



NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 STRUCTURE MANAGEMENT UNIT

ATTENTION: PRIORITY MAINTENANCE - SPAN 1 BEAM 1;  
 UPDATES MADE TO APPROACH ROADWAY SKETCH  
 AND UNDERCLEARANCE SKETCHES

## Structure Safety Report

### Routine Element Inspection - Contract

COUNTY: ROBESON      STRUCTURE NUMBER: 770154      FREQUENCY: 24 MONTHS

FACILITY CARRIED: SR1006      MILE POST: \_\_\_\_\_

LOCATION: 0.1 MI. W. JCT. SR1741

FEATURE INTERSECTED: I95

LATITUDE: 34° 47' 58.94"      LONGITUDE: 78° 59' 27.9"

SUPERSTRUCTURE: REINFORCED CONCRETE FLOOR ON PRESTR.CONC.GIRDERS

SUBSTRUCTURE: E.BTS&I.BTS:RC CAPS/PPC PILES

SPANS: 1@41'2";2@54';1@41'2"

FRACTURE CRITICAL     TEMPORARY SHORING     SCOUR CRITICAL     SCOUR PLAN OF ACTION

PRESENT CONDITION: Fair      INSPECTION DATE: 05/24/2017

POSTED SV: Not Posted      POSTED TTST: Not Posted

OTHER SIGNS PRESENT: NONE



Sign noticed issued for	Number Required
<u>NO</u> <b>WEIGHT LIMIT</b>	<u>0</u>
<u>NO</u> <b>DELINEATORS</b>	<u>0</u>
<u>NO</u> <b>NARROW BRIDGE</b>	<u>0</u>
<u>NO</u> <b>ONE LANE BRIDGE</b>	<u>0</u>
<u>NO</u> <b>LOW CLEARANCE</b>	<u>0</u>

DIRECTION OF INSPECTION      W-E

DIRECTION MATCHES PLANS      \_\_\_\_\_

LOOKIG EAST

INSPECTED BY MATTHEW MOYER	SIGNATURE <i>Matthew Moyer</i>	ASSISTED BY    DAVID WAGNER
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# Structure Element Scoring

Structure Number: 770154

Inspection Date 5/24/2017

Element Number	Parent Number	Element Name	Location	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity
12	0	Reinforced Concrete Deck	Deck	6362	0	1	6361	0
109	0	Prestressed Concrete Open Girder/Beam	Beam	884	875	4	5	0
215	0	Reinforced Concrete Abutment	Abutments	60	50	0	10	0
226	0	Prestressed Concrete Pile	Piles and Columns	16	16	0	0	0
234	0	Reinforced Concrete Pier Cap	Caps	147	142	5	0	0
302	0	Compression Joint Seal	Expansion Joints	96	82	2	12	0
515	316	Steel Protective Coating	Bearing Device	72	0	8	38	26
331	0	Reinforced Concrete Bridge Railing	Bridge Rail	384	382	2	0	0

# Summary of Maintenance Needs

Maintenance By Defect

Structure Number: 770154

Inspection Date: 05/24/2017

<b>MMS Code</b>	<b>Element Name</b>	<b>Defect Name</b>	<b>Recommended Quantity</b>
3326	Reinforced Concrete Deck	Cracking (RC and Other)	6409 Square Feet
3326	Reinforced Concrete Deck	Delamination/Spall	3 Square Feet
3306	Prestressed Concrete Open Girder/Bear	Delamination/Spall	10 Feet
3350	Reinforced Concrete Abutment	Delamination/Spall	2 Feet
3350	Reinforced Concrete Abutment	Cracking (RC and Other)	8 Feet
3348	Reinforced Concrete Pier Cap	Exposed Rebar	1 Feet
3348	Reinforced Concrete Pier Cap	Cracking (RC and Other)	5 Feet
3310	Compression Joint Seal	Debris Impaction	12 Feet
3310	Compression Joint Seal	Adjacent Deck or Header	2 Feet
3334	Other Bearings	Corrosion	13 Each
3342	Steel Protective Coating	Effectiveness (Steel Protective Coatings)	72 Square Feet

## Element Structure Maintenance Quantities

Structure Number: 770154

Inspection Date 05/24/2017

Location	MMS Code	Description	Maint Quantity	Total Quantity	Severe Quantity	Poor Quantity	Fair Quantity	Good Quantity
Abutments	3350	Maintenance of Concrete Wings and Wall	10	60	0	10	0	50
Beam	3306	Maintenance Concrete Superstructure Components	10	884	0	5	4	875
Bearing Device	3342	Clean and Paint Steel	72	72	26	38	8	0
Bridge Rail	3318	Maintenance of Concrete Bridge Rail	0	384	0	0	2	382
Caps	3348	Maintenance of Concrete Substructure	6	147	0	0	5	142
Deck	3326	Maintenance of Concrete Deck	6412	6362	0	6361	1	0
Expansion Joints	3310	Maintenance of Standard Bridge Expansion Joints	14	96	0	12	2	82
Piles and Columns	3348	Maintenance of Concrete Substructure	0	16	0	0	0	16

## Element Condition and Maintenance Data

Structure Number: 770154

Inspection Date: 05/24/2017

**Span 1 Deck**  
**Reinforced Concrete Deck**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
12	Reinforced Concrete Deck	1,376	0	1	1,375	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
12	Cracking (RC and Other)	1375 SF. OF HAIRLINE MAP CRACKING AND TRANSVERSE AND DIAGONAL CRACKING UP TO 1/16" WIDE IN TOP OF DECK	3	1,375	1,375 Square Feet
12	Delamination/Spall	8" DIAMETER DELAMINATION IN TOP OF DECK 10 FT. FROM BENT 1	2	1	1 Square Feet

**General Comments**

**Span 1 Beam 1**  
**Prestressed Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
109	Prestressed Concrete Open Girder/Beam	43	42	0	1	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	7" X 5" X 2" DEEP SPALL WITH EXPOSED STRANDS IN BOTTOM FLANGE NORTH FACE AT BENT 1 (PM)	3	1	1 Feet

**General Comments**

**Span 1 Near Bearing**  
**Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments**

**Span 1 Far Bearing**  
**Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments**

**Span 1****Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	2	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF LIMITED EFFECTIVENESS OF PROTECTIVE COATING	2	2	2 Square Feet

**General Comments****Span 1****Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 1****Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	2	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF LIMITED EFFECTIVENESS PROTECTIVE COATING	2	2	2 Square Feet

