



NC DEPARTMENT OF TRANSPORTATION      ATTENTION:  
 DIVISION OF HIGHWAYS  
 STRUCTURE MANAGEMENT UNIT

## Structure Safety Report

### Routine Element Inspection

COUNTY: ROBESON      STRUCTURE NUMBER: 770167      FREQUENCY: 24 MONTHS

FACILITY CARRIED: SR1723      MILE POST: 36.4

LOCATION: 0.3 MI W JCT SR1904

FEATURE INTERSECTED: I95

LATITUDE: 34° 52' 50.04"      LONGITUDE: 78° 57' 42.05"

SUPERSTRUCTURE: RC FLOOR/PPC GDRS & PPC CORED SLAB

SUBSTRUCTURE: E.BTS:RC CAPS/PPC PILES; INT.BTS:RCP&B;BT.3/PILE FTG.

SPANS: 1@52'6";2@55';1@52'6"

FRACTURE CRITICAL     TEMPORARY SHORING     SCOUR CRITICAL     SCOUR PLAN OF ACTION

PRESENT CONDITION: Good      INSPECTION DATE: 11/08/2017

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**      YES

LOOKING EAST

INSPECTED BY Ray L. Kisner	SIGNATURE <i>Ray L. Kisner</i>	ASSISTED BY    John Britt
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# Structure Element Scoring

Structure Number: 770167

Inspection Date 11/8/2017

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	2784	2782	2	0	0
15	0	Prestressed Concrete Top Flange	Beam	2970	2970	0	0	0
104	0	Prestressed Concrete Closed Web/Box Gir	Beam	990	990	0	0	0
109	0	Prestressed Concrete Open Girder/Beam	Beam	404	400	4	0	0
205	0	Reinforced Concrete Column	Piles and Columns	6	6	0	0	0
215	0	Reinforced Concrete Abutment	Abutments	60	60	0	0	0
220	0	Reinforced Concrete Pile Cap/Footing	Footing	2	2	0	0	0
226	0	Prestressed Concrete Pile	Piles and Columns	2	2	0	0	0
234	0	Reinforced Concrete Pier Cap	Caps	155	155	0	0	0
301	0	Pourable Joint Seal	Expansion Joints	0	0	0	0	0
310	0	Elastomeric Bearing	Bearing Device	36	36	0	0	0
311	0	Movable Bearing	Bearing Device	16	16	0	0	0
515	311	Steel Protective Coating	Bearing Device	32	32	0	0	0
331	0	Reinforced Concrete Bridge Railing	Bridge Rail	432	414	18	0	0
510	0	Wearing Surface	Wearing Surfaces	5160	5052	0	108	0

# Summary of Maintenance Needs

Maintenance By Defect

Structure Number: 770167

Inspection Date: 11/08/2017

<b>MMS Code</b>	<b>Element Name</b>	<b>Defect Name</b>	<b>Recommended Quantity</b>
3318	Reinforced Concrete Bridge Railing	Delamination/Spall	18 Feet
2816	Wearing Surface	Crack (Wearing Surface)	108 Square Feet

## Element Structure Maintenance Quantities

Structure Number: 770167

Inspection Date 11/08/2017

Location	MMS Code	Description	Maint Quantity	Total Quantity	Severe Quantity	Poor Quantity	Fair Quantity	Good Quantity
Abutments	3350	Maintenance of Concrete Wings and Wall	0	60	0	0	0	60
Beam	3306	Maintenance Concrete Superstructure Components	0	1394	0	0	4	1390
Beam	3326	Maintenance of Concrete Deck	0	2970	0	0	0	2970
Bearing Device	3334	Bridge Bearing	0	52	0	0	0	52
Bearing Device	3342	Clean and Paint Steel	0	32	0	0	0	32
Bridge Rail	3318	Maintenance of Concrete Bridge Rail	18	432	0	0	18	414
Caps	3348	Maintenance of Concrete Substructure	0	155	0	0	0	155
Deck	3326	Maintenance of Concrete Deck	0	2784	0	0	2	2782
Expansion Joints	3310	Maintenance of Standard Bridge Expansion Joints	0	0	0	0	0	0
Footing	3348	Maintenance of Concrete Substructure	0	2	0	0	0	2
Piles and Columns	3348	Maintenance of Concrete Substructure	0	8	0	0	0	8
Wearing Surfaces	2816	Asphalt Surface Repair	108	5160	0	108	0	5052

