NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: PRIORITY MAINTENANCE, TEMPORARY REPAIR TO CHANNEL GIRDER

Structure Safety Report

Routine Element Inspection - Contract

COUNTY: LINCOLN **STRUCTURE NUMBER:** 540121 **FREQUENCY:** 24 MONTHS

FACILITY CARRIED: SR1113 **MILE POST:**

LOCATION: 0.1 MI. E. JCT. SR1205

FEATURE INTERSECTED: TANYARD CREEK

LATITUDE: 35° 30' 48.57" **LONGITUDE:** 81° 20' 14.14"

SUPERSTRUCTURE: PRECAST PRESTRESSED CONCRETE CHANNELS

SUBSTRUCTURE: END & INTERIOR BENTS:PPC CAPS ON TIMBER PILES,TIM.BULKHEADS

1@ 30-'3" ,1 @ 30'-0" ,1 @ 30'-3"

SPANS: 1@30'3 ,1@30'0 ,1@30'3

☐ FRACTURE CRITICAL ☐ TEMPORARY SHORING ☐ SCOUR CRITICAL ☐ SCOUR PLAN OF ACTION

PRESENT CONDITION: Poor **INSPECTION DATE:** 01/14/2016

POSTED SV: 24 **POSTED TTST:** 28

OTHER SIGNS PRESENT: (4) DELINEATORS



Looking east

Sign noticed issued for		Number Required
NO	**WEIGHT LIMIT**	0
NO	**DELINEATORS**	0
NO	**NARROW BRIDGE**	0
NO	**ONE LANE BRIDGE**	0
NO	**LOW CLEARANCE**	0

INSPECTED BY	SIGNATURE	ASSISTED BY
JOHN SLOAN	John Sloan	NICOLE BROWN

Span Element Report

Structure Number: 540121 Inspection Date: 01/14/2016

Span Number 1 **Span Length** 30.25 Feet **Number of Slabs/Channels:** 10

Element Number	Parent Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code
15		Prestressed Concrete Top Flange	760	757	0	3	0	3	3326
109		Prestressed Concrete Open Girder/Bea	310	264	34	9	3	46	3306
228		Timber Pile	5	5	0	0	0	0	3344
234		Reinforced Concrete Pier Cap	26	26	0	0	0	0	3348
330		Metal Bridge Railing	62	62	0	0	0	0	3322
510		Wearing Surface	732	384	0	348	0	348	2816

"Near" Approach and Substructure quantities have been include for reporting purposes. The last span will also include End Bent 2 and Far Approach quantities where applicable

Span Number 2 **Span Length** 30 Feet **Number of Slabs/Channels:** 10

Element Number	Parent Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code
15		Prestressed Concrete Top Flange	750	750	0	0	0	0	3326
109		Prestressed Concrete Open Girder/Bea	300	268	24	6	2	32	3306
228		Timber Pile	5	5	0	0	0	0	3344
234		Reinforced Concrete Pier Cap	26	21	0	5	0	5	3348
330		Metal Bridge Railing	60	60	0	0	0	0	3322
510		Wearing Surface	720	396	0	324	0	324	2816

"Near" Approach and Substructure quantities have been include for reporting purposes. The last span will also include End Bent 2 and Far Approach quantities where applicable

Span Number 3 **Span Length** 30.25 Feet **Number of Slabs/Channels:** 10

Element Number	Parent Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code
15		Prestressed Concrete Top Flange	760	760	0	0	0	0	3326
109		Prestressed Concrete Open Girder/Bea	310	273	27	10	0	37	3306
228		Timber Pile	10	9	1	0	0	3	3344
234		Reinforced Concrete Pier Cap	52	43	6	3	0	9	3348
330		Metal Bridge Railing	62	62	0	0	0	0	3322
510		Wearing Surface	726	402	0	324	0	324	2816

"Near" Approach and Substructure quantities have been include for reporting purposes. The last span will also include End Bent 2 and Far Approach quantities where applicable

Superstructure Detailed Element Quantites

Structure Number: 540121 Inspection Date: 01/14/2016

Span Number 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☑ Bridge Rail	1	330	Metal Bridge Railing	31	31	0	0	0	0	3322	☐ Requested
☑ Bridge Rail	2	330	Metal Bridge Railing	31	31	0	0	0	0	3322	☐ Requested
☑ Wearing Surfaces		510	Wearing Surface	732	384	0	348	0	348	2816	☐ Requested
☐ Beam	1	15	Prestressed Concrete Top Flange	76	74	0	2	0	2	3326	☐ Requested
☑ Beam	1	109	Prestressed Concrete Open Girder/Beam	31	28	2	1	0	3	3306	☑ Requested
☐ Beam	2	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	2	109	Prestressed Concrete Open Girder/Beam	31	27	2	2	0	4	3306	☐ Requested
☐ Beam	3	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	3	109	Prestressed Concrete Open Girder/Beam	31	28	2	1	0	3	3306	☑ Requested
☐ Beam	4	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	4	109	Prestressed Concrete Open Girder/Beam	31	28	2	1	0	3	3306	☑ Requested
☐ Beam	5	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	5	109	Prestressed Concrete Open Girder/Beam	31	25	3	0	3	6	3306	☑ Requested
☐ Beam	6	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	6	109	Prestressed Concrete Open Girder/Beam	31	15	12	4	0	16	3306	☑ Requested
☐ Beam	7	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	7	109	Prestressed Concrete Open Girder/Beam	31	29	2	0	0	2	3306	☐ Requested
☐ Beam	8	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	8	109	Prestressed Concrete Open Girder/Beam	31	28	3	0	0	3	3306	☐ Requested
☐ Beam	9	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	9	109	Prestressed Concrete Open Girder/Beam	31	28	3	0	0	3	3306	☐ Requested
☐ Beam	10	15	Prestressed Concrete Top Flange	76	75	0	1	0	1	3326	☐ Requested
☑ Beam	10	109	Prestressed Concrete Open Girder/Beam	31	28	3	0	0	3	3306	☐ Requested

Structure Number: 540121 Inspection Date: 01/14/2016

Span Number 2

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☑ Bridge Rail	1	330	Metal Bridge Railing	30	30	0	0	0	0	3322	☐ Requested
☑ Bridge Rail	2	330	Metal Bridge Railing	30	30	0	0	0	0	3322	☐ Requested
☑ Wearing Surfaces		510	Wearing Surface	720	396	0	324	0	324	2816	☐ Requested
☐ Beam	1	15	Prestressed Concrete Top Flange	75	75	0	0	0	0	3326	☐ Requested
☑ Beam	1	109	Prestressed Concrete Open Girder/Beam	30	28	2	0	0	2	3306	☐ Requested
☐ Beam	2	15	Prestressed Concrete Top Flange	75	75	0	0	0	0	3326	☐ Requested
☑ Beam	2	109	Prestressed Concrete Open Girder/Beam	30	27	3	0	0	3	3306	☐ Requested
☐ Beam	3	15	Prestressed Concrete Top Flange	75	75	0	0	0	0	3326	☐ Requested
☑ Beam	3	109	Prestressed Concrete Open Girder/Beam	30	27	3	0	0	3	3306	☐ Requested
☐ Beam	4	15	Prestressed Concrete Top Flange	75	75	0	0	0	0	3326	☐ Requested
☑ Beam	4	109	Prestressed Concrete Open Girder/Beam	30	26	4	0	0	4	3306	☐ Requested
☐ Beam	5	15	Prestressed Concrete Top Flange	75	75	0	0	0	0	3326	☐ Requested
☑ Beam	5	109	Prestressed Concrete Open Girder/Beam	30	26	2	1	1	4	3306	☑ Requested
☐ Beam	6	15	Prestressed Concrete Top Flange	75	75	0	0	0	0	3326	☐ Requested
☑ Beam	6	109	Prestressed Concrete Open Girder/Beam	30	25	2	2	1	5	3306	☑ Requested
☐ Beam	7	15	Prestressed Concrete Top Flange	75	75	0	0	0	0	3326	☐ Requested
☑ Beam	7	109	Prestressed Concrete Open Girder/Beam	30	28	2	0	0	2	3306	☐ Requested
☐ Beam	8	15	Prestressed Concrete Top Flange	75	75	0	0	0	0	3326	☐ Requested
☑ Beam	8	109	Prestressed Concrete Open Girder/Beam	30	25	2	3	0	5	3306	☐ Requested
☐ Beam	9	15	Prestressed Concrete Top Flange	75	75	0	0	0	0	3326	☐ Requested
☑ Beam	9	109	Prestressed Concrete Open Girder/Beam	30	28	2	0	0	2	3306	☐ Requested
☐ Beam	10	15	Prestressed Concrete Top Flange	75	75	0	0	0	0	3326	☐ Requested
☑ Beam	10	109	Prestressed Concrete Open Girder/Beam	30	28	2	0	0	2	3306	☐ Requested

Structure Number: 540121 Inspection Date: 01/14/2016

Span Number 3

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☑ Bridge Rail	1	330	Metal Bridge Railing	31	31	0	0	0	0	3322	☐ Requested
☑ Bridge Rail	2	330	Metal Bridge Railing	31	31	0	0	0	0	3322	☐ Requested
☑ Wearing Surfaces		510	Wearing Surface	726	402	0	324	0	324	2816	☐ Requested
☐ Beam	1	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	1	109	Prestressed Concrete Open Girder/Beam	31	29	2	0	0	2	3306	☐ Requested
☐ Beam	2	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	2	109	Prestressed Concrete Open Girder/Beam	31	27	3	1	0	4	3306	☐ Requested
☐ Beam	3	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	3	109	Prestressed Concrete Open Girder/Beam	31	28	3	0	0	3	3306	☐ Requested
☐ Beam	4	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	4	109	Prestressed Concrete Open Girder/Beam	31	26	2	3	0	5	3306	☑ Requested
☐ Beam	5	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	5	109	Prestressed Concrete Open Girder/Beam	31	28	3	0	0	3	3306	☐ Requested
☐ Beam	6	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	6	109	Prestressed Concrete Open Girder/Beam	31	27	3	1	0	4	3306	☐ Requested
☐ Beam	7	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	7	109	Prestressed Concrete Open Girder/Beam	31	29	2	0	0	2	3306	☐ Requested
☐ Beam	8	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	8	109	Prestressed Concrete Open Girder/Beam	31	27	3	1	0	4	3306	☑ Requested
☐ Beam	9	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	9	109	Prestressed Concrete Open Girder/Beam	31	27	3	1	0	4	3306	☑ Requested
☐ Beam	10	15	Prestressed Concrete Top Flange	76	76	0	0	0	0	3326	☐ Requested
☑ Beam	10	109	Prestressed Concrete Open Girder/Beam	31	25	3	3	0	6	3306	☑ Requested

Superstructure Element Defect Descriptions

Structure Number: 540121 Inspection Date: 01/14/2016

Span Number 1

Span 1 **Wearing Surfaces** **Component Name:** Asphalt Wearing Surface

Element: 510 **Name** Wearing Surface **Qty:** 732 **Lvl 2:** 0 **Lvl 3** 348 **Lvl 4** 0 **Maint. Qty** 348

Defect Description:

300 sq ft area of 1/8 in wide longitudinal cracks between channel units in the eastbound lane.