**General Comments****Span 1****Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments**

**Span 1****Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 1****Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 2****Expansion Joint****Compression Seal**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
302	Compression Joint Seal	32	24	2	6	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
302	Debris Impaction	6 FT. OF DEBRIS IMPACTION	3	6	6 Feet
302	Adjacent Deck or Header	2 - 8" DIAGONAL CRACKS 1/16" WIDE IN HEADER	2	2	2 Feet

**General Comments****Span 2****Deck****Reinforced Concrete Deck**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
12	Reinforced Concrete Deck	1,805	0	0	1,805	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
12	Cracking (RC and Other)	1803 SF. OF HAIRLINE MAP CRACKING AND TRANSVERSE AND DIAGONAL CRACKING UP TO 1/16" WIDE IN TOP OF DECK	3	1,803	1,803 Square Feet
12	Delamination/Spall	20" X 12" X 1/2" DEEP SPALL WITH EXPOSED REBAR IN TOP OF DECK AT BENT 1	3	2	2 Square Feet
12	Cracking (RC and Other)	50 SF. OF TRANSVERSE HAIRLINE CRACKING WITH EFFLORESCENCE IN BOTTOM OF DECK	2		50 Square Feet

**General Comments**

**Span 2** **Beam 1****Prestressed Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
109	Prestressed Concrete Open Girder/Beam	54	53	1	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	7" X 3" DELAMINATION IN WEB NORTH FACE AT BENT 2	2	1	1 Feet

**General Comments****Span 2** **Beam 3****Prestressed Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
109	Prestressed Concrete Open Girder/Beam	54	52	1	1	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	3" X 7" X 1/2" DEEP SPALL WITH EXPOSED REBAR IN BOTTOM FACE AT BENT 2	3	1	1 Feet
109	Delamination/Spall	7" X 3" DELAMINATION IN WEB SOUTH FACE AT BENT 2	2	1	1 Feet

**General Comments****Span 2** **Beam 4****Prestressed Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
109	Prestressed Concrete Open Girder/Beam	54	53	0	1	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	14" X 7" X 2" DEEP SPALL IN END OF BEAM AT BENT 1	3	1	2 Feet

**General Comments****Span 2** **Beam 5****Prestressed Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
109	Prestressed Concrete Open Girder/Beam	54	53	1	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	3" X 5" X 1" DEEP SPALL IN WEB NORTH FACE AT BENT 2	2	1	1 Feet

**General Comments****Span 2** **Right Bridge Rail****Concrete Railing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
331	Reinforced Concrete Bridge Railing	54	53	1	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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331 Cracking (RC and Other) 18" TRANSVERSE HAIRLINE CRACK IN CURB 2 1 Feet

**General Comments****Span 2 Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 2 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 2 Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 2 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments**

**Span 2 Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 2 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 2 Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 2 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments**

**Span 2 Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 2 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments****Span 3 Deck****Reinforced Concrete Deck**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
12	Reinforced Concrete Deck	1,805	0	0	1,805	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
12	Cracking (RC and Other)	1805 SF. OF HAIRLINE MAP CRACKING AND TRANSVERSE AND DIAGONAL CRACKING UP TO 1/16" WIDE IN TOP OF DECK	3	1,805	1,805 Square Feet

**General Comments****Span 3 Beam 1****Prestressed Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
109	Prestressed Concrete Open Girder/Beam	54	53	1	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	7" X 3" DELAMINATION IN WEB NORTH FACE AT BENT 2	2	1	1 Feet

**General Comments**

**Span 3** **Beam 4**  
**Prestressed Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
109	Prestressed Concrete Open Girder/Beam	54	53	0	1	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	10" DIAMETER X 1/2" DEEP SPALL IN BOTTOM FACE AT TIE-DOWN POINT NEAR MIDSPAN	3	1	1 Feet

General Comments

**Span 3** **Beam 5**  
**Prestressed Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
109	Prestressed Concrete Open Girder/Beam	54	53	0	1	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	8" DIAMETER X 1/2" DEEP SPALL IN BOTTOM FACE AT TIE-DOWN POINT NEAR MIDSPAN	3	1	1 Feet

General Comments

**Span 3** **Expansion Joint**  
**Compression Seal**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
302	Compression Joint Seal	32	26	0	6	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
302	Debris Impaction	6 FT. OF DEBRIS IMPACTION	3	6	6 Feet

General Comments

**Span 3** **Right Bridge Rail**  
**Concrete Railing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
331	Reinforced Concrete Bridge Railing	54	53	1	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
331	Cracking (RC and Other)	18" TRANSVERSE HAIRLINE CRACK IN CURB	2	1	Feet

General Comments

**Span 3** **Near Bearing**  
**Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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Structure Number: 770154

Inspection Date: 05/24/2017

316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments**

**Span 3 Far Bearing**

**Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments**

**Span 3 Near Bearing**

**Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments**

**Span 3 Far Bearing**

**Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments**

**Span 3 Near Bearing**

**Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 3 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments****Span 3 Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments****Span 3 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments****Span 3 Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments**

**Span 3 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments****Span 4 Deck****Reinforced Concrete Deck**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
12	Reinforced Concrete Deck	1,376	0	0	1,376	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
12	Cracking (RC and Other)	1376 SF. OF HAIRLINE MAP CRACKING AND TRANSVERSE AND DIAGONAL CRACKING UP TO 1/16" WIDE IN TOP OF DECK	3	1,376	1,376 Square Feet

**General Comments****Span 4 Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments****Span 4 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	2	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	SURFACE CORROSION	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	3	2	2 Square Feet

**General Comments**

**Span 4 Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments****Span 4 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	2	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF LIMITED EFFECTIVENESS OF PROTECTIVE COATING	2	2	2 Square Feet

**General Comments****Span 4 Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments****Span 4 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	2	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF LIMITED EFFECTIVENESS OF PROTECTIVE COATING	2	2	2 Square Feet

**General Comments**



**Span 4 Near Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/4" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments****Span 4 Far Bearing****Other Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
515	Steel Protective Coating	2	0	0	0	2 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
316	Corrosion	1/8" OF PACK RUST	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	2 SF. OF INEFFECTIVE PROTECTIVE COATING	4	2	2 Square Feet

**General Comments****End Bent 1 Reinforced Concrete Abutment 1****Reinforced Concrete Abutment**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
215	Reinforced Concrete Abutment	30	28	0	2	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
215	Delamination/Spall	2 - SPALLS UP TO 12" X 4" X 1/2" DEEP AT NORTH END	3	2	2 Feet

**General Comments****End Bent 1 Reinforced Concrete Pier Cap 1****Reinforced Concrete Pier Cap**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
234	Reinforced Concrete Pier Cap	30	28	2	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
234	Cracking (RC and Other)	12" VERTICAL HAIRLINE CRACK IN FACE OF CAP EXTENDING INTO TOP OF CAP UNDER BAY 3	2	1	1 Feet
234	Cracking (RC and Other)	6" VERTICAL HAIRLINE CRACK UNDER BAY 1	2	1	1 Feet