## Element Condition and Maintenance Data

Structure Number: 770167

Inspection Date: 11/08/2017

### Span 1 Deck

#### Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,392	1,390	2	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
12	Patched Areas	RIGHT DECK OVERHANG SOUND PATCH AT MID SPAN	2	2		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	50	48	2	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
109	Patched Area	SOUND PATCH FAR END ON BAY1 SIDE AT BENT 1	2	2		Feet

**General Comments**

### Span 1 Wearing Surface

#### Asphalt Wearing Surface

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
510	Wearing Surface	1,260	1,206	0	54	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
510	Crack (Wearing Surface)	1/4" WIDE TRANSVERSE CRACK OVER BENT 1	3	27	27	Square Feet
510	Crack (Wearing Surface)	1/8" WIDE TRANSVERSE CRACK OVER END BENT 1	3	27	27	Square Feet

**General Comments**

### Span 1 Left Bridge Rail

#### Concrete Railing

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

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
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**General Comments**

SPAN 1 LEFT RAIL HAS EXPOSED AGGREGATE

**Span 1 Right Bridge Rail****Concrete Railing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
331	Reinforced Concrete Bridge Railing	53	35	18	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
331	Delamination/Spall	SURFACE SPALLS 18 WITH EXPOSED REBAR IN RIGHT CURB	2	18	18 Feet

**General Comments**

SPAN 1 RIGHT RAIL 35 FT OF EXPOSED AGGREGATE

**Span 2 Wearing Surface****Asphalt Wearing Surface**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
510	Wearing Surface	1,320	1,293	0	27	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
510	Crack (Wearing Surface)	1/8" WIDE TRANSVERSE CRACK OVER BENT 2	3	27	27 Square Feet

**General Comments****Span 3 Wearing Surface****Asphalt Wearing Surface**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
510	Wearing Surface	1,320	1,293	0	27	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
510	Crack (Wearing Surface)	3/16" WIDE TRANSVERSE CRACK OVER BENT 3	3	27	27 Square Feet

**General Comments****Span 4 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	51	51	0	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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**General Comments****Span 4 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	51	49	2	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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109 Patched Area SOUND PATCH IN BOTTOM FLANGE NEAR END AT BENT 2 2 Feet  
3, PRIORITY MAINTENANCE REPAIR.

**General Comments**

**Span 4 Left Bridge Rail**

**Concrete Railing**

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

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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**General Comments**

SPAN 4 LEFT RAIL HAS EXPOSED AGGREGATE

**Span 4 Right Bridge Rail**

**Concrete Railing**

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

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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**General Comments**

SPAN 4 RIGHT RAIL HAS EXPOSED AGGREGATE

**End Bent 1 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	31	31	0	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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**General Comments**

END BENT PILES NOT VISIBLE DUE TO SLOPE PROTECTION, PLANS NOT VISIBLE

**End Bent 2 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	31	31	0	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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**General Comments**