24 sq ft: Full width transverse crack, 1/8 in wide at Bent 1.
24 sq ft: Full width transverse crack, 1/8 in wide at End Bent 1.

Span 1 **Beam** 1 **Component Name:** Prestressed Concrete Channel

Element: 15 **Name** Prestressed Concrete Top Flan **Qty:** 76 **Lvl 2:** 0 **Lvl 3** 2 **Lvl 4** 0 **Maint. Qty** 2

Defect Description:

2 square feet of spall, 1 inch deep, 5 ft from End Bent 1.

Span 1 **Beam** 1 **Component Name:** Prestressed Concrete Channel



Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 2 **Lvl 3** 1 **Lvl 4** 0 **Maint. Qty** 3

Defect Description:

2 in diameter spall, 1 inch deep, with exposed prestressing strand, in web 2, at midspan.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 1 **Beam** 2 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 2 **Lvl 3** 2 **Lvl 4** 0 **Maint. Qty** 4

Defect Description:

1 ft of spall, 3 inches deep, at the bearing at End Bent 1, at web 1.
2 inch diameter, 1 inch deep spall, in web 2, at mid-span; web 1 is similar.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 1 **Beam** 3 **Component Name:** Prestressed Concrete Channel



Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 2 **Lvl 3** 1 **Lvl 4** 0 **Maint. Qty** 3

Defect Description:

1 feet of spall, 3 inches deep, in web 2, with exposed prestressing.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 1 **Beam** 4 **Component Name:** Prestressed Concrete Channel



Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 2 **Lvl 3** 1 **Lvl 4** 0 **Maint. Qty** 3

Defect Description:

1 ft x 3 in spall, 3 inches deep, with exposed prestressing strand, 30% section loss, on web 1, at Bent 1. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 1 **Beam** 5 **Component Name:** Prestressed Concrete Channel



Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 3 **Lvl 3** 0 **Lvl 4** 3 **Maint. Qty** 6

Defect Description:

3 feet of exposed prestressing with a spall up to 6 inches deep, in web 2, at End Bent 1. The strand is broken, 100% section loss. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.

4 in diameter spall, 1/2 inch deep spall, no exposed prestressing strands.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 1 **Beam** 6 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 12 **Lvl 3** 4 **Lvl 4** 0 **Maint. Qty** 16

Defect Description:

4 ft spall, 4 inches deep, with exposed prestressing, in web 1, 50% section loss in the strand, 5 ft from Bent 1. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.

4 in x 4 in patched area is delaminated in web 1, at Bent 1.
8 ft of patched area; 2 ft of patch is delaminated, in web 1 at midspan.

1 ft of exposed stirrups in the beam end diaphragm at Bent 1.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 1 **Beam** 7 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 2 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 2

Defect Description:

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 1 **Beam** 8 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 3 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 3

Defect Description:

1 ft x 3 in patched area, area is sound in both webs at Bent 1.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 1 **Beam** 9 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 3 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 3

Defect Description:

1 ft of exposed stirrups in the beam end diaphragm at Bent 1.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 1 **Beam** 10 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 3 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 3

Defect Description:

1 ft of exposed stirrups in the beam end diaphragm at Bent 1.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 1 **Beam** 10 **Component Name:** Prestressed Concrete Channel

Element: 15 **Name** Prestressed Concrete Top Flan **Qty:** 76 **Lvl 2:** 0 **Lvl 3** 1 **Lvl 4** 0 **Maint. Qty** 1

Defect Description:

12 inch diameter spall, 1/2 inch deep, at mid-span.

Span Number 2

Span 2 **Wearing Surfaces** **Component Name:** Asphalt Wearing Surface

Element: 510 **Name** Wearing Surface **Qty:** 720 **Lvl 2:** 0 **Lvl 3** 324 **Lvl 4** 0 **Maint. Qty** 324

Defect Description:

300 sq ft area of 1/8 in wide longitudinal cracks between channel units in the eastbound lane.

24 sq ft: Full width transverse crack, 1/8 in wide at Bent 2.

Span 2 **Beam** 1 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 30 **Lvl 2:** 2 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 2

Defect Description:

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 2 **Beam** 2 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 30 **Lvl 2:** 3 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 3

Defect Description:

1 ft of patched area in both webs at Bent 2

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 2 **Beam** 3 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 30 **Lvl 2:** 3 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 3

Defect Description:

1 ft of patched area in both webs at Bent 2

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 2 **Beam** 4 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 30 **Lvl 2:** 4 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 4

Defect Description:

1 ft of patched area in web 2, at Bent 1.
1 ft of patched area in both webs at Bent 2
1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 2 **Beam** 5 **Component Name:** Prestressed Concrete Channel 

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 30 **Lvl 2:** 2 **Lvl 3** 1 **Lvl 4** 1 **Maint. Qty** 4

Defect Description:

1 ft of spall, 3 inches deep, with exposed prestressing strand, in web 2, at Bent 1.

1 ft of spall, 6 inches deep with exposed prestressing, 100% section loss in web 1, Bent 2. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 2 **Beam** 6 **Component Name:** Prestressed Concrete Channel 

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 30 **Lvl 2:** 2 **Lvl 3** 2 **Lvl 4** 1 **Maint. Qty** 5

Defect Description:

2 ft spall, 3 inches deep, with exposed prestressing strands, 60% section loss in flange 1, at Bent 1. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.

1 ft of exposed prestressing, strand is broken, 100% section loss, flange 2, at Bent 1. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 2 **Beam** 7 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 30 **Lvl 2:** 2 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 2

Defect Description:

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 2 **Beam** 8 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 30 **Lvl 2:** 2 **Lvl 3** 3 **Lvl 4** 0 **Maint. Qty** 5

Defect Description:

3 ft of spall, 1/2 inch deep with exposed rebar, in web 1, 10 ft from Bent 1.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 2 **Beam** 9 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 30 **Lvl 2:** 2 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 2

Defect Description:

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 2 **Beam** 10 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 30 **Lvl 2:** 2 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 2

Defect Description:

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span Number 3

Span 3 **Wearing Surfaces** **Component Name:** Asphalt Wearing Surface

Element: 510 **Name** Wearing Surface **Qty:** 726 **Lvl 2:** 0 **Lvl 3** 324 **Lvl 4** 0 **Maint. Qty** 324

Defect Description:

300 sq ft area of 1/8 in wide longitudinal cracks between channel units in the eastbound lane.

24 sq ft: Full width transverse crack, 1/8 in wide at End Bent 2.

Span 3 **Beam** 1 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 2 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 2

Defect Description:

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 3 **Beam** 2 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 3 **Lvl 3** 1 **Lvl 4** 0 **Maint. Qty** 4

Defect Description:

1 ft x 3 in spall, 3 inches deep with exposed prestressing with 80% section loss in web 1 at midspan. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.

6 in x 2 in, 1 inch deep spall in both webs at End Bent 2.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 3 **Beam** 3 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 3 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 3

Defect Description:

1 ft of patched area in web 1 at Bent 2.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 3 **Beam** 4 **Component Name:** Prestressed Concrete Channel



Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 2 **Lvl 3** 3 **Lvl 4** 0 **Maint. Qty** 5

Defect Description:

6 in x 3 in spall, 3 inches deep with exposed prestressing in web 2, at Bent 2.

8 in x 2 in, 4 inches deep spall with exposed prestressing strand, with 30% section loss and 20% loss of bearing area in web 2, at End Bent 2. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.

8 in x 2 in, 3 inches deep spall with exposed prestressing strand, with 30% section loss in web 1, at End Bent 2. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 3 **Beam** 5 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 3 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 3

Defect Description:

2 inch diameter spall, 1/2 inch deep with exposed rebar in web 2, at Bent 2.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 3 **Beam** 6 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 3 **Lvl 3** 1 **Lvl 4** 0 **Maint. Qty** 4

Defect Description:

2 inch diameter spall, 1/2 inch deep with exposed rebar in web 1, at Bent 2.

12 in x 2 in, 4 inch deep spall and 10% loss of bearing area in web 1, at End Bent 2.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 3 **Beam** 7 **Component Name:** Prestressed Concrete Channel

Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 2 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 2

Defect Description:

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 3 **Beam** 8 **Component Name:** Prestressed Concrete Channel



Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 3 **Lvl 3** 1 **Lvl 4** 0 **Maint. Qty** 4

Defect Description:

6 in x 2 in spall, 2 inches deep with exposed prestressing in web 2, at Bent 2.

6 in x 1 in spall, 2 inches deep in web 1, at midspan.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 3 **Beam** 9 **Component Name:** Prestressed Concrete Channel



Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 3 **Lvl 3** 1 **Lvl 4** 0 **Maint. Qty** 4

Defect Description:

8 in x 3 in, 3 inches deep with exposed prestressing strand 75% section loss in web 1, at Bent 2. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.

1 ft of delamination in web 2, at End Bent 2.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Span 3 **Beam** 10 **Component Name:** Prestressed Concrete Channel



Element: 109 **Name** Prestressed Concrete Open Gir **Qty:** 31 **Lvl 2:** 3 **Lvl 3** 3 **Lvl 4** 0 **Maint. Qty** 6

Defect Description:

3 inch diameter spall, 1 inch deep with exposed rebar in web 2, at Bent 2.

30 in x 2 in, 3 inch deep spall with exposed prestressing strand with 60% section loss in web 1, at End Bent 2. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.

1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings.