**General Comments**

**End Bent 2****Reinforced Concrete Abutment 1****Reinforced Concrete Abutment**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
215	Reinforced Concrete Abutment	30	22	0	8	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
215	Cracking (RC and Other)	3 SF. OF HAIRLINE MAP CRACKING AT NORTH END	3	3	3 Feet
215	Cracking (RC and Other)	5 SF. OF HAIRLINE MAP CRACKING IN BAY 3	3	5	5 Feet

**General Comments****Bent 2****Reinforced Concrete Pier Cap 1****Reinforced Concrete Pier Cap**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
234	Reinforced Concrete Pier Cap	29	26	3	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
234	Cracking (RC and Other)	2 - 18" HORIZONTAL HAIRLINE CRACK IN WEST FACE AT SOUTH END	2	2	3 Feet
234	Exposed Rebar	4" DIAMETER X 1/2" DEEP SPALL WITH EXPOSED REBAR IN WEST FACE UNDER BEAM 4	2	1	1 Feet

**General Comments**

## Elements Verified

Location	Name	Component	Element Name	Amount
Span 1	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1376
Span 1	Beam 1	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	43
Span 1	Beam 2	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	43
Span 1	Beam 3	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	43
Span 1	Beam 4	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	43
Span 1	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	42
Span 1	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	42
Span 2	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1805
Span 2	Beam 1	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	54
Span 2	Beam 2	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	54
Span 2	Beam 3	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	54
Span 2	Beam 4	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	54
Span 2	Beam 5	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	54
Span 2	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	54
Span 2	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	54
Span 2	Expansion Joint	Compression Seal	Compression Joint Seal	32
Span 3	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1805
Span 3	Beam 1	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	54
Span 3	Beam 2	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	54
Span 3	Beam 3	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	54
Span 3	Beam 4	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	54
Span 3	Beam 5	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	54
Span 3	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	54
Span 3	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	54
Span 3	Expansion Joint	Compression Seal	Compression Joint Seal	32
Span 4	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1376
Span 4	Beam 1	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	43
Span 4	Beam 2	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	43
Span 4	Beam 3	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	43
Span 4	Beam 4	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	43
Span 4	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	42
Span 4	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	42
Span 4	Expansion Joint	Compression Seal	Compression Joint Seal	32
Bent 1		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	29
Bent 1		Prestressed Concrete Pile	Prestressed Concrete Pile	1
Bent 1		Prestressed Concrete Pile	Prestressed Concrete Pile	1
Bent 1		Prestressed Concrete Pile	Prestressed Concrete Pile	1
Bent 1		Prestressed Concrete Pile	Prestressed Concrete Pile	1
End Bent 1		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	30
End Bent 1		Reinforced Concrete Abutment	Reinforced Concrete Abutment	30
Bent 2		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	29
Bent 2		Prestressed Concrete Pile	Prestressed Concrete Pile	1
Bent 2		Prestressed Concrete Pile	Prestressed Concrete Pile	1
Bent 2		Prestressed Concrete Pile	Prestressed Concrete Pile	1

## Elements Verified

Location	Name	Component	Element Name	Amount
Bent 2		Prestressed Concrete Pile	Prestressed Concrete Pile	1
Bent 2		Prestressed Concrete Pile	Prestressed Concrete Pile	1
Bent 2		Prestressed Concrete Pile	Prestressed Concrete Pile	1
End Bent 2		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	30
End Bent 2		Reinforced Concrete Abutment	Reinforced Concrete Abutment	30
Bent 3		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	29
Bent 3		Prestressed Concrete Pile	Prestressed Concrete Pile	1
Bent 3		Prestressed Concrete Pile	Prestressed Concrete Pile	1
Bent 3		Prestressed Concrete Pile	Prestressed Concrete Pile	1
Bent 3		Prestressed Concrete Pile	Prestressed Concrete Pile	1
Bent 3		Prestressed Concrete Pile	Prestressed Concrete Pile	1

# General Inspection Notes

# National Bridge and NC Inspection Items

Structure Number: 770154

Inspection Date: 05/24/2017

## National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	5
Item 59: Superstructure	0 - 9 , N	6
Item 60: Substructure	0 - 9 , N	6
Item 61: Channel and Channel Protection	0 - 9 , N	N
Item 62: Culvert	0 - 9 , N	N
Item 71: Waterway Adequacy	0 - 9 , N	N
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	F	6360	3376
Drainage System	G, F, P, or C	F	6360	3332
Utilities	G, F, P, or C			
Slope Protection	G, F, P, or C	G	0	3352
Scour	G, F, P, or C			
Wingwall	G, F, P, or C	G	0	3350
Field Scour Evaluation				
Drift	G, F, P, or C		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	G		
Estimated Remaining Life	0 - 100 Years	14		
Superstructure Paint Code				

Note: If NC SMU Inspection 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	12
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: 770154

Inspection Date: 05/24/2017

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<b>Item</b>	Priority Maintenance Issued	<b>Grade</b>	Y	<b>Maint Code</b>		<b>Qty.</b>	0
<b>Details</b>	Span 1 Beam 1: 7" X 5" X 2" DEEP SPALL WITH EXPOSED STRANDS IN BOTTOM FLANGE NORTH FACE AT BENT 1 (PM)						

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<b>Item</b>	Deck Debris	<b>Grade</b>	F	<b>Maint Code</b>	3376	<b>Qty.</b>	6360
<b>Details</b>	DEBRIS ALONG NORTH AND SOUTH CURB						

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<b>Item</b>	Drainage System	<b>Grade</b>	F	<b>Maint Code</b>	3332	<b>Qty.</b>	6360
<b>Details</b>	PONDING WATER ALONG NORTH AND SOUTH CURB						

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Span 1 Deck: 1376 SF. OF HAIRLINE MAP CRACKING AND TRANSVERSE AND DIAGONAL CRACKING UP TO 1/16" WIDE IN TOP OF DECK



Expansion Joint : 6 FT. OF DEBRIS IMPACTION





Span 2 Deck: 20" X 12" X 1/2" DEEP SPALL WITH EXPOSED REBAR IN TOP OF DECK AT BENT 1



PONDING WATER ALONG NORTH AND SOUTH CURB



DEBRIS ALONG SOUTH CURB



End Bent 1 Abutment/Backwall : 2 - SPALLS UP TO 12" X 4" X 1/2" DEEP AT NORTH END