END BENT PILES NOT VISIBLE DUE TO SLOPE PROTECTION, PLANS NOT VISIBLE

## Elements Verified

Location	Name	Component	Element Name	Amount
Span 1	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1392
Span 1	Beam 1	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	50
Span 1	Beam 2	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	50
Span 1	Beam 3	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	50
Span 1	Beam 4	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	50
Span 1	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	53
Span 1	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	53
Span 1	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	1260
Span 1	Near Bearing	Movable Bearing	Movable Bearing	1
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 1	Near Bearing	Movable Bearing	Movable Bearing	1
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 1	Near Bearing	Movable Bearing	Movable Bearing	1
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 1	Near Bearing	Movable Bearing	Movable Bearing	1
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 2	Slab 1	Prestressed Concrete Cored Slab	Prestressed Concrete Top Flange	165
Span 2	Slab 1	Prestressed Concrete Cored Slab	Prestressed Concrete Closed Web/Box Girder	55
Span 2	Slab 2	Prestressed Concrete Cored Slab	Prestressed Concrete Top Flange	165
Span 2	Slab 2	Prestressed Concrete Cored Slab	Prestressed Concrete Closed Web/Box Girder	55
Span 2	Slab 3	Prestressed Concrete Cored Slab	Prestressed Concrete Top Flange	165
Span 2	Slab 3	Prestressed Concrete Cored Slab	Prestressed Concrete Closed Web/Box Girder	55
Span 2	Slab 4	Prestressed Concrete Cored Slab	Prestressed Concrete Top Flange	165
Span 2	Slab 4	Prestressed Concrete Cored Slab	Prestressed Concrete Closed Web/Box Girder	55
Span 2	Slab 5	Prestressed Concrete Cored Slab	Prestressed Concrete Top Flange	165
Span 2	Slab 5	Prestressed Concrete Cored Slab	Prestressed Concrete Closed Web/Box Girder	55
Span 2	Slab 6	Prestressed Concrete Cored Slab	Prestressed Concrete Top Flange	165
Span 2	Slab 6	Prestressed Concrete Cored Slab	Prestressed Concrete Closed Web/Box Girder	55
Span 2	Slab 7	Prestressed Concrete Cored Slab	Prestressed Concrete Top Flange	165
Span 2	Slab 7	Prestressed Concrete Cored Slab	Prestressed Concrete Closed Web/Box Girder	55
Span 2	Slab 8	Prestressed Concrete Cored Slab	Prestressed Concrete Top Flange	165
Span 2	Slab 8	Prestressed Concrete Cored Slab	Prestressed Concrete Closed Web/Box Girder	55
Span 2	Slab 9	Prestressed Concrete Cored Slab	Prestressed Concrete Top Flange	165
Span 2	Slab 9	Prestressed Concrete Cored Slab	Prestressed Concrete Closed Web/Box Girder	55
Span 2	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	55
Span 2	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	55
Span 2	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	1320
Span 2	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1





## Elements Verified

Location	Name	Component	Element Name	Amount
Span 3	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 4	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1392
Span 4	Beam 1	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	51
Span 4	Beam 2	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	51
Span 4	Beam 3	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	51
Span 4	Beam 4	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	51
Span 4	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	53
Span 4	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	53
Span 4	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	1260
Span 4	Far Bearing	Movable Bearing	Movable Bearing	1
Span 4	Near Bearing	Movable Bearing	Movable Bearing	1
Span 4	Far Bearing	Movable Bearing	Movable Bearing	1
Span 4	Near Bearing	Movable Bearing	Movable Bearing	1
Span 4	Far Bearing	Movable Bearing	Movable Bearing	1
Span 4	Near Bearing	Movable Bearing	Movable Bearing	1
Span 4	Far Bearing	Movable Bearing	Movable Bearing	1
Span 4	Near Bearing	Movable Bearing	Movable Bearing	1
Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	31
Bent 1	Pile 1	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1	Pile 2	Reinforced Concrete Column	Reinforced Concrete Column	1
End Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	31
End Bent 1	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	30
Bent 2	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	31
Bent 2	Pile 1	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 2	Pile 2	Reinforced Concrete Column	Reinforced Concrete Column	1
End Bent 2	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	31
End Bent 2	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	30
Bent 3	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	31
Bent 3	Pile 1	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 3	Pile 2	Reinforced Concrete Column	Reinforced Concrete Column	1

# General Inspection Notes

Bent 1

Cap 1

END BENT PILES NOT VISIBLE DUE TO SLOPE PROTECTION, PLANS NOT VISIBLE

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Bent 2

Cap 1

END BENT PILES NOT VISIBLE DUE TO SLOPE PROTECTION, PLANS NOT VISIBLE

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Span 1

Left Bridge Rail

SPAN 1 LEFT RAIL HAS EXPOSED AGGREGATE

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Span 4

Beam 1

Span 4

Left Bridge Rail

SPAN 4 LEFT RAIL HAS EXPOSED AGGREGATE

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Span 4

Right Bridge Rail

SPAN 4 RIGHT RAIL HAS EXPOSED AGGREGATE

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# National Bridge and NC Inspection Items