Substructure Detailed Element Quantites

Structure Number: 540121 Inspection Date: 01/14/2016

End Bent 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☑ Caps	1	234	Reinforced Concrete Pier Cap	26	26	0	0	0	0	3348	☐ Requested
☑ Piles and Columns	1	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	2	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	3	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	4	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	5	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested

Bent 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☑ Caps	1	234	Reinforced Concrete Pier Cap	26	21	0	5	0	5	3348	☐ Requested
☑ Piles and Columns	1	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	2	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	3	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	4	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	5	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested

Bent 2

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☑ Caps	1	234	Reinforced Concrete Pier Cap	26	17	6	3	0	9	3348	☑ Requested
☑ Piles and Columns	1	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	2	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	3	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	4	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	5	228	Timber Pile	1	0	1	0	0	3	3344	☐ Requested

Structure Number: 540121 Inspection Date: 01/14/2016

End Bent 2

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☑ Caps	1	234	Reinforced Concrete Pier Cap	26	26	0	0	0	0	3348	☐ Requested
☑ Piles and Columns	1	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	3	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	2	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	4	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☑ Piles and Columns	5	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested

Substructure Element Defect Descriptions

Structure Number: 540121 Inspection Date: 01/14/2016

Bent 1

Bent 1 **Row** 1 **Caps** 1

Element: 234 **Name** Reinforced Concrete Pier Cap **Qty:** 26 **Lvl 2:** 0 **Lvl 3** 5 **Lvl 4** 0 **Maint. Qty** 5

Defect Description:

8 inch diameter spall, 1/2 inch deep, beneath web 1 in beam 1, span 2 face.

8 inch diameter spall, 1 inch deep, under web 1 in beam 3, span 1 face.

2 ft of efflorescence with heavy buildup, 1/4 inch thick with 4 inch long stalactites under the cap.

8 inch diameter spall, 1 inch deep, under web 1 in beam 1, span 2 face.

Bent 2 **Row** 1 **Caps** 1

Element: 234 **Name** Reinforced Concrete Pier Cap **Qty:** 26 **Lvl 2:** 6 **Lvl 3** 3 **Lvl 4** 0 **Maint. Qty** 9

Defect Description:

6 in x 3 in spall, 1 inch deep, at pile 1, on span 2 face.

2 ft of delamination at pile 2, span 2 face.

3 in diameter spall, 1 inch deep, at pile 3, on span 2 face.

6 in x 6 in spall, 2 inches deep, at pile 3, on span 2 face.

3 in diameter spall, 1 inch deep, at pile 5, on span 2 face.

1 inch of timber subcap compression with softness, at pile 1, on span 3 face.

6 in x 3 in spall, 1 inch deep, at pile 1, on span 3 face.

1/2 inch of timber subcap compression with softness, at pile 4, on span 3 face.

Bent 2 **Row** 1 **Piles and Columns** 5

Element: 228 **Name** Timber Pile **Qty:** 1 **Lvl 2:** 1 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 3

Defect Description:

3 ft of checks, penetrates less than 50% of the member.

National Bridge and NC Inspection Items

Structure Number: 540121 **Inspection Date:** 01/14/2016

National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	**6**
Item 59: Superstructure	0 - 9 , N	**4**
Item 60: Substructure	0 - 9 , N	**4**
Item 61: Channel and Channel Protection	0 - 9 , N	**5**
Item 62: Culvert	0 - 9 , N	**N**
Item 71: Waterway Adequacy	0 - 9 , N	**5**
Item 72: Approach Roadway Alignment	0 - 9 , N	**8**

Note: If NBI Inspection Item is not present, code NBI item with "N"

NC SMU Inspection Items

Item	Grade Scale	Grade	Maint. Qty.	Maint. Code
Deck Debris	G, F, P, or C	**G**	**0**	**3376**
Drainage System	G, F, P, or C	**G**	**0**	**3332**
Utilities	G, F, P, or C			
Slope Protection	G, F, P, or C		**0**	**3352**
Scour	G, F, P, or C	**F**		
Wingwall	G, F, P, or C		**0**	**3350**
Field Scour Evaluation		**U**		
Drift	G, F, P, or C	**G**	**0**	**3366**
Fender System	G, F, P, or C		**0**	**3364**
Movable Span Machinery	G, F, P, or C			
Response to Live Load	G, F, P, or C	**F**		
Estimated Remaining Life	0 - 100 Years	**5**		

Note: If NC SMU Insepction Item is not present, leave NC SMU item blank

Inspection Information

Item	Grade Scale	Grade
Regulatory Sign Noticed Issued	YES/NO	**N**
Priority Maintenance Request Submitted	YES/NO	**Y**
Inspection Time	Hours	**10**
Traffic Control Time	Hours	**0**
Snooper Time	Hours	**0**
Ladder Used	YES/NO	**Y**
Bucket Truck Used	YES/NO	**N**
Boat Used	YES/NO	**N**
Other Equipment Used	YES/NO	**N**

National Bridge and NC SMU Inspection Item Details

Structure Number: 540121 **Inspection Date:** 01/14/2016

Item	Deck - Item 58	**Grade**	6	**Maint Code**		**Qty.**	0
Details	Spalls in the soffit of the deck.						
Item	Superstructure - Item 59	**Grade**	4	**Maint Code**		**Qty.**	0
Details	Multiple exposed prestressing strands with significant section loss.						
Item	Substructure - Item 60	**Grade**	4	**Maint Code**		**Qty.**	0
Details	Spalls in Bents 1 and 2 caps, and compression of timber subcap at Bent 2.						
Item	Channel and Channel Protection - Item 61	**Grade**	5	**Maint Code**		**Qty.**	0
Details	Bank protection is being eroded.						
Item	Waterway Adequacy - Item 71	**Grade**	5	**Maint Code**		**Qty.**	0
Details	Narrow channel with low available free boarding in spans 1 and 3.						
Item	Scour	**Grade**	F	**Maint Code**		**Qty.**	0
Details	Northwest streambank erosion: streambank has a 6 ft high vertical face at Bent 2.						
Item	Response to live load	**Grade**	F	**Maint Code**		**Qty.**	0
Details	Vibrations under truck traffic.						



8 ft long, 3 inch wide, full depth decay in timber cross-brace, at Bent 1, Pile 4.



Span 1 Channel/Slab 2: 1 ft of spall, 3 inches deep, at the bearing at End Bent 1, in web 1.



Span 1 Channel/Slab 3: 1 feet of spall, 3 inches deep, in web 2, with exposed prestressing.



Span 1 Channel/Slab 5: 3 feet of exposed prestressing with a spall up to 6 inches deep. The strand is broken, 100% section loss. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.



Span 1 Channel/Slab 10: 12 inch diameter spall, 1/2 inch deep, at mid-span.



Span 1 Channel/Slab 10: Exposed stirrups in the girder end diaphragm at Bent 1.



Span 1 Channel/Slab 6: 4 ft spall, 4 inches deep, with exposed prestressing, in web 1, 50% section loss in the strand, 5 ft from Bent 1. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.



Span 1 Channel/Slab 4: 1 ft x 3 in spall, 3 inches deep, with exposed prestressing strand, 30% section loss, in web 1, at Bent 1. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.



Span 1 Channel/Slab 6: 4 in x 4 in patched area is delaminated in web 1, at Bent 1.



Span 1 Channel/Slab 8: 1 ft x 3 in patched area, area is sound; in both webs at Bent 1.



Span 1 Channel/Slab 1: 2 in diameter spall, 1 inch deep, with exposed prestressing strand, in web 2, at midspan.



Span 1 Channel/Slab 2: 2 inch diameter, 1 inch deep spall, in web 2, at mid-span. Web 1 is similar.



Span 1 Channel/Slab 5: 4 in diameter spall, 1/2 inch deep spall.



Span 1 Channel/Slab 6: 8 ft of patched area; 2 ft of patch is delaminated, in web 1, at midspan.



Bent 1 Cap : 8 inch diameter spall, 1/2 inch deep, beneath web 1 in beam 1, span 2 face.



Bent 1 Cap : 8 inch diameter spall, 1 inch deep, under web 1 in beam 3, span 1 face.



Bent 1 Cap : 2 ft of efflorescence with heavy buildup, 1/4 inch thick with 4 inch long stalactites.



Span 1 Channel/Slab 1: 1 ft of embedded bearing plate corrosion, without section loss, in both webs, and both near and far bearings. All others similar.



Bent 1 Cap : 8 inch diameter spall, 1 inch deep, under beam 1 in web 2, span 2 face.



Span 2 Channel/Slab 4: 1 ft of patched area in web 2, at Bent 1.



Span 2 Channel/Slab 5: 1 ft of spall, 3 inches deep, with exposed prestressing strand, in web 2, at Bent 1.



Span 2 Channel/Slab 6: 2 ft spall, 3 inches deep, with exposed prestressing strands, 60% section loss at Bent 1. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.



Span 2 Channel/Slab 6: 1 ft of exposed prestressing, strand is broken, 100% section loss, in web 2 at Bent 1. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.



Span 2 Channel/Slab 5: 1 ft of spall, 6 inches deep with exposed prestressing, 100% section loss in web 1, at Bent 2. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.



Bent 2 Cap : 6 in x 6 in spall, 2 inches deep at pile 3, on span 2 face.



Bent 2 timber subcap: 3 ft of softness between piles 3 and 4, on span 2 face.



Bent 2 Cap : 1 inch of timber subcap compression with softness at pile 1 on span 3 face.



Span 3 Channel/Slab 4: 6 in x 3 in spall, 3 inches deep with exposed prestressing in web 2, at Bent 2.



Span 3 Channel/Slab 8: 6 in x 2 in spall, 2 inches deep with exposed prestressing in web 2, at Bent 2.