Span 1 Beam 1 Near Bearing: SURFACE CORROSION



Span 1 Beam 1: 7" X 5" X 2" DEEP SPALL WITH EXPOSED STRANDS IN BOTTOM FLANGE NORTH FACE AT BENT 1 (PM)



Span 1 Beam 3 Far Bearing: 1/4" OF PACK RUST



Span 2 Beam 4: 14" X 7" X 2" DEEP SPALL IN END OF BEAM AT BENT 1



Span 2 Beam 3: 7" X 3" DELAMINATION IN WEB SOUTH FACE AT BENT 2



Span 2 Beam 3: 3" X 7" X 1/2" DEEP SPALL WITH EXPOSED REBAR IN BOTTOM FACE AT BENT 2



Span 3 Beam 4: 10" DIAMETER X 1/2" DEEP SPALL IN BOTTOM FACE AT TIE-DOWN POINT NEAR MIDSPAN



LOOKIG EAST



TYPICAL GUARDRAIL TO BRIDGE RAIL TRANSITION, SOUTHWEST CORNER SHOWN



SOUTH BRIDGE RAIL, NORTH BRIDGE RAIL SIMILAR



JOINT AT BENT 1, BENTS 2 AND 3 SIMILAR





LOOKING SOUTH



LOOKING NORTH



TYPICAL GUARDRAIL END TREATMENT, SOUTHEAST CORNER SHOWN



LOOKING WEST



END BENT 1



BENT 1, BENT 3 SIMILAR



LADDER USED DURING INSPECTION



TYPICAL BEARING, BEAM 2 AT BENT 1 SHOWN



BENT 2



SPAN 2 SUPERSTRUCTURE, SPAN 3 SIMILAR



SPAN 4 SUPERSTRUCTURE, SPAN 1 SIMILAR



END BENT 2



SPAN 3 UNDERCLEARANCE LOOKING NORTH



SOUTH PROFILE



SPAN 2 UNDERCLEARANCE LOOKING SOUTH



NORTH PROFILE



NATIONAL BRIDGE INVENTORY----- STRUCTURE INVENTORY AND APPRAISAL

Run Date: 09/28/2017

**IDENTIFICATION**

(1) STATE NAME -NORTH CAROLINA BRIDGE **770154**  
 (8) STRUCTURE NUMBER(FEDERAL) 000000001550154  
 (5) INVENTORY ROUTE (ON/UNDER) - ON 31010060  
 (2) STATE HIGHWAY DEPARTMENT DISTRICT 1  
 (3) COUNTY CODE 155 (4) PLACE CODE 0  
 (6) FEATURE INTERSECTED - I95  
 (7) FACILITY CARRIED SR1006  
 (9) LOCATION 0.1 MI. W. JCT. SR1741  
 (11) MILEPOINT 0  
 (16) LAT 34° 47' 58.94" (17) LONG 78° 59' 27.90"  
 (98) BORDER BRIDGE STATE CODE PCT SHARE  
 (99) BORDER BRIDGE STRUCTURE NO

SUFFICIENCY RATING = 84.13  
 STATUS = Not Deficient

**CLASSIFICATION** **CODE**

(112) NBIS BRIDGE SYSTEM - YES  
 (104) HIGHWAY SYSTEM Is not on NHS 0  
 (26) FUNCTIONAL CLASS - Major Collector 07  
 (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

**STRUCTURE TYPE AND MATERIAL**

(43) STRUCTURE TYPE MAIN: Prestressed Concrete  
 TYPE - Stringer Mutlibeam or Girder CODE 502  
 (44) STRUCTURE TYPE APPR :  
 TYPE - CODE 000  
 (45) NUMBER OF SPANS IN MAIN UNIT 4  
 (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

**CONDITION** **CODE**

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

**LOAD RATING AND POSTING** **CODE**

(31) DESIGN LOAD HS 15 3  
 (63) OPERATING RATING METHOD - Load Factor 1  
 (64) OPERATING RATING - HS-52 93  
 (65) INVENTORY RATING METHOD - Load Factor 1  
 (66) INVENTORY RATING - HS-24 43  
 (70) BRIDGE POSTING - No Posting Required 5  
 (41) STRUCTURE OPEN, POSTED ,OR CLOSED A  
 DESCRIPTION - Open, No Restriction

**AGE AND SERVICE**

(27) YEAR BUILT 1959  
 (106) YEAR RECONSTRUCTED  
 (42) TYPE OF SERVICE : ON - Highway  
 UNDER - Highway CODE 11  
 (28) LANES: ON STRUCTURE 2 UNDER STRUCTURE 4  
 (29) AVERAGE DAILY TRAFFIC 2600  
 (30) YEAR OF ADT 2014 (109) TRUCK ADT PCT 7%  
 (19) BYPASS OR DETOUR LENGTH 6 MI

**APPRAISAL** **CODE**

(67) STRUCTURAL EVALUATION 6  
 (68) DECK GEOMETRY 4  
 (69) UNDERCLEARANCES, VERTI & HORIZ 4  
 (71) WATERWAY ADEQUACY N  
 (72) APPROACH ROADWAY ALIGNMENT 8  
 (36) TRAFFIC SAFETY FEATURES 0010  
 (113) SCOUR CRITICAL BRIDGES N

**GEOMETRIC DATA**

(48) LENGTH OF MAXIMUM SPAN 52 FT  
 (49) STRUCTURE LENGTH 190 FT  
 (50) CURB OR SIDEWALK: LEFT 1.7085 FT RIGHT 1.7085 FT  
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 28 FT  
 (52) DECK WIDTH OUT TO OUT 33.417 FT  
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 23 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 28 FT  
 (53) MIN VERT CLEAR OVER BRIDGE RDWY 999.9 FT  
 (54) MIN VERT UNDERCLEAR REF Highway 16.1 FT  
 (55) MIN LAT UNDERCLEAR RT REF Highway 10.75 FT  
 (56) MIN LAT UNDERCLEAR LT REF - 17 FT

**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 5200 (115) YEAR FUTURE ADT 2025

**INSPECTIONS**

(90) INSPECTION DATE 05/24/2017

**NAVIGATION DATA**

(38) NAVIGATION CONTROL - Not Applicable CODE N  
 (111) PIER PROTECTION - CODE  
 (39) NAVIGATION VERTICAL CLEARANCE 0  
 (116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR FT  
 (40) NAVIGATION HORIZONTAL CLEARANCE 0 FT

(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

Structure No: 770154

County: ROBESON

Run Date:

Span Number	Feature Intersected	Inventory Route	Minimum Maximum Vertical Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Numer of Lanes	Average Daily Traffic	Year of Average Daily Traffic	Total Horizontal Clearance	See Note 1							
													Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway Designator	Direction of Traffic	Highway System of Route
	6	5	10	11	12	13	20	26	28	29	30	47	54A	54	55	56	69	100	102	104
2	I95S	11000950	16.2	30.50	1	10095		1	2	23000	2013	48.08	H	16.1	10.75	16.83	9	1	1	1
3	I95N	11000950	16.3	30.50	1	10095		1	2	23000	2015	48.25	H	16.1	10.75	17	9	1	1	1

Note 1: Items 54, 55, and 56 are not reported FHWA under route data points but are collected for each under route to determine the minimum value for Underclearance Appraisal Item 69. The under route that generates the lowest Underclearance Appraisal value will be reported on the Facility Carried record.