Structure Number: 770167

Inspection Date: 11/08/2017

## National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	8
Item 59: Superstructure	0 - 9 , N	7
Item 60: Substructure	0 - 9 , N	7
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	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	F	6	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			
Fender System	G, F, P, or C			
Movable Span Machinery	G, F, P, or C			
Response to Live Load	G, F, P, or C	G		
Estimated Remaining Life	0 - 100 Years	25		
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	N
Inspection Time	Hours	8
Traffic Control Time	Hours	
Snooper Time	Hours	
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: 770167

Inspection Date: 11/08/2017

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<b>Item</b>	Superstructure - Item 59	<b>Grade</b>	7	<b>Maint Code</b>		<b>Qty.</b>	0
<b>Details</b>	SPAN 4 BEAM 4 NEAR BEARING CLEANED AND COATED WITH BLACK MAX, ALL BEARINGS IN SPANS 1 AND 4 ARE SIMILAR						

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<b>Item</b>	Slope Protection	<b>Grade</b>	F	<b>Maint Code</b>	3352	<b>Qty.</b>	6
<b>Details</b>	END BENT 1 TOP OF SLOPE AT BAY 1 6 FT. LONG X 1/4" WIDE LONGITUDINAL CRACK						

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<b>Item</b>	General Comments and Misc Items	<b>Grade</b>		<b>Maint Code</b>		<b>Qty.</b>	0
<b>Details</b>	SPAN 1 BEAM 1 PRIORITY MAINTENANCE REPAIRED, SPAN 4 BEAM 4 PRIORITY MAINTENANCE REPAIRED, ALL BEARINGS IN SPANS 1 AND 4 HAVE BEEN CLEANED AND COATED WITH BLACK MAX COATING						



Span 4 Beam 4: SOUND PATCH IN BOTTOM FLANGE NEAR END AT BENT 3, PRIORITY MAINTENANCE REPAIR.