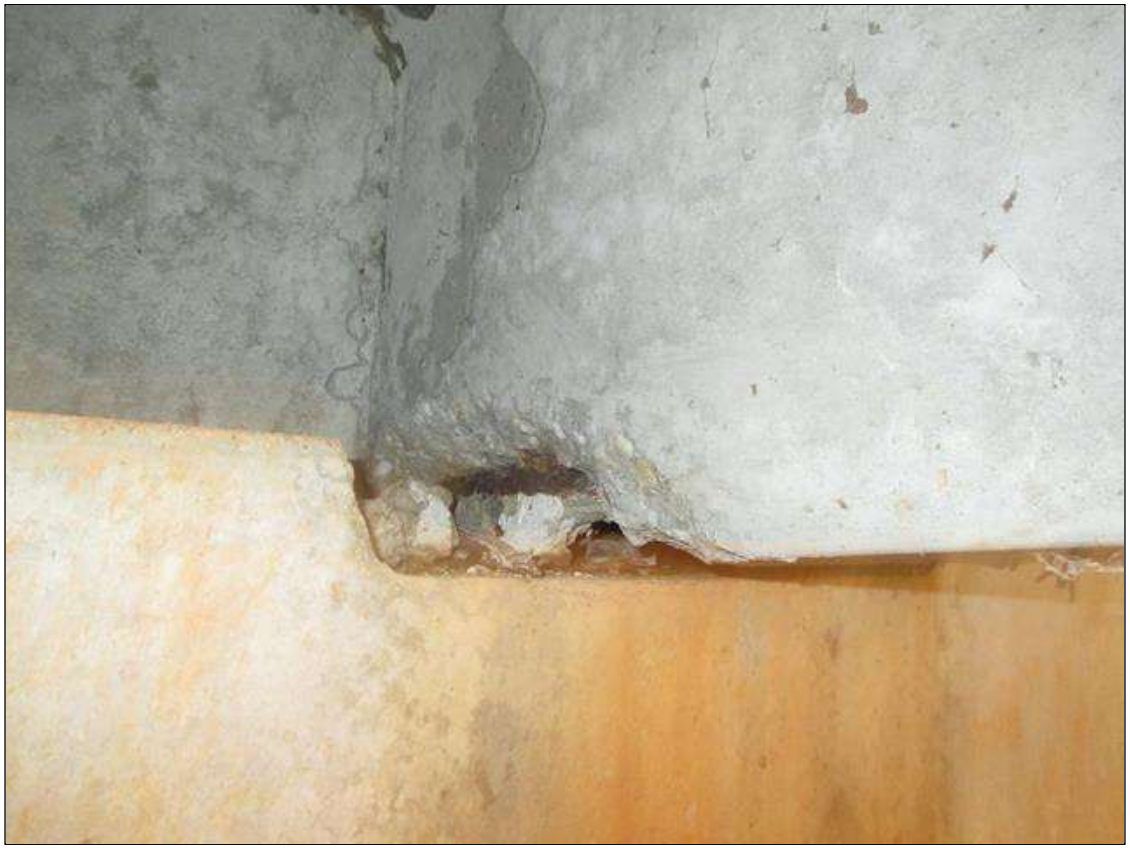
Span 3 Channel/Slab 9: 8 in x 3 in, 3 inches deep with exposed prestressing strand 75% section loss in web 1, at Bent 2. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.



Bent 2 Cap : 1/2 inch of timber subcap compression with softness at pile 4, on span 3 face.



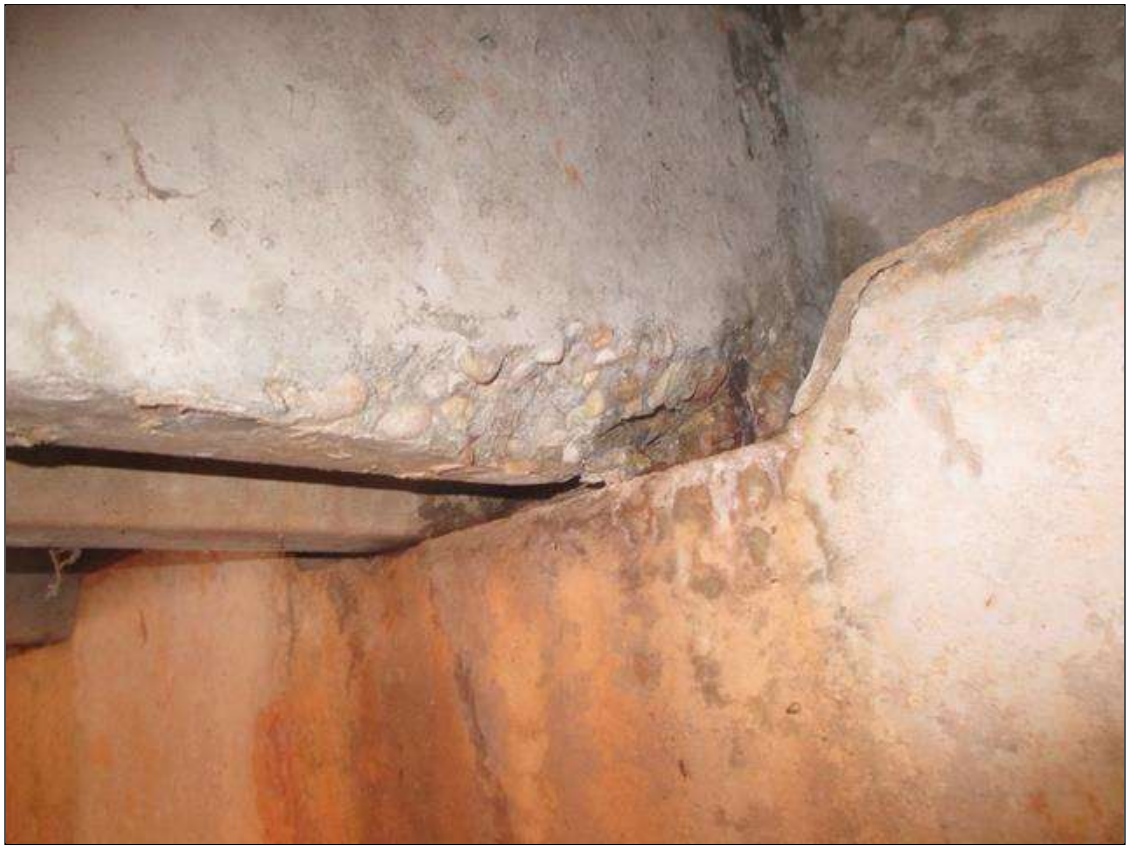
Span 3 Channel/Slab 2: 1 ft x 3 in spall, 3 inches deep with exposed prestressing with 80% section loss in web 1 at midspan. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.



Span 3 Channel/Slab 4: 8 in x 2 in, 4 inches deep spall with exposed prestressing strand with 30% section loss and 20% loss of bearing area in web 2, at End Bent 2. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.



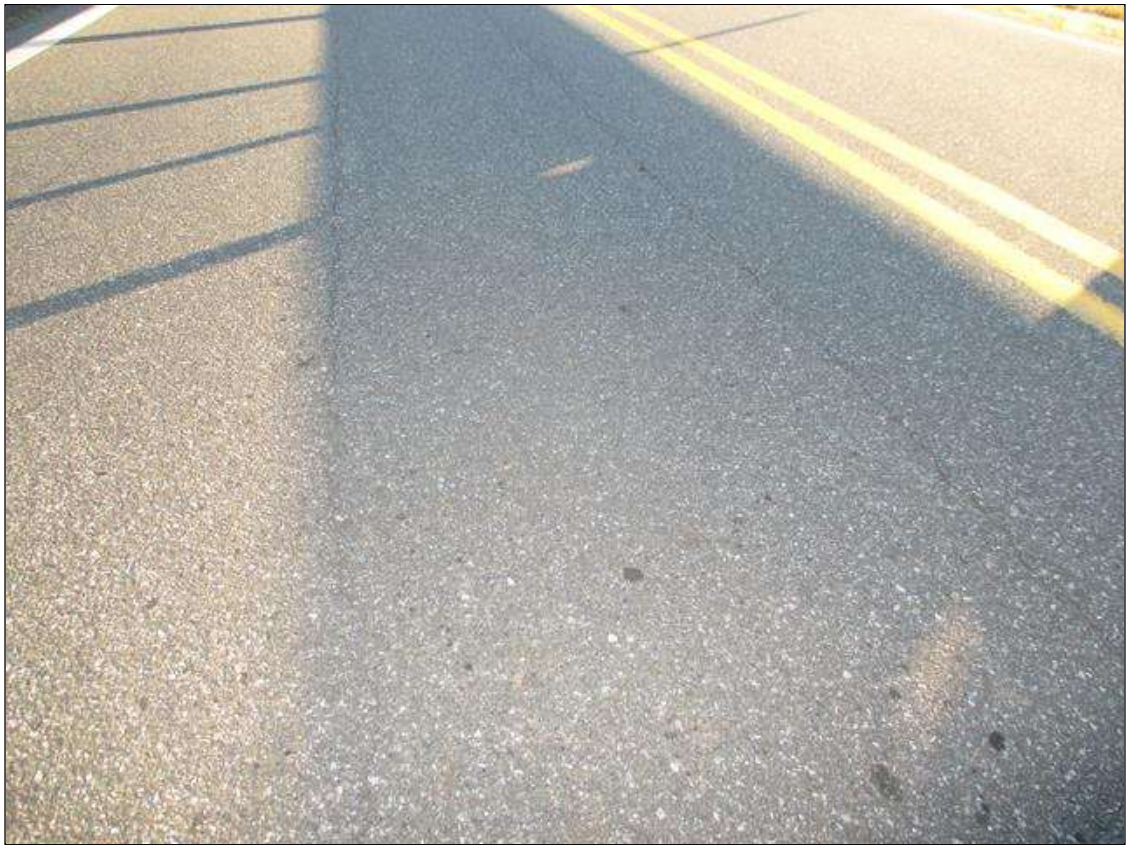
Span 3 Channel/Slab 4: 8 in x 2 in, 3 inches deep spall with exposed prestressing strand with 30% section loss in web 1, at End Bent 2.



Span 3 Channel/Slab 6: 12 in x 2 in, 4 inch deep spall and 10% loss of bearing area in web 1, at End Bent 2.



Span 3 Channel/Slab 10: 30 in x 2 in, 3 inch deep spall with exposed prestressing strand with 60% section loss in web 1, at End Bent 2. The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge.



Span 2 Wearing Surface: 300 sq ft area of 1/8 in wide longitudinal cracks between channel units in the eastbound lane.



Span 1 Wearing Surface: Full width transverse crack, 1/8 in wide at Bent 1.



Northwest streambank erosion: streambank has a 6 ft high vertical face at Bent 2.



