwall interface.

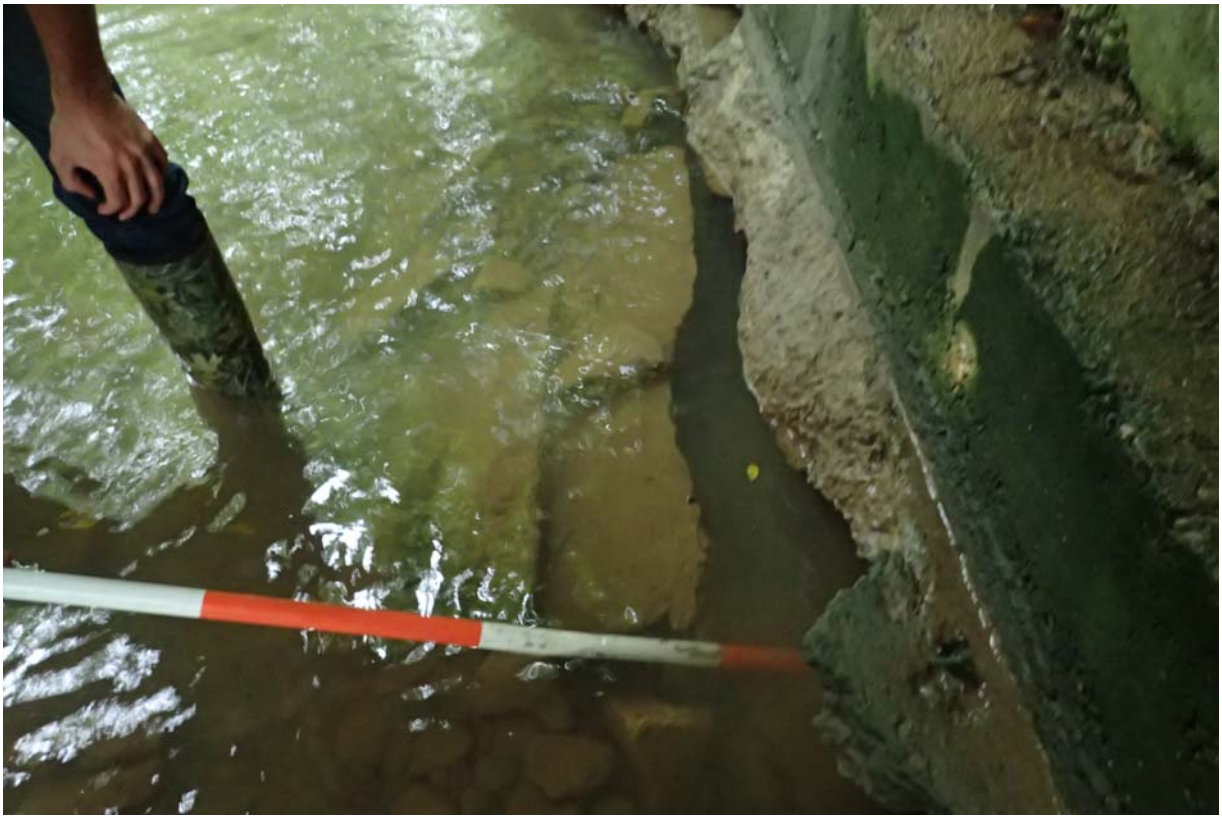
Up to 24" of horizontal undermining at the upstream end of the west abutments footing/ apron.

Up to 12" of vertical undermining at the upstream end of the west abutments footing/apron.

Up to 24" of horizontal undermining at the upstream end of the west abutments footing/apron.

Approximate width of west abutments footing/apron.

View of spalling and sections broken off of the west abutments concrete protection apron.



Approximate 1' of horizontal undermining of the west abutments footing near midlength.

Approximate 6" of horizontal undermining at the downstream end of the west abutments footing.

Moderate diagonal cracking (~3/16"- 1/4") in the downstream west wingwall.

Crack gauge monitoring moderate diagonal cracking (~3/16"- 1/4") in the downstream west wingwall.

View from downstream.

Minor undermining (horizontally up to 5") along the downstream 1/2 of the east abutments footing.

Minor undermining (horizontally up to 5") along the downstream 1/2 of the east abutments footing.

Beams and deck underside.

Beams and deck underside.

Moderate to heavy corrosion at the west end of beam 3 from upstream.

Heavy corrosion along beam 4 from upstream.

Heavy corrosion along beam 4 from upstream.

Heavy corrosion at the west end of beam 6 from upstream.

Smart level measurement on the upstream west wingwall.

Smart level measurement at the upstream end of the west abutment.

Smart level measurement at the downstream end of the west abutment.

Smart level measurement on the downstream west wingwall.

Smart level measurement at the downstream end of the east abutment.

Smart level measurement on the downstream east wingwall.

Beam 4 near the east abutment.

Sighting along beam 4 near the east abutment.

Sighting along beam 7 from upstream. Notice the bow in the downstream direction.

Sighting along beam 8 from upstream. Notice the bow in the downstream direction.

Full height rust through hole in the web of beam 4 from upstream near midspan.

Large rust through hole in the web of beam 4 from upstream ~ 7' from the west abutment.

Heavy section loss within the width and thickness of beam 4s bottom flange ~ 7' from the west abutment.

Heavy section loss within the width and thickness of beam 4s bottom flange ~ 7' from the west abutment.

Heavy section loss within the width and thickness of beam 4s bottom flange ~ 7' from the west abutment.

Heavy corrosion of beam 6 from upstream near the west abutment.