Span 1 Deck: RIGHT DECK OVERHANG SOUND PATCH AT MID SPAN



SPAN 1 BEAM 4 FAR BEARING CLEANED AND PAINTED WITH BLACK MAX, ALL BEARINGS IN SPANS 1 AND 4 SIMILAR



END BENT 1 TOP OF SLOPE AT BAY 1 6 FT. LONG X 1/4" WIDE LONGITUDINAL CRACK



Span 1 Wearing Surface: 1/8" WIDE TRANSVERSE CRACK OVER END BENT 1



Span 1 Right Bridge Rail: SURFACE SPALLS 18 WITH EXPOSED REBAR IN RIGHT CURB





SPAN 1 RIGHT RAIL 35 FT OF EXPOSED AGGREGATE



SPAN 1 LEFT RAIL HAS EXPOSED AGGREGATE



Span 1 Wearing Surface: 1/4" WIDE TRANSVERSE CRACK OVER BENT 1



Span 2 Wearing Surface: 1/8" WIDE TRANSVERSE CRACK OVER BENT 2



Span 3 Wearing Surface: 3/16" WIDE TRANSVERSE CRACK OVER BENT 3



SPAN 4 RIGHT RAIL HAS EXPOSED AGGREGATE



SPAN 4 LEFT RAIL HAS EXPOSED AGGREGATE



Span 1 Beam 1: SOUND PATCH FAR END ON BAY1 SIDE AT BENT 1



NORTH END OF BENT 3 CAP



SPAN 4 BEAM 4 NEAR BEARING CLEANED AND COATED WITH BLACK MAX, ALL BEARINGS IN SPANS 1 AND 4 ARE SIMILAR



END BENT 2



SPAN 4 BEAM 4 FAR BEARING, ALL BEARINGS IN SPANS 1 AND 4 ARE SIMILAR



SPAN 4 SUPERSTRUCTURE, SPAN 1 SIMILAR



BENT 3



BENT 2



SPAN 3 SUPERSTRUCTURE, SPAN 2 SIMILAR





SOUTH PROFILE



LOOKING NORTH, NORTHBOUND LANE I- 95 THRU SPAN 3



SOUTH END OF BENT 2 CAP



CONSTRUCTION JOINT IN BENT 2 CAP



NORTH PROFILE



LOOKING SOUTH, SOUTHBOUND LANE I-95 THRU SPAN 2



BENT 1



END BENT 1



SIMILAR RAIL / FENCE CONNECTION



GUARDRAIL END TERMINAL



GUARDRAIL POST SPACING AT MIDPORTION



LOOKING EAST



GUARDRAIL POST SPACING AT BRIDGE



DATA PLATE IN RAIL AT SOUTHWEST CORNER



GUARDRAIL CONNECTION



LOOKING WEST, OFF BRIDGE





LOOKING EAST, OFF BRIDGE



LOOKING NORTH, I- 95



LOOKING SOUTH, I - 95



LOOKING WEST

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

Run Date: 04/20/2018

**IDENTIFICATION**

(1) STATE NAME -NORTH CAROLINA BRIDGE **770167**  
 (8) STRUCTURE NUMBER(FEDERAL) 000000001550167  
 (5) INVENTORY ROUTE (ON/UNDER) - ON 31017230  
 (2) STATE HIGHWAY DEPARTMENT DISTRICT 1  
 (3) COUNTY CODE 155 (4) PLACE CODE 0  
 (6) FEATURE INTERSECTED - I95  
 (7) FACILITY CARRIED SR1723  
 (9) LOCATION 0.3 MI W JCT SR1904  
 (11) MILEPOINT 36.4  
 (16) LAT 34° 52' 50.04" (17) LONG 78° 57' 42.05"  
 (98) BORDER BRIDGE STATE CODE PCT SHARE  
 (99) BORDER BRIDGE STRUCTURE NO

SUFFICIENCY RATING = 73.97  
 STATUS = Functionally Obsolete

**CLASSIFICATION** **CODE**

(112) NBIS BRIDGE SYSTEM - YES  
 (104) HIGHWAY SYSTEM Is not on NHS 0  
 (26) FUNCTIONAL CLASS - Local 09  
 (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 - Slab CODE 501  
 (44) STRUCTURE TYPE APPR: Prestressed Concrete  
 TYPE - Stringer Multibeam or Girder CODE 502  
 (45) NUMBER OF SPANS IN MAIN UNIT 2  
 (46) NUMBER OF APPROACH SPANS 2  
 (107) DECK STRUCTURE TYPE - 2 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 8  
 (59) SUPERSTRUCTURE 7  
 (60) SUBSTRUCTURE 7  
 (61) CHANNEL & CHANNEL PROTECTION N  
 (62) CULVERTS N

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

(31) DESIGN LOAD HS 20 + MOD 6  
 (63) OPERATING RATING METHOD - Load Factor 1  
 (64) OPERATING RATING - HS-38 68  
 (65) INVENTORY RATING METHOD - Load Factor 1  
 (66) INVENTORY RATING - HS-22 40  
 (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 2500  
 (30) YEAR OF ADT 2012 (109) TRUCK ADT PCT 6%  
 (19) BYPASS OR DETOUR LENGTH 4 MI

**APPRAISAL** **CODE**

(67) STRUCTURAL EVALUATION 7  
 (68) DECK GEOMETRY 2  
 (69) UNDERCLEARANCES, VERTI & HORIZ 3  
 (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 54 FT  
 (49) STRUCTURE LENGTH 215 FT  
 (50) CURB OR SIDEWALK: LEFT 1.125 FT RIGHT 1.125 FT  
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 24 FT  
 (52) DECK WIDTH OUT TO OUT 28.5 FT  
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 21 FT  
 (33) BRIDGE MEDIAN - No Median CODE 0  
 (34) SKEW 10° (35) STRUCTURE FLARED 0  
 (10) INVENTORY ROUTE MIN VERT CLEAR 999.9 FT  
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 24 FT  
 (53) MIN VERT CLEAR OVER BRIDGE RDWY 999.9 FT  
 (54) MIN VERT UNDERCLEAR REF Highway 16.417 FT  
 (55) MIN LAT UNDERCLEAR RT REF Highway 9.167 FT  
 (56) MIN LAT UNDERCLEAR LT REF - 17.042 FT