End Bent 1



Bent 1, looking west



Span 2 underside



End Bent 2



Upstream structure profile



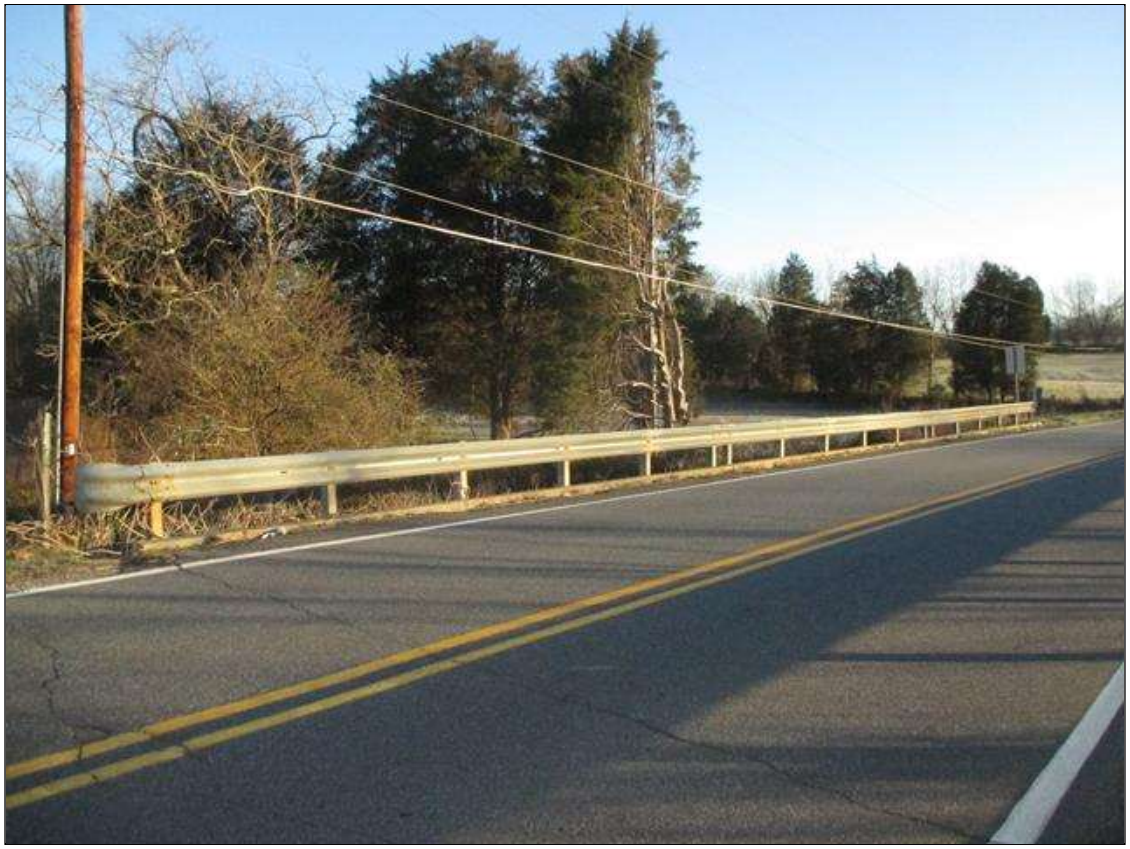
Downstream structure profile



West approach posting sign



Looking east



Upstream barrier rail



Looking downstream



Looking upstream



East approach posting sign



Looking west

NATIONAL BRIDGE INVENTORY-------- STRUCTURE INVENTORY AND APPRAISAL Run Date: 06/15/2016

IDENTIFICATION

(1) STATE NAME -NORTH CAROLINA BRIDGE **540121**
(8) STRUCTURE NUMBER(FEDERAL) 000000001090121
(5) INVENTORY ROUTE (ON/UNDER) - ON 31011130
(2) STATE HIGHWAY DEPARTMENT DISTRICT 3
(3) COUNTY CODE 109 (4) PLACE CODE 0
(6) FEATURE INTERSECTED - TANYARD CREEK
(7) FACILITY CARRIED SR1113
(9) LOCATION 0.1 MI. E. JCT. SR1205
(11)MILEPOINT 0
(16)LAT 35° 30' 48.57" (17)LONG 81° 20' 14.14"
(98)BORDER BRIDGE STATE CODE PCT SHARE
(99)BORDER BRIDGE STRUCTURE NO

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN: Prestressed Concrete
TYPE - Channel Beam CODE 522
(44) STRUCTURE TYPE APPR :
TYPE - CODE 000
(45) NUMBER OF SPANS IN MAIN UNIT 3
(46) NUMBER OF APPROACH SPANS
(107)DECK STRUCTURE TYPE - 1 CODE
(108)WEARING SURFACE / PROTECTIVE SYSTEM :
(A) TYPE OF WEARING SURFACE - CODE
(B) TYPE OF MEMBRANE - CODE
(C) TYPE OF DECK PROTECTION - CODE

AGE AND SERVICE

(27) YEAR BUILT 1974
(106)YEAR RECONSTRUCTED
(42) TYPE OF SERVICE : ON - Highway
UNDER - Waterway CODE 15
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE 0
(29) AVERAGE DAILY TRAFFIC 3700
(30) YEAR OF ADT 2013 (109) TRUCK ADT PCT 6%
(19) BYPASS OR DETOUR LENGTH 5 MI

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN 29 FT
(49) STRUCTURE LENGTH 91 FT
(50)CURB OR SIDEWALK: LEFT .4 FT RIGHT .4 FT
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 24.167 FT
(52) DECK WIDTH OUT TO OUT 25 FT
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 20 FT
(33) BRIDGE MEDIAN - No Median CODE 0
(34) SKEW 0° (35) STRUCTURE FLARED 0
(10) INVENTORY ROUTE MIN VERT CLEAR 999.9 FT
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 24.167 FT
(53) MIN VERT CLEAR OVER BRIDGE RDWY 999.9 FT
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad 0 FT
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad 000 FT
(56) MIN LAT UNDERCLEAR LT REF - 000 FT

NAVIGATION DATA

(38) NAVIGATION CONTROL - No Navigational Control CODE 0
(111)PIER PROTECTION - CODE
(39) NAVIGATION VERTICAL CLEARANCE 0
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR FT
(40) NAVIGATION HORIZONTAL CLEARANCE 0 FT

SUFFICIENCY RATING = 6
STATUS = Structurally Deficient

CLASSIFICATION — CODE

(112)NBIS BRIDGE SYSTEM - YES
(104)HIGHWAY SYSTEM Is not on NHS 0
(26) FUNCTIONAL CLASS - Minor Collector 08
(100)STRAHNET HIGHWAY - Not a STRAHNET Route 0
(101)PARALLEL STRUCTURE - No Parallel Structure N
(102)DIRECTION OF TRAFFIC - 2-way Traffic 2
(103)TEMPORARY STRUCTURE -
(110)DESIGNATED NATIONAL NETWORK - Not on the National Network 0
(20) TOLL On Free Road 3
(31) MAINTAIN - State Highway Agency 01
(22) OWNER - State Highway Agency 01
(37) HISTORICAL SIGNIFICANCE - Not Eligible 5

CONDITION — CODE

(58) DECK 6
(59) SUPERSTRUCTURE 4
(60) SUBSTRUCTURE 4
(61) CHANNEL & CHANNEL PROTECTION 5
(62) CULVERTS N

LOAD RATING AND POSTING — CODE

(31) DESIGN LOAD H 10 1
(63) OPERATING RATING METHOD - Allowable Stress 2
(64) OPERATING RATING - HS-17 30
(65) INVENTORY RATING METHOD - Allowable Stress 2
(66) INVENTORY RATING - HS-6 10
(70) BRIDGE POSTING - Posting Required 3
(41) STRUCTURE OPEN, POSTED ,OR CLOSED P
DESCRIPTION - Posted for Load

APPRAISAL — CODE

(67) STRUCTURAL EVALUATION 3
(68) DECK GEOMETRY 2
(69) UNDERCLEARANCES,VERTI & HORIZ N
(71) WATERWAY ADEQUACY 5
(72) APPROACH ROADWAY ALIGNMENT 8
(36) TRAFFIC SAFETY FEATURES 0000
(113)SCOUR CRITICAL BRIDGES 5

PROPOSED IMPROVEMENTS

(75) TYPE OF WORK - CODE
(76) LENGTH OF STRUCTURE IMPROVEMENT
(94) BRIDGE IMPROVEMENT COST
(95) ROADWAY IMPROVEMENT COST
(96) TOTAL PROJECT COST
(97) YEAR OF IMPROVEMENT COST ESTIMATE
(114)FUTURE ADT 7400 (115) YEAR FUTURE ADT 2025

INSPECTIONS

(90) INSPECTION DATE 01/14/2016
(92) CRITICAL FEATURE INSPECTION : (93) CFI DATE
A) FRACTURE CRIT DETAIL - NO A)
B) UNDERWATER INSP - NO B)
C) OTHER SPECIAL INSP NO C)
SCOUR

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE Run Date: 06/15/2016

COUNTY :	DIVISION :	DISTRICT:	STRUCTURE NUMBER :	LENGTH :
LINCOLN	12	3	540121	91 FEET

ROUTE CARRIED : SR1113

FEATURE INTERSECTED : TANYARD CREEK

LOCATED : 0.1 MI. E. JCT. SR1205

BRIDGE NAME :

CITY :

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
08	NFA	NFA	3700 2013	LT 233 RT 233

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1974	BMU	5.8351		H 10

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
			TAN	90	ON 2 UNDER 0

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT HC 0 FT	14 FT	1 FT

SUPERSTRUCTURE : PRECAST PRESTRESSED CONCRETE CHANNELS

SUBSTRUCTURE : END & INTERIOR BENTS:PPC CAPS ON TIMBER PILES,TIM.BULKHEADS

SPANS : 1@30'3 ,1@30'0 ,1@30'3

BEAMS OR GIRDERS : 10 SECTIONS OF PRECAST PRESTRESSED CONCRETE CHANNELS

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
5 PPCCH,2 AWS		25 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
24.167 FT	24.917 FT	LT .4 FT RT .4 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :
HS-6	HS-17	pile2	SV 24 TTST 28 DATE 10/01/2008

SYSTEM : Secondary S.R. Route

GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN Date:

These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 2 CHANNEL/SLAB 5: 1 FT OF SPALL, 3 INCHES DEEP, WITH EXPOSED PRESTRESTING STRAND, IN FLANGE 2, AT BENT 1.	
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 2 CHANNEL/SLAB 6: 2 FT SPALL, 3 INCHES DEEP, WITH EXPOSED PRESTRESSING STRANDS, 60% SECTION LOSS AT FLANGE 1, BENT 1. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT OF STRENGTH OR SERVICEABILITY ON THE BRIDGE.	
3306	Maintain Concrete Superstructure Components	SF	1	SPAN 1 CHANNEL/SLAB 1: 2 IN DIAMETER SPALL, 1 INCH DEEP, WITH EXPOSED PRESTRESSING STRAND, IN FLANGE 2, AT MID SPAN.	
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 1 CHANNEL/SLAB 4: 1 FT X 3 IN SPALL, 3 INCHES DEEP, WITH EXPOSED PRESTRESSING STRAND, 30% SECTION LOSS, ON FLANGE 1, AT BENT 1. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH AND SERVICEABILITY OF THE ELEMENT.	
3306	Maintain Concrete Superstructure Components	SF	4	SPAN 1 CHANNEL/SLAB 6: 4 FT SPALL, 4 INCHES DEEP, WITH EXPOSED PRESTRESSING, IN FLANGE 1, 50% SECTION LOSS IN THE STRAND, 5 FT FROM BENT 1. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT OF STRENGTH AND SERVICEABILITY OF THE ELEMENT.	
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 1 CHANNEL/SLAB 5: 3 FT OF SPALL UP TO 6 INCHES DEEP WITH EXPOSED PRESTRESSING IN FLANGE 2 AT END BENT 1. THE STRAND IS BROKEN, 100% SECTION LOSS. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT OR BRIDGE.	

Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN Date:

These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 1 CHANNEL/SLAB 3: 1 FEET OF SPALL, 3 INCHES DEEP, IN FLANGE 2, WITH EXPOSED PRESTRESSING, AT END BENT 1.	
3306	Maintain Concrete Superstructure Components	SF	1	SPAN 2 CHANNEL/SLAB 5: 1 FT OF SPALL, 6 INCHES DEEP WITH EXPOSED PRESTRESSING, 100% SECTION LOSS AT FLANGE 1, BENT 2. THIS CONDITION WARRANTS STRUCTURAL REVIEW TO DETERMINE THE EFFECTS ON STRENGTH OR SERVICEABILITY OF THE ELEMENT OR BRIDGE.	
3306	Maintain Concrete Superstructure Components	SF	1	SPAN 1 CHANNEL/SLAB 2: 1 FT OF SPALL, 3 INCHES DEEP, WITH EXPOSED PRESTRESSING STRAND, AT THE BEARING AT END BENT 1, AT FLANGE 1.	
3306	Maintain Concrete Superstructure Components	SF	3	SPAN 3 CHANNEL/SLAB 10: 30 IN X 2 IN, 3 INCH DEEP SPALL WITH EXPOSED PRESTRESSING STRAND WITH 60% SECTION LOSS IN WEB 1 AT END BENT 2. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.	
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 3 CHANNEL/SLAB 6: 12 IN X 2 IN, 4 INCH DEEP SPALL AND 10% LOSS OF BEARING AREA IN WEB 1 AT END BENT 2. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.	
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 3 CHANNEL/SLAB 4: 8 IN X 2 IN, 3 INCHES DEEP SPALL WITH EXPOSED PRESTRESSING STRAND WITH 30% SECTION LOSS IN WEB 1 AT END BENT 2. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.	

Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN Date:

These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 3 CHANNEL/SLAB 4: 8 IN X 2 IN, 4 IN DEEP SPALL WITH EXPOSED PRESTRESSING STRAND, 30% SECTION LOSS,20% LOSS OF BEARING AREA, WEB 2 AT END BENT 2. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.	
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 3 CHANNEL/SLAB 2: 1 FT X 2 IN SPALL, 3 INCHES DEEP WITH EXPOSED PRESTRESSING WITH 80% SECTION LOSS IN WEB 1 AT MIDSPAN. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.	
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 3 CHANNEL/SLAB 9: 8 IN X 3 IN, 3 INCHES DEEP WITH EXPOSED PRESTRESSING STRAND 75% SECTION LOSS IN WEB 1 AT BENT 2. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.	
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 3 CHANNEL/SLAB 8: 6 IN X 2 IN SPALL, 2 INCHES DEEP WITH EXPOSED PRESTRESSING IN WEB 2 AT BENT 2.	
3306	Maintain Concrete Superstructure Components	SF	2	SPAN 3 CHANNEL/SLAB 4: 6 IN X 3 IN SPALL, 3 INCHES DEEP WITH EXPOSED PRESTRESSING AT WEB 2 BENT 2.	
3344	Repair / Replace Timber Substructure Components	LF	1	BENT 2 CAP : 1/2 INCH OF TIMBER SUBCAP COMPRESSION WITH SOFTNESS AT PILE 4 ON SPAN 3 SIDE.	
3344	Repair / Replace Timber Substructure Components	LF	1	BENT 2 CAP : 1 INCH OF TIMBER SUBCAP COMPRESSION WITH SOFTNESS AT PILE 1 ON SPAN 3 SIDE.	

Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:		
Beams and Girders	Bent/Span No. 2	GIRDER 5

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 2 CHANNEL/SLAB 5: 1 FT OF SPALL, 3 INCHES DEEP, WITH EXPOSED PRESTRESTING STRAND, IN FLANGE 2, AT BENT 1.

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:		
Beams and Girders	Bent/Span No. 1	GIRDER 6

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 2 CHANNEL/SLAB 6: 2 FT SPALL, 3 INCHES DEEP, WITH EXPOSED PRESTRESSING STRANDS, 60% SECTION LOSS AT FLANGE 1, BENT 1. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT OF STRENGTH OR SERVICEABILITY ON THE BRIDGE.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	1 SF

Location:

Beams and Girders Bent/Span No. 1 GIRDER 1

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 1 CHANNEL/SLAB 1: 2 IN DIAMETER SPALL, 1 INCH DEEP, WITH EXPOSED PRESTRESSING STRAND, IN FLANGE 2, AT MID SPAN.

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:

Beams and Girders Bent/Span No. 1 GIRDER 4

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 1 CHANNEL/SLAB 4: 1 FT X 3 IN SPALL, 3 INCHES DEEP, WITH EXPOSED PRESTRESSING STRAND, 30% SECTION LOSS, ON FLANGE 1, AT BENT 1. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH AND SERVICEABILITY OF THE ELEMENT.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	4 SF

Location:

Beams and Girders Bent/Span No. 1 GIRDER 6

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 1 CHANNEL/SLAB 6: 4 FT SPALL, 4 INCHES DEEP, WITH EXPOSED PRESTRESSING, IN FLANGE 1, 50% SECTION LOSS IN THE STRAND, 5 FT FROM BENT 1. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT OF STRENGTH AND SERVICEABILITY OF THE ELEMENT.

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:

Beams and Girders Bent/Span No. 1 GIRDER 5

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 1 CHANNEL/SLAB 5: 3 FT OF SPALL UP TO 6 INCHES DEEP WITH EXPOSED PRESTRESSING IN FLANGE 2 AT END BENT 1. THE STRAND IS BROKEN, 100% SECTION LOSS. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT OR BRIDGE.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:

Beams and Girders Bent/Span No. 1 GIRDER 1

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 1 CHANNEL/SLAB 3: 1 FEET OF SPALL, 3 INCHES DEEP, IN FLANGE 2, WITH EXPOSED PRESTRESSING, AT END BENT 1.

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	1 SF

Location:

Beams and Girders Bent/Span No. 2 Girder 5

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 2 CHANNEL/SLAB 5: 1 FT OF SPALL, 6 INCHES DEEP WITH EXPOSED PRESTRESSING, 100% SECTION LOSS AT FLANGE 1, BENT 2. THIS CONDITION WARRANTS STRUCTURAL REVIEW TO DETERMINE THE EFFECTS ON STRENGTH OR SERVICEABILITY OF THE ELEMENT OR BRIDGE.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	1 SF

Location:

Beams and Girders Bent/Span No. 1 Girder 2

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 1 CHANNEL/SLAB 2: 1 FT OF SPALL, 3 INCHES DEEP, WITH EXPOSED PRESTRESSING STRAND, AT THE BEARING AT END BENT 1, AT FLANGE 1.

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	3 SF

Location:

Beams and Girders Bent/Span No. 3 GIRDER 10

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 3 CHANNEL/SLAB 10: 30 IN X 2 IN, 3 INCH DEEP SPALL WITH EXPOSED PRESTRESSING STRAND WITH 60% SECTION LOSS IN WEB 1 AT END BENT 2. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:

Beams and Girders Bent/Span No. 3 GIRDER 6

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 3 CHANNEL/SLAB 6: 12 IN X 2 IN, 4 INCH DEEP SPALL AND 10% LOSS OF BEARING AREA IN WEB 1 AT END BENT 2. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:

Beams and Girders Bent/Span No. 3 GIRDER 4

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N, BROWN

Details

SPAN 3 CHANNEL/SLAB 4: 8 IN X 2 IN, 3 INCHES DEEP SPALL WITH EXPOSED PRESTRESSING STRAND WITH 30% SECTION LOSS IN WEB 1 AT END BENT 2. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:

Beams and Girders Bent/Span No. 3 GIRDER 4

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 3 CHANNEL/SLAB 4: 8 IN X 2 IN, 4 IN DEEP SPALL WITH EXPOSED PRESTRESSING STRAND, 30% SECTION LOSS,20% LOSS OF BEARING AREA, WEB 2 AT END BENT 2. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:

Beams and Girders Bent/Span No. 3 GIRDER 2

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 3 CHANNEL/SLAB 2: 1 FT X 2 IN SPALL, 3 INCHES DEEP WITH EXPOSED PRESTRESSING WITH 80% SECTION LOSS IN WEB 1 AT MIDSPAN. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:		
Beams and Girders	Bent/Span No. 3	GIRDER 9

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 3 CHANNEL/SLAB 9: 8 IN X 3 IN, 3 INCHES DEEP WITH EXPOSED PRESTRESSING STRAND 75% SECTION LOSS IN WEB 1 AT BENT 2. THE CONDITION WARRANTS A STRUCTURAL REVIEW TO DETERMINE THE EFFECT ON STRENGTH OR SERVICEABILITY OF THE ELEMENT.

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:		
Slope	Bent/Span No. 3	GIRDER 8

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 3 CHANNEL/SLAB 8: 6 IN X 2 IN SPALL, 2 INCHES DEEP WITH EXPOSED PRESTRESSING IN WEB 2 AT BENT 2.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	2 SF

Location:		
Beams and Girders	Bent/Span No. 4	GIRDER 4

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

SPAN 3 CHANNEL/SLAB 4: 6 IN X 3 IN SPALL, 3 INCHES DEEP WITH EXPOSED PRESTRESSING AT WEB 2 BENT 2.