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 09/28/2017

COUNTY : ROBESON DIVISION : 6 DISTRICT : 1 STRUCTURE NUMBER : 770154 LENGTH : 190 FEET

ROUTE CARRIED : SR1006 FEATURE INTERSECTED : I95

LOCATED : 0.1 MI. W. JCT. SR1741 BRIDGE NAME : CITY :

FUNC. CLASS : 07 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 2600 2014 RAIL TYPE : LT 111 RT 111

BUILT : 1959 BY : SHC PROJ : 8.13972 FED.AID PROJ : DESIGN LOAD : HS 15

REHAB : BY : PROJ : ALIGNMENT : TAN SKEW : 90 LANES : ON 2 UNDER 4

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

SUPERSTRUCTURE : REINFORCED CONCRETE FLOOR ON PRESTR.CONC.GIRDERS

SUBSTRUCTURE : E.BTS&I.BTS:RC CAPS/PPC PILES

SPANS : 1@41'2";2@54";1@41'2"

BEAMS OR GIRDERS : SPN.1&4:4 LNS PPC GDRS.;SPNS.2&3:5 LNS.PPC GIRDERS

FLOOR : 7.5" RC/NO AWS ENCROACHMENT : DECK (OUT TO OUT) : 33.417 FT

CLEAR ROADWAY : 28 FT BETWEEN RAILS : 31.417 FT SIDEWALK OR CURB : LT 1.7085 FT RT 1.7085 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-24 OPE.RTG. : HS-52 CONTR.MEMBER : int.gdrB POSTED : SV TTST DATE

SYSTEM : Primary S.R. Route GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
2	I95S	16.20	16.10	48.0830	16.8330	10.75
3	I95N	16.30	16.10	48.25	17	10.75

Note: All measurements are in feet.

REMARKS :

# **BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS**

Bridge: 770154

County ROBESON

Date: 05/24/2017

**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	1	Span 1 Beam 1: 7" X 5" X 2" DEEP SPALL WITH EXPOSED STRANDS IN BOTTOM FLANGE NORTH FACE AT BENT 1 (PM)	

## Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

**BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS**

Bridge: 770154 County ROBESON

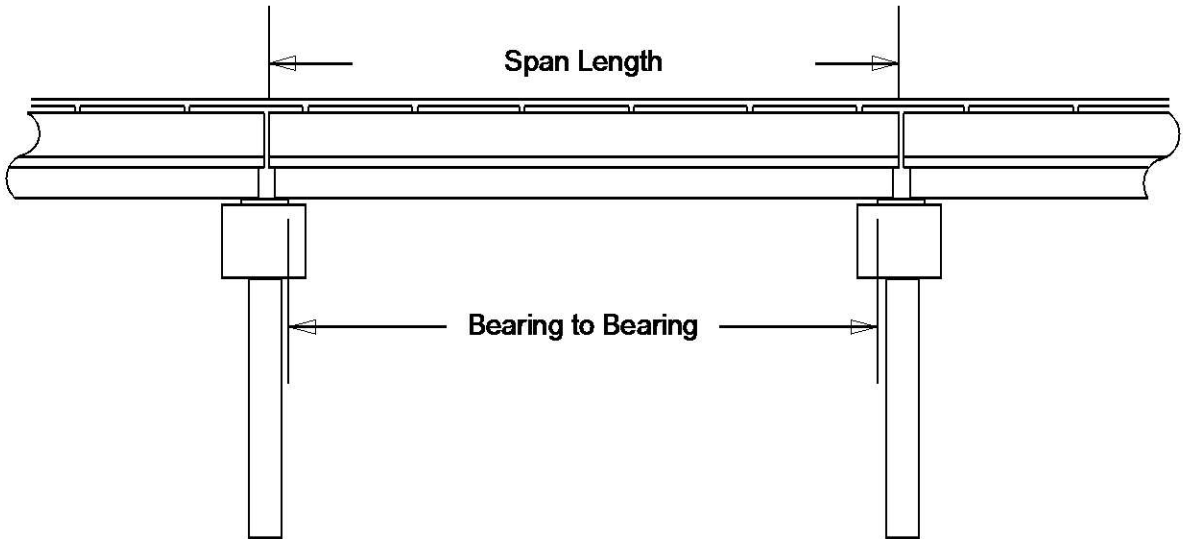
THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	1 SF
Location:		
Bent/Span No.		
Priority Level	Status	
Recommended	Routine Maintenance	
Submitted Date:	Submitted By:	Assisted By:
05/24/2017	MATTHEW MOYER	
Details		
Span 1 Beam 1: 7" X 5" X 2" DEEP SPALL WITH EXPOSED STRANDS IN BOTTOM FLANGE NORTH FACE AT BENT 1 (PM)		

# Structure Data Worksheet

Spans

County: ROBESON      Structure No: 770154      Date: 05/24/2017      Inspected By: MJM



Span No	Span Length	Bearing to Bearing	Comments
1	41.167	39.0	NBIS BRIDGE LENGTH = 185.333'
2	54.0 FT.	52.0	MEASUREMENTS VERIFIED 5/24/2017 BY MJM
3	54.0 FT.	52.0	
4	41.167 FT.	39.0	

# Bridge Inspection Field Sketch



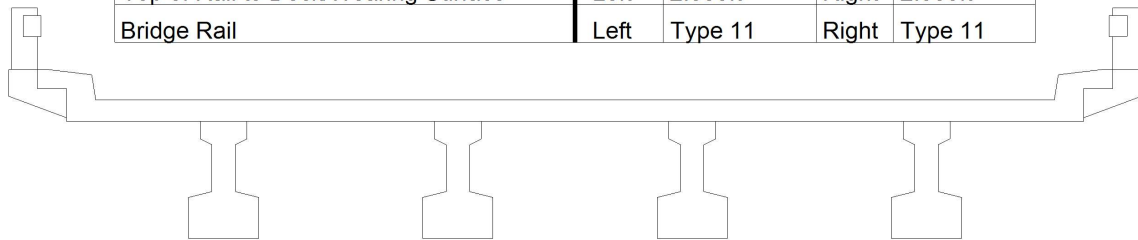
Roadway	21ft Wide	2 Paved Lanes	Looking East
Left Shoulder	5ft Wide	1ft Paved	4ft Unpaved
Right Shoulder	6ft Wide	1ft Paved	5ft Unpaved
Left Guardrail	5ft from road		
Right Guardrail	6ft from road		