**PROPOSED IMPROVEMENTS** **CODE**

(75) TYPE OF WORK -  
 (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 5000 (115) YEAR FUTURE ADT 2025

**INSPECTIONS**

(90) INSPECTION DATE 11/08/2017  
 (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

**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

Structure No: 770167

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	16.08	36.40	1	10095		1	2	19500	2013	46.88	H	16	9.21	16.25	9	1	1	1
3	I95N	11000950	16.5	36.40	1	10095		1	2	19500	2013	47.17	H	16.42	9.17	17.04	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: 04/20/2018

COUNTY : ROBESON                      DIVISION : 6                      DISTRICT : 1                      STRUCTURE NUMBER : 770167                      LENGTH : 215 FEET

ROUTE CARRIED : SR1723                      FEATURE INTERSECTED : I95

LOCATED : 0.3 MI W JCT SR1904                      BRIDGE NAME :                      CITY :

FUNC. CLASS : 09                      SYST.ON : NFA                      SYST.UNDER : NFA                      ADT & YR : 2500 2012                      RAIL TYPE : LT 141 RT 141

BUILT : 1959                      BY : SHC                      PROJ : 8.13962                      FED.AID PROJ : IMD-095-1(78)                      DESIGN LOAD : HS 20 + MOD

REHAB :                      BY : DOH                      PROJ : 41927.3.1                      ALIGNMENT : TAN                      SKEW : 80                      LANES : ON 2 UNDER 4

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

SUPERSTRUCTURE : RC FLOOR/PPC GDRS & PPC CORED SLAB

SUBSTRUCTURE : E.BTS:RC CAPS/PPC PILES; INT.BTS:RCP&B;BT.3/PILE FTG.

SPANS : 1@52'6";2@55";1@52'6"

BEAMS OR GIRDERS : SPN. A&D, 4LNS. 36" PPC GDRS. SPN. B&C, 9LNS. PPC CORED SLAB SECTIONS

FLOOR : 8RC&PPCCS / 3" AWS                      ENCROACHMENT :                      DECK (OUT TO OUT) : 28.5 FT

CLEAR ROADWAY : 24 FT                      BETWEEN RAILS : 26.25 FT                      SIDEWALK OR CURB : LT 1.125 FT RT 1.125 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-22                      OPE.RTG. : HS-38                      CONTR.MEMBER : CS - B                      POSTED : SV                      TTST                      DATE

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

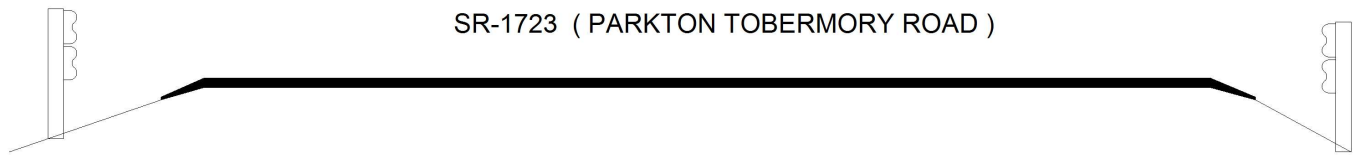
**UNDER ROUTES AND CLEARANCES**

Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
2	I95S	16.0830	16	46.8760	16.25	9.2090
3	I95N	16.50	16.4170	47.1670	17.0420	9.1670

*Note: All measurements are in feet.*

REMARKS :

# Bridge Inspection Field Sketch



Roadway	19.333ft Wide	2 Paved Lanes	Looking East
Left Shoulder	3.75ft Wide	0.833ft Paved	2.917ft Unpaved
Right Shoulder	2.708ft Wide	0.875ft Paved	1.833ft Unpaved
Left Guardrail	3.003ft from road		
Right Guardrail	2.708ft from road		