MMS Code	MMS Description	Quantity
3344	Repair / Replace Timber Substructure Components	1 LF

Location:		
Pier Substructure	Bent/Span No. 2	PILE 4

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

BENT 2 CAP : 1/2 INCH OF TIMBER SUBCAP COMPRESSION WITH SOFTNESS AT PILE 4 ON SPAN 3 SIDE.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 540121 County LINCOLN

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3344	Repair / Replace Timber Substructure Components	1 LF

Location:		
Pier Substructure	Bent/Span No. 2	PILE 1

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification

Submitted Date:	Submitted By:	Assisted By:
01/14/2016	J. SLOAN	N. BROWN

Details

BENT 2 CAP : 1 INCH OF TIMBER SUBCAP COMPRESSION WITH SOFTNESS AT PILE 1 ON SPAN 3 SIDE.



SPAN 1 CHANNEL/SLAB 3: 1 FEET OF SPALL, 3 INCHES DEEP, IN FLANGE 2, WITH EXPOSED PRESTRESSING, AT END BENT 1.



SPAN 1 CHANNEL/SLAB 5: 3 FT OF SPALL UP TO 6 INCHES DEEP WITH EXPOSED PRESTRESSING IN WEB 2, END BENT 1; STRAND IS BROKEN, 100% SECTION LOSS.



SPAN 1 CHANNEL/SLAB 6: 4 FT SPALL, 4 INCHES DEEP, WITH EXPOSED PRESTRESSING, IN WEB 1, 50% SECTION LOSS, 5 FT FROM BENT 1.



SPAN 1 CHANNEL/SLAB 4: 1 FT X 3 IN SPALL, 3INCHES DEEP, WITH EXPOSED PRESTRESSING STRAND, 30% SECTION LOSS, ON FLANGE 1, AT BENT 1.



SPAN 1 CHANNEL/SLAB 1: 2 IN DIAMETER SPALL, 1 INCH DEEP, WITH EXPOSED PRESTRESSING STRAND, NO SECTION LOSS, IN FLANGE 2, AT MIDSPAN.



SPAN 2 CHANNEL/SLAB 5: 1 FT OF SPALL, 3 INCHES DEEP, WITH EXPOSED PRESTRESSING STRAND, IN FLANGE 2, AT BENT 1.



SPAN 2 CHANNEL/SLAB 6: 2 FT SPALL, 3 INCHES DEEP, WITH EXPOSED PRESTRESSING STRANDS, 60% SECTION LOSS AT FLANGE 1, BENT 1.



SPAN 1 CHANNEL/SLAB 2: 1 FT OF SPALL, 3 INCHES DEEP, WITH EXPOSED PRESTRESSING STRAND, AT THE BEARING AT END BENT 1, AT FLANGE 1.



SPAN 2 CHANNEL/SLAB 5: 1 FT OF SPALL, 6 INCHES DEEP WITH EXPOSED PRESTRESSING, 100% SECTION LOSS AT FLANGE 1, BENT 2.



BENT 2 CAP : 1 INCH OF TIMBER SUBCAP COMPRESSION WITH SOFTNESS AT PILE 1 ON SPAN 3 SIDE.



SPAN 3 CHANNEL/SLAB 4: 6 IN X 3 IN SPALL, 3 INCHES DEEP WITH EXPOSED PRESTRESSING AT WEB 2 BENT 2.



SPAN 3 CHANNEL/SLAB 8: 6 IN X 2 IN SPALL, 2 INCHES DEEP WITH EXPOSED PRESTRESSING IN WEB 2 AT BENT 2.



SPAN 3 CHANNEL/SLAB 9: 8 IN X 3 IN, 3 INCHES DEEP WITH EXPOSED PRESTRESSING STRAND 75% SECTION LOSS IN WEB 1 AT BENT 2,



BENT 2 CAP : 1/2 INCH OF TIMBER SUBCAP COMPRESSION WITH SOFTNESS AT PILE 4 ON SPAN 3 SIDE.



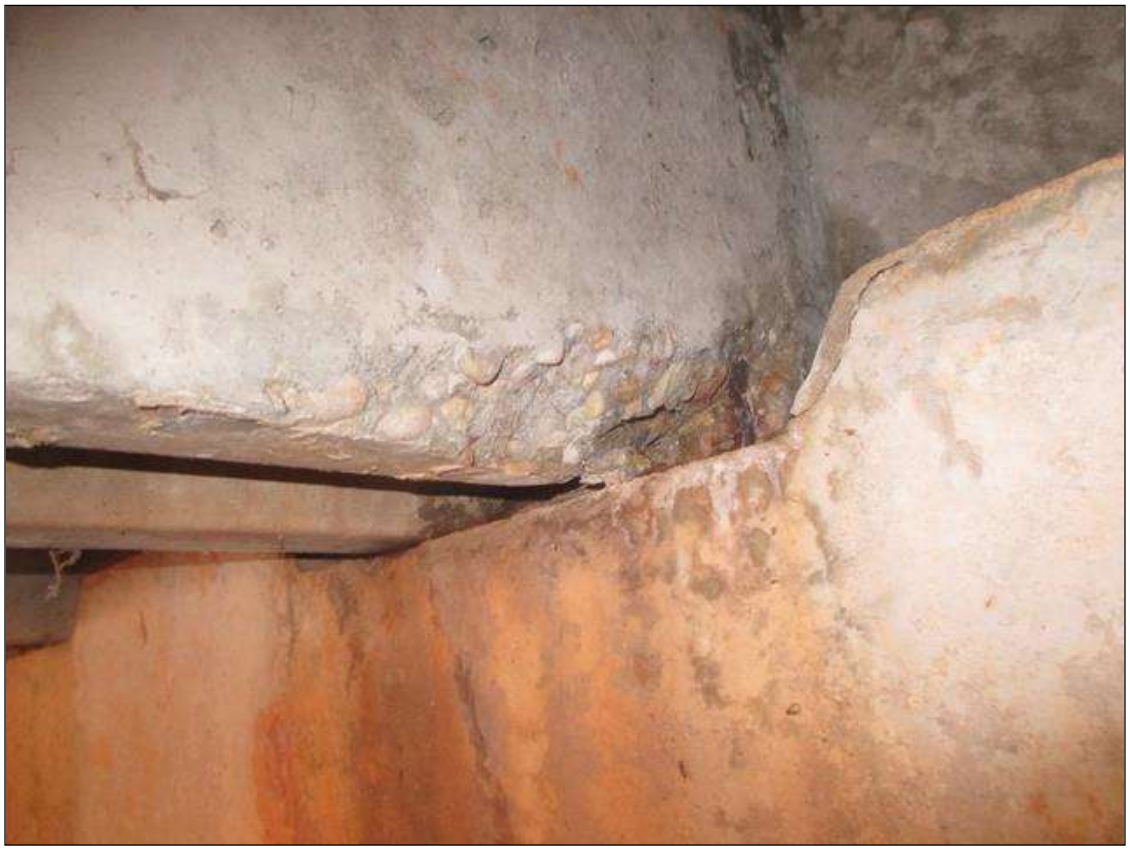
SPAN 3 CHANNEL/SLAB 2: 1 FT X 3 IN SPALL, 3 INCHES DEEP WITH EXPOSED PRESTRESSING WITH 80% SECTION LOSS IN WEB 1 AT MIDSPAN.



SPAN 3 CHANNEL/SLAB 4: 8 IN X 2 IN, 4 IN DEEP SPALL WITH EXPOSED PRESTRESSING STRAND, 30% SECTION LOSS,20% LOSS OF BEARING AREA, WEB 2 AT END BENT 2.



SPAN 3 CHANNEL/SLAB 4: 8 IN X 2 IN, 3 INCHES DEEP SPALL WITH EXPOSED PRESTRESSING STRAND WITH 30% SECTION LOSS IN WEB 1 AT END BENT 2.



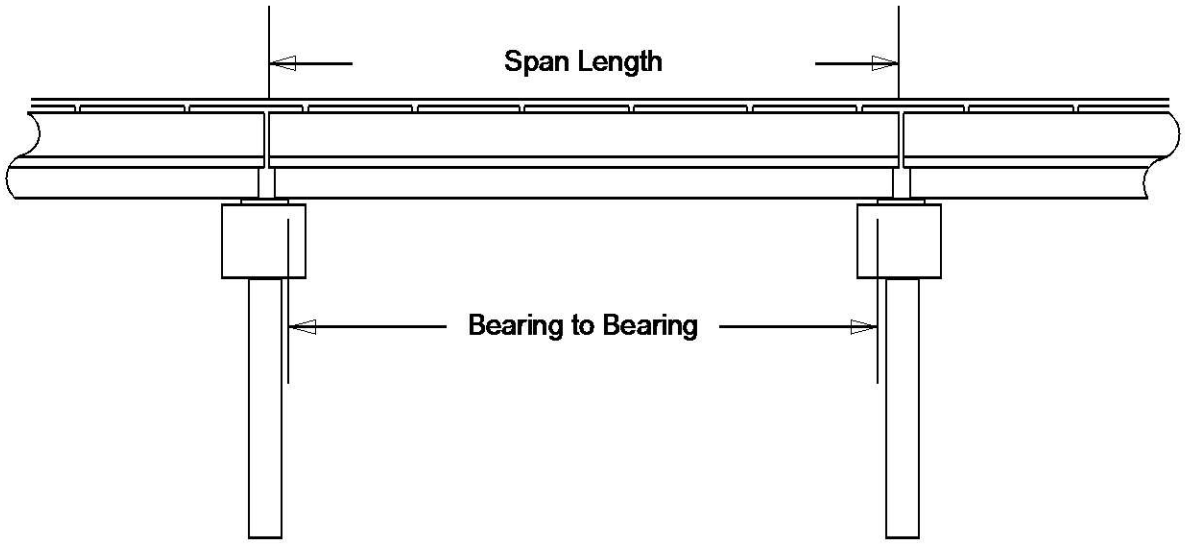
SPAN 3 CHANNEL/SLAB 6: 12 IN X 2 IN, 4 INCH DEEP SPALL AND 10% LOSS OF BEARING AREA IN WEB 1 AT END BENT 2.



SPAN 3 CHANNEL/SLAB 10: 30 IN X 2 IN, 3 INCH DEEP SPALL WITH EXPOSED PRESTRESSING STRAND WITH 60% SECTION LOSS IN WEB 1 AT END BENT 2.