MEASUREMENTS UPDATED 5/24/2017 BY MJM

<b>Title</b> APPROACH ROADWAY		<b>Description</b> LOOKING EAST	
<b>Bridge No:</b> 770154	<b>Drawn By:</b> RBH	<b>Date:</b> 12/12/07	<b>File Name:</b> S0098000577

# Bridge Inspection Field Sketch

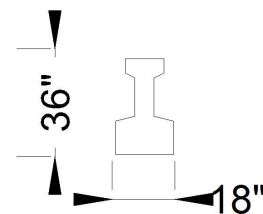
Deck Width/Out to Out	33.417ft	Between Rails	31.417ft
Clear Roadway	28ft	Wearing Surface	
Median Width		Median Height	
Curb Height		Left 0.833ft	Right 0.833ft
Sidewalk Width		Left	Right
Clear Roadway (Rail to Median)		Left	Right
Guardrail Width		Left 1ft	Right 1ft
Top of Rail to Deck/Wearing Surface		Left 2.583ft	Right 2.583ft
Bridge Rail		Left Type 11	Right Type 11



Measurements for Span #	1		
Deck Thickness	0.625	Left Overhang	4.458
Top of Rail to Bottom of Beam	6.125	Right Overhang	4.458

Beam Number	Beam Type	Spacing	Comments
1	PPC Girder	8.167ft	
2	PPC Girder	8.167ft	
3	PPC Girder	8.167ft	
4	PPC Girder	ft	

### SIMILAR GIRDERS



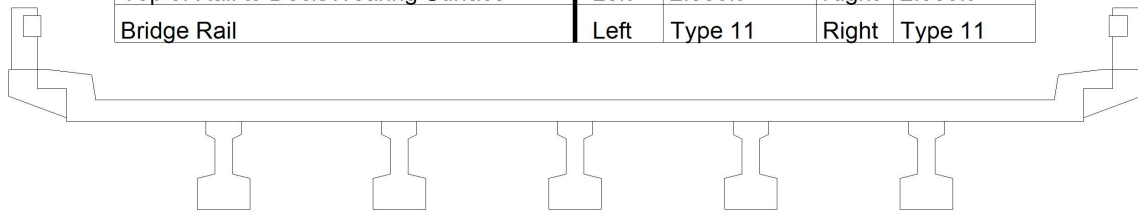
MEASUREMENTS VERIFIED 5/24/2017 BY MJM

<b>Title</b> Superstructure	<b>Description</b> Spans 1 & 4
<b>Bridge No:</b> 770154	<b>Drawn By:</b> RBH
<b>Date:</b> 12/12/07	<b>File Name:</b> S0098000578



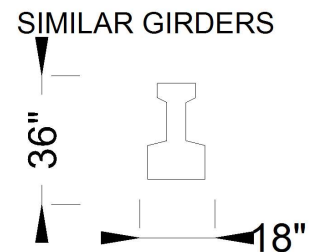
# Bridge Inspection Field Sketch

Deck Width/Out to Out	33.417ft	Between Rails	31.417ft
Clear Roadway	28ft	Wearing Surface	
Median Width		Median Height	
Curb Height		Left	0.833ft
		Right	0.833ft
Sidewalk Width		Left	
		Right	
Clear Roadway (Rail to Median)		Left	
		Right	
Guardrail Width		Left	1ft
		Right	1ft
Top of Rail to Deck/Wearing Surface		Left	2.583ft
		Right	2.583ft
Bridge Rail		Left	Type 11
		Right	Type 11



Measurements for Span #	2		
Deck Thickness	0.625	Left Overhang	4.458
Top of Rail to Bottom of Beam	6.125	Right Overhang	4.458

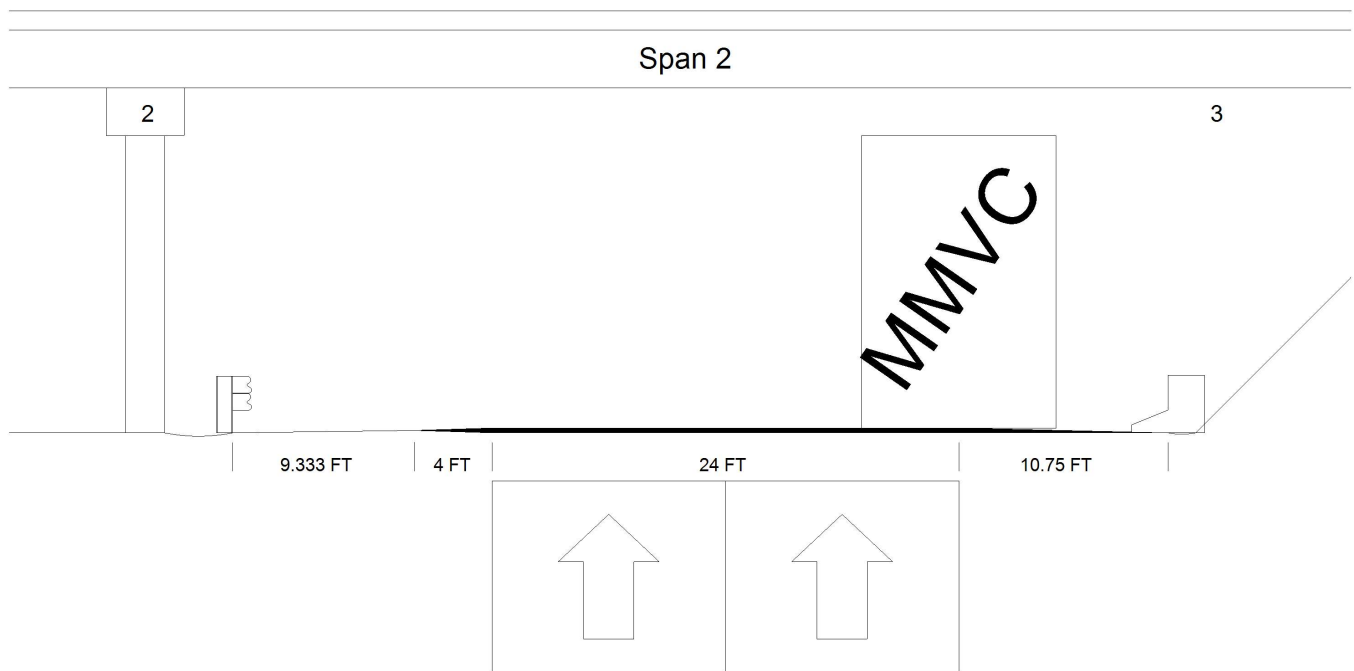
Beam Number	Beam Type	Spacing	Comments
1	PPC Girder	6.125ft	
2	PPC Girder	6.125ft	
3	PPC Girder	6.125ft	
4	PPC Girder	6.125ft	
5	PPC Girder	ft	



MEASUREMENTS VERIFIED 5/24/2017 BY MJM

<b>Title</b> Superstructure # 2		<b>Description</b> Span 2	
Bridge No: 770154	Drawn By: RBH	Date: 12/12/07	File Name: S0098000579

# Bridge Inspection Field Sketch



Roadway 1		Direction of Traffic	South
Distance to Left Rail	13.333FT	Distance to Right Rail	10.75FT
Distance to Left Toe of Slope		Distance to Left Bent	16.833FT
Distance to Right Toe of Slope	12.167FT	Distance to Right Bent	12.167FT
MMVC	16.2 Ft at Beam 5. 10 FT from RIGHT EDGE OF PAVEMENT		
MVC	16.1 Ft at Beam 5. 0 FT from CENTER of ROADWAY		

MEASUREMENTS UPDATED 5/24/2017 BY MJM

## Title

Underclearance N.B.L. ( Looking North )

## Description

Span 2

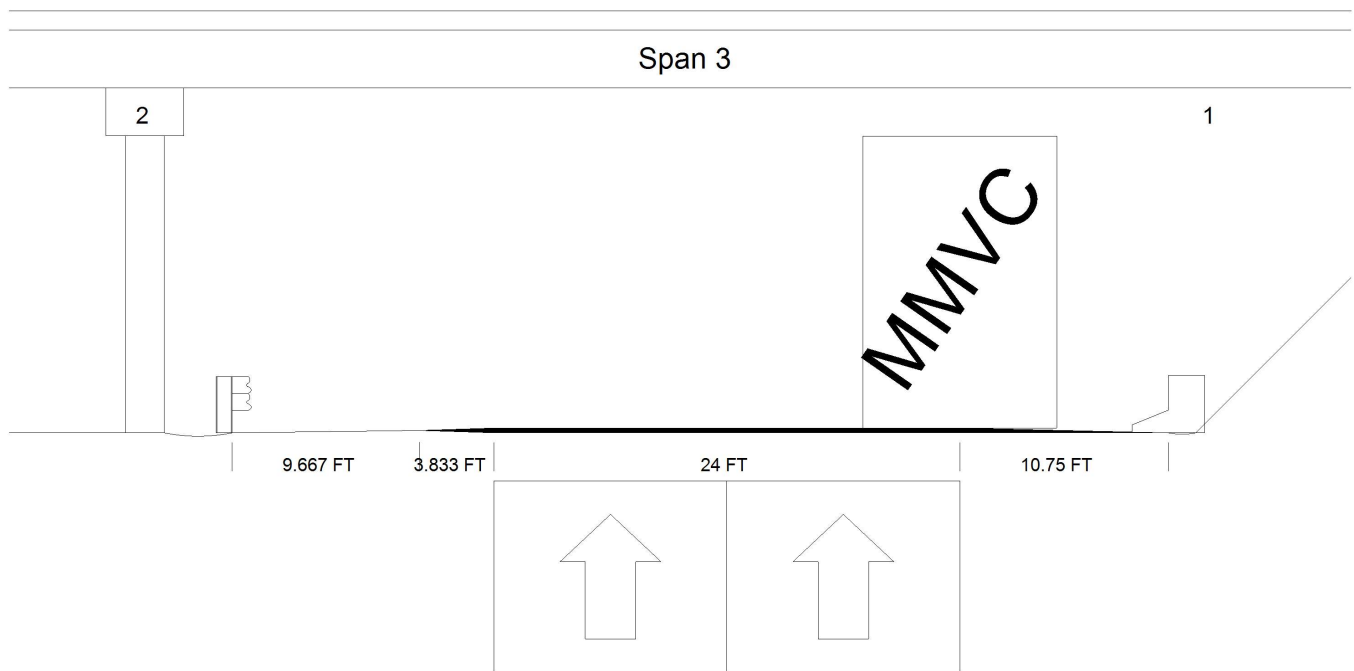
Bridge No: 770154

Drawn By: RLK

Date: 5/23/2011

File Name: S0098000580

# Bridge Inspection Field Sketch



Roadway 1		Direction of Traffic	North
Distance to Left Rail	13.5FT	Distance to Right Rail	10.75FT
Distance to Left Toe of Slope		Distance to Left Bent	17FT
Distance to Right Toe of Slope	12.167FT	Distance to Right Bent	12.167FT
MMVC	16.3 Ft at Beam 5, 10 FT from RIGHT EDGE OF PAVEMENT		
MVC	16.1 Ft at Beam 5, 0 FT from AT CENTER OF ROADWAY		

MEASUREMENTS UPDATED 5/24/2017 BY MJM

**Title**

Underclearance S.B.L. ( Looking South )