Structure Data Worksheet

County: LINCOLN **Structure No:** 540121 **Date:** **Inspected By:** JES



Span No	Span Length	Bearing to Bearing	Comments
1	30.250'	29.000'	
2	30.000'	29.333'	
3	30.250'	29.000'	NBIS = 88.5'

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 540121 **County:** LINCOLN **Date:** _____ **By:** JES

Record sounding from top of rail. Other location if needed: _____

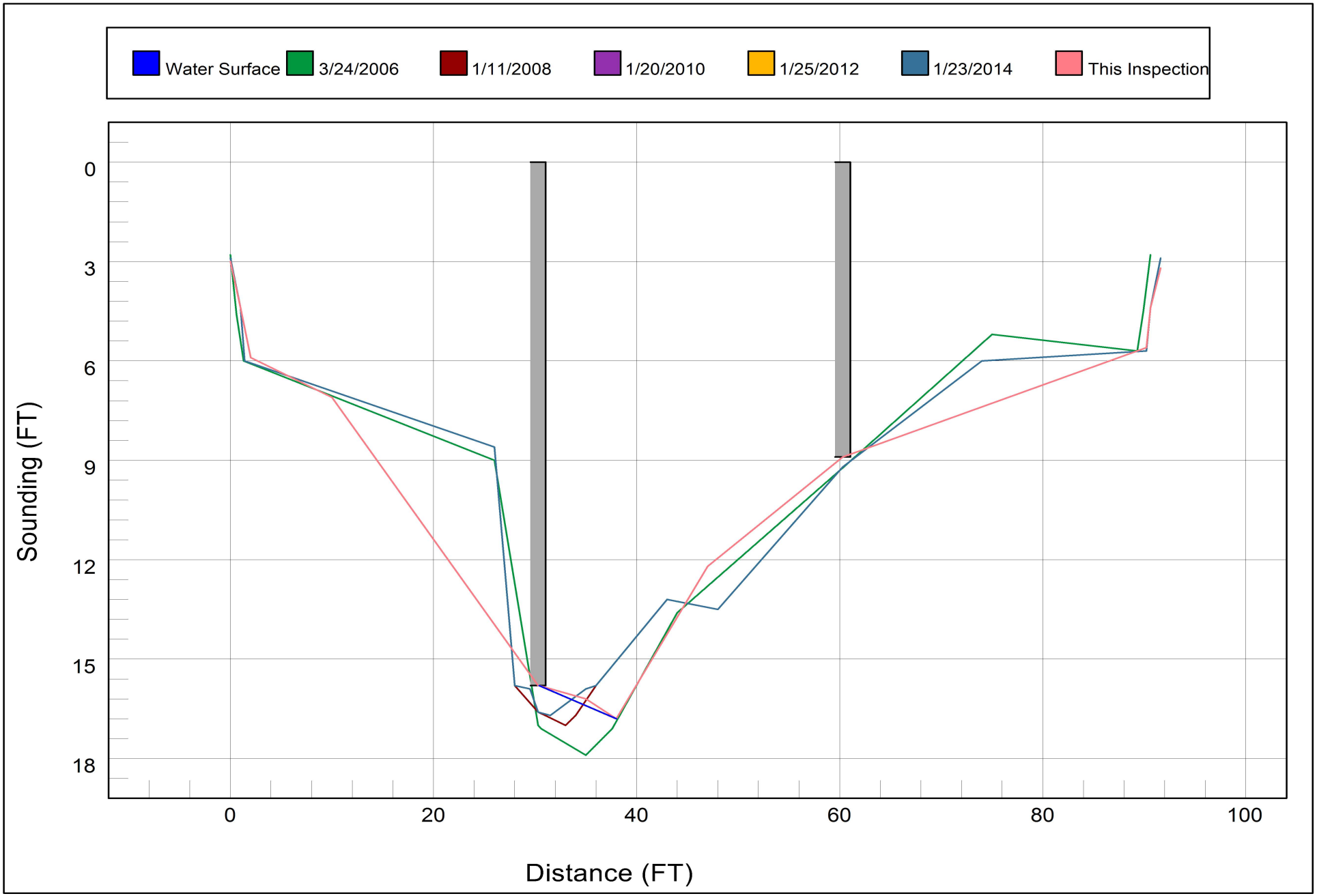
Distance from Highwater Mark to top of rail: _____ **Location of Highwater Mark:** _____

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	3	FILL FACE			
1	4.4	Top of Cap			
2	5.9	FACE OF CAP	2	5.4	FACE OF CAP
10	7.1	GROUND			
30.3	15.8	BENT 1	30.3	16.6	BENT 1
30.4	15.8	WSWE			
35	16.2	STREAMBED			
38	16.8	WSWE			
47	12.2	GROUND			
60.3	8.9	BENT 2	60.3	10.3	BENT 2
90.2	5.6	FACE OF CAP	90.2	5.6	FACE OF CAP
90.6	4.4	Top of Cap			
91.6	3.2	FILL FACE			

Bridge: 540121 County LINCOLN Date:

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch



Roadway	20ft Wide	2 Paved Lanes	Looking East
Left Shoulder	4ft Wide		4ft Unpaved
Right Shoulder	4ft Wide		4ft Unpaved
Left Guardrail			
Right Guardrail			

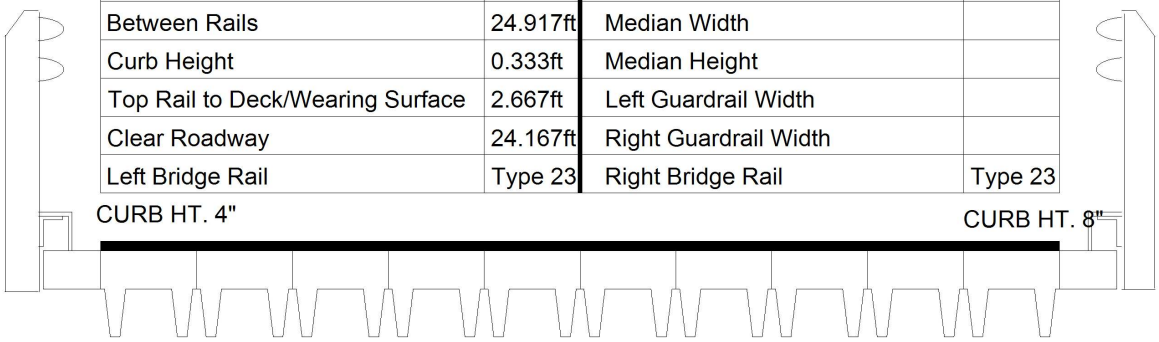
VERIFIED BY J. SLOAN & N. BROWN ON 1-14-2016

Title	**Description**
APPROACH	APPROACH DETAILS

Bridge No: 540121	**Drawn By:** DJA	**Date:** 01/11/2008	**File Name:** S0142000550

Bridge Inspection Field Sketch

Deck Width/Out to Out	25.0ft	Wearing Surface	0.167ft
Between Rails	24.917ft	Median Width	
Curb Height	0.333ft	Median Height	
Top Rail to Deck/Wearing Surface	2.667ft	Left Guardrail Width	
Clear Roadway	24.167ft	Right Guardrail Width	
Left Bridge Rail	Type 23	Right Bridge Rail	Type 23



Measurements for Span #	1		
Deck Thickness	0.417	Left Overhang	0.0
Top of Rail to Bottom of Beam	4.417	Right Overhang	0.0

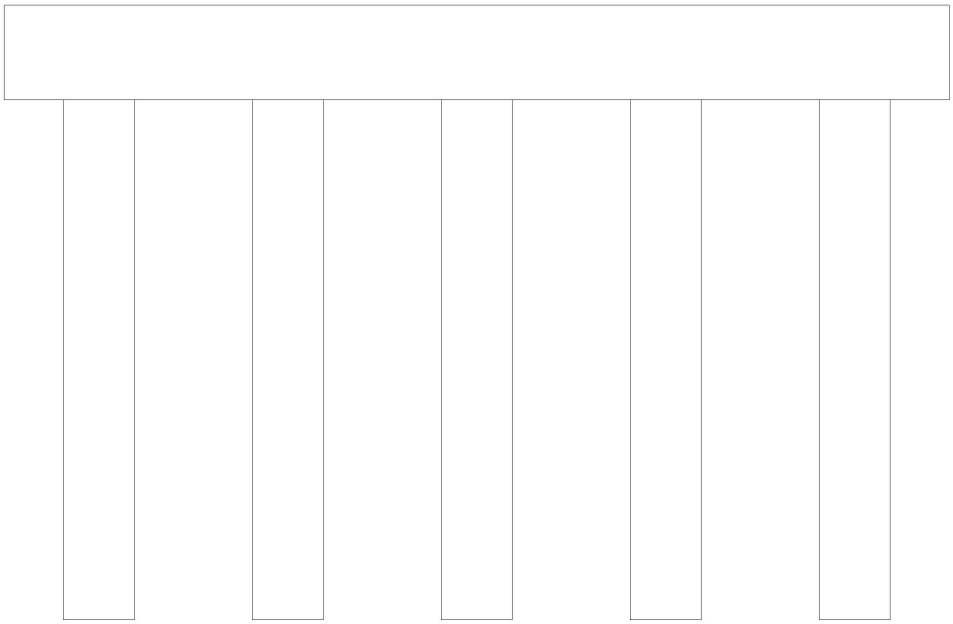
No. of Channels	10
Leg Width	0.208ft
Leg Height	1.000ft
Leg to Leg (Centers)	1.792ft
Channel Width	2.500ft
Channel Height	1.417ft
Comments	

VERIFIED BY J. SLOAN & N. BROWN ON 1-14-2016

Title	Description
DECK SECTION	TOP AND BOTT. DETAILS

Bridge No:	Drawn By:	Date:	File Name:
540121	DJA	01/11/2008	S0142000551

Bridge Inspection Field Sketch



Abutment #	1	Abutment 2 , BTS. 1 & 2 similar	
Cap - Pre-Cast			
Cap Size	26ft Long	1.333ft Wide	1ft High
Left Overhang	1.333ft	Lt Cap/Beam Overhang	6"ft
Right Overhang	1.333ft	Rt Cap/Beam Overhang	6"ft

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	5.583'		1.000'		Vertical
2	Wood or Timber	Pile Bent	5.583'		1.000'		Vertical
3	Wood or Timber	Pile Bent	5.583'		1.000'		Vertical
4	Wood or Timber	Pile Bent	5.583'		1.000'		Vertical
5	Wood or Timber	Pile Bent			1.000'		Vertical

11 3/4" X 5 3/4" TIMBER RISER BTWN. CAP AND PILES AND BENT 2 AND ABUT. 2 (26'-0" LONG)

VERIFIED BY J. SLOAN & N. BROWN ON 1-14-2016

Title	Description
SUBSTRUCTURE	PILE DETAILS

Bridge No:	Drawn By:	Date:	File Name:
540121	DJA	01/11/2008	S0142000552