**Description**

Span 3

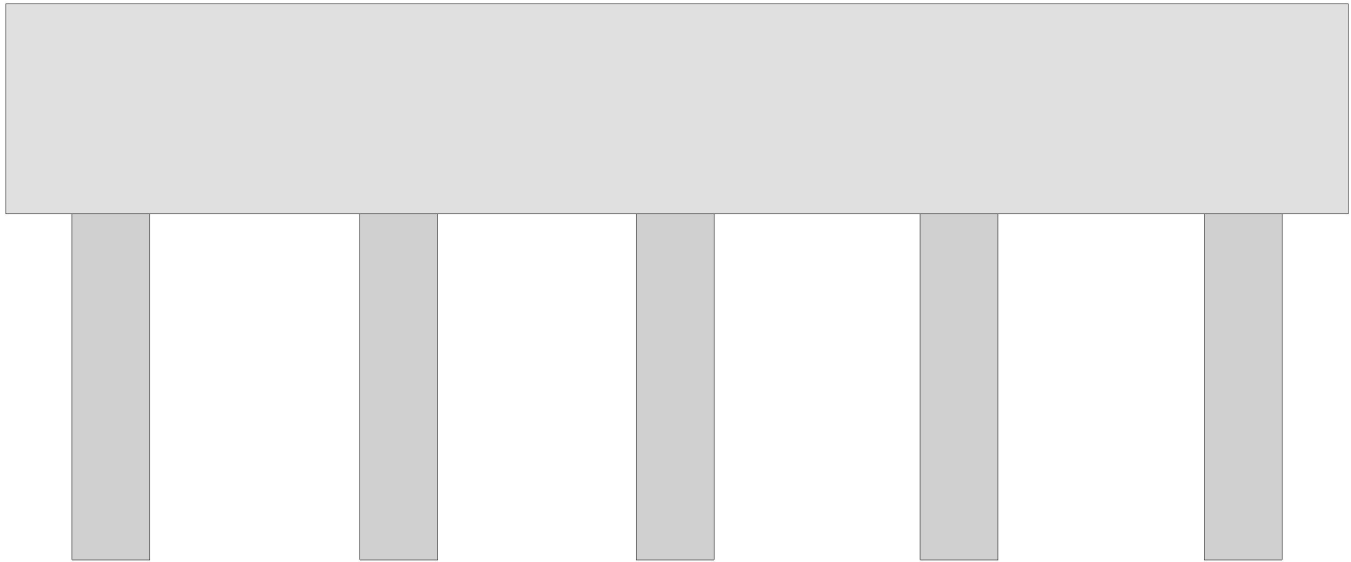
Bridge No: 770154

Drawn By: RLK

Date: 5/23/2011

File Name: S0098000581

# Bridge Inspection Field Sketch



<b>Cap Information</b>			<b>Material</b> Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
28.750 ft.	3.000 ft.	4.500 ft.	2.250 ft.	2.250 ft.	1.750 ft.	1.750 ft.				
<b>Subcap Information</b>			<b>Material</b>							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
<b>Sill Information</b>			<b>Material</b>							
Length	Width	Height								
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Concrete	6.167 ft.	1.667 ft.			Vertical	Yes	No	No	No
2	Concrete	5.917 ft.	1.667 ft.			Vertical	Yes	No	No	No
3	Concrete	6.083 ft.	1.667 ft.			Vertical	Yes	No	No	No
4	Concrete	6.083 ft.	1.667 ft.			Vertical	Yes	No	No	No
5	Concrete		1.667 ft.			Vertical	Yes	No	No	No
<b>Bent/Abutment #:</b> 1			<b>Similar Bents:</b> 3							

**Title** MEASUREMENTS VERIFIED 5/24/2017 BY MJM  
SUBSTRUCTURE

**Description**  
BENT 1

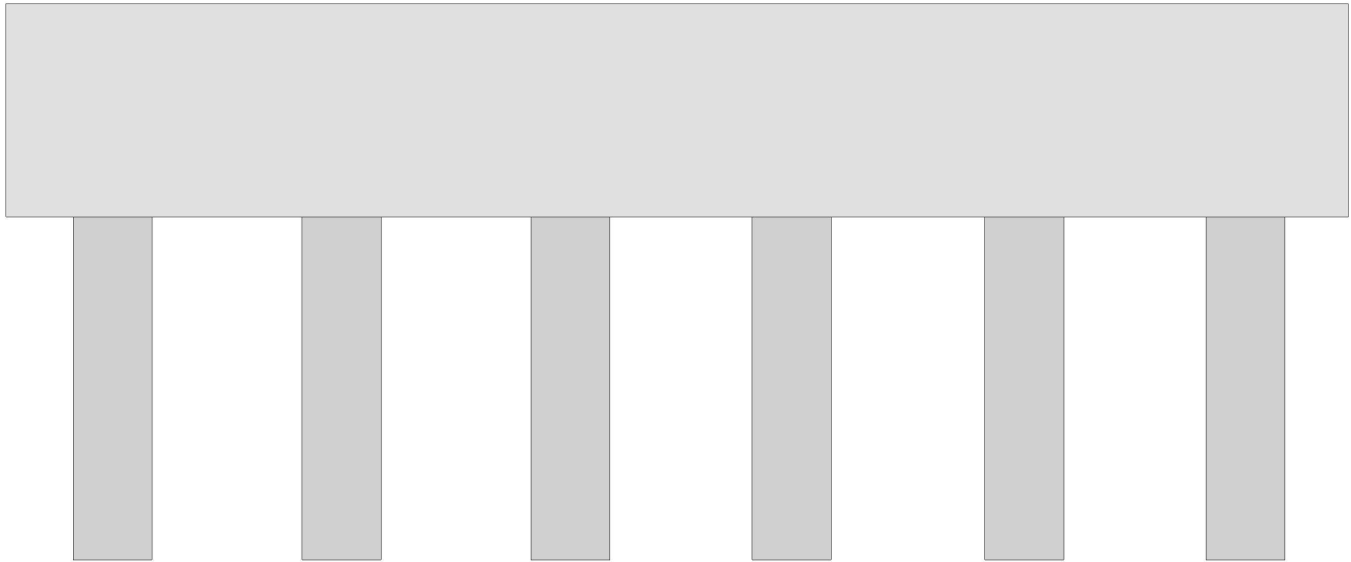
**Bridge No:** 770154

**Drawn By:** RLK

**Date:** 6/3/2009

**File Name:** S0098000821

# Bridge Inspection Field Sketch



<b>Cap Information</b>			<b>Material</b> Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
28.333 ft.	3.000 ft.	4.500 ft.	2.250 ft.	2.250 ft.	1.750 ft.	1.750 ft.				
<b>Subcap Information</b>			<b>Material</b>							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
<b>Sill Information</b>			<b>Material</b>							
Length	Width	Height								
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Concrete	4.833 ft.	1.667 ft.			Vertical	Yes	No	No	No
2	Concrete	4.833 ft.	1.667 ft.			Vertical	Yes	No	No	No
3	Concrete	4.667 ft.	1.667 ft.			Vertical	Yes	No	No	No
4	Concrete	4.917 ft.	1.667 ft.			Vertical	Yes	No	No	No
5	Concrete	4.667 ft.	1.667 ft.			Vertical	Yes	No	No	No
6	Concrete		1.667 ft.			Vertical	Yes	No	No	No
<b>Bent/Abutment #:</b> 2			<b>Similar Bents:</b>							

<b>Title</b> MEASUREMENTS VERIFIED 5/24/2017 BY MJM				<b>Description</b>			
SUBSTRUCTURE 2				BENT 2			
<b>Bridge No:</b> 770154		<b>Drawn By:</b> RLK		<b>Date:</b> 6/3/2009		<b>File Name:</b> S0098000822	