MEASUREMENTS VERIFIED BY RLK 12/13/11

MEASUREMENTS VERIFIED BY RLK 11/6/13

MEASUREMENTS VERIFIED BY RLK 11/16/15

MEASUREMENTS VERIFIED BY RLK 11/08/17

## Title

APPROACH ROADWAY

## Description

LOOKING EAST

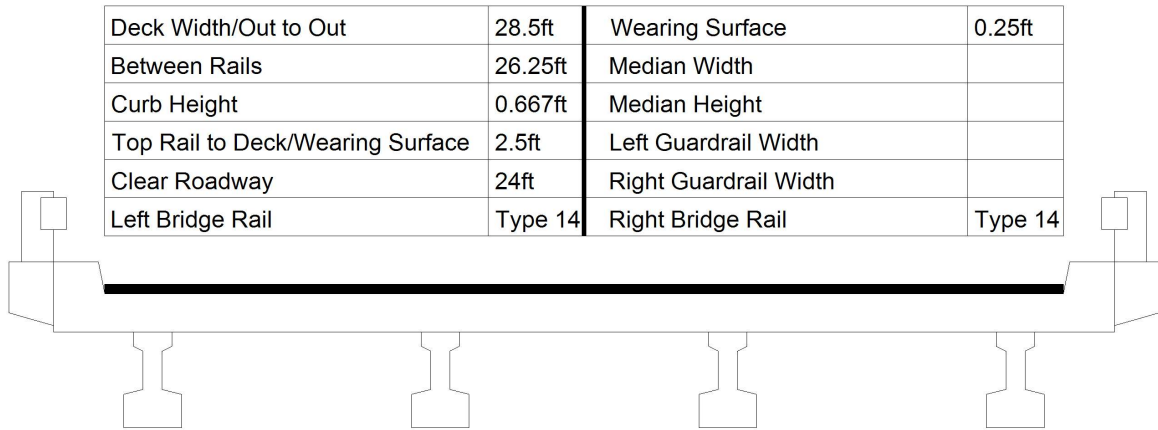
Bridge No: 770167

Drawn By: RLK

Date: 1/26/2010

File Name: S0098000253

# Bridge Inspection Field Sketch



Measurements for Span #	1	Span 4 similar	
Deck Thickness	0.667	Left Overhang	3.75
Top of Rail to Bottom of Beam	6.25	Right Overhang	3.75

Beam No	Beam Type	Spacing	Comments
1	PPC Girder	7 ft.	
2	PPC Girder	7 ft.	
3	PPC Girder	7 ft.	
4	PPC Girder		

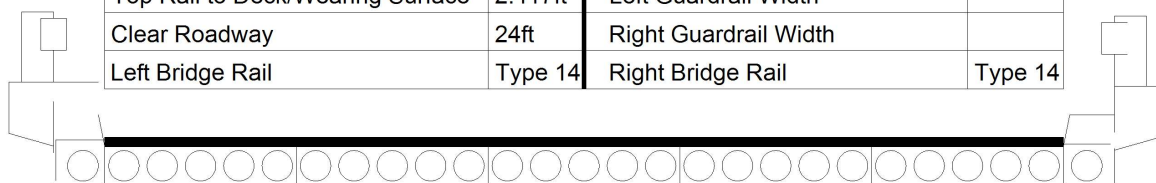
Notes: Spans 2 & 3 has been changed to Cored Slab, .083 ft. asphalt has been added to deck.  
 P.P.C. Girders are 3 ft. high. x 14" Wide      Note: Vandalism prevention fence has been added.  
 MEASUREMENTS VERIFIED BY RLK 1/26/10  
 MEASUREMENTS VERIFIED BY RLK 12/13/11  
 MEASUREMENTS VERIFIED BY RLK 11/6/13  
 MEASUREMENTS REVISED BY RLK 11/16/15  
 MEASUREMENTS REVISED BY RLK 11/08/17

**CHANGED OUT TO OUT, DECK OVERHANGS 11/16/15  
 MEASUREMENTS TAKEN AT EXTERIOR OF R.C. RAILS**

<b>Title</b> VOID 3	<b>Description</b> Span 1		
<b>Bridge No:</b> 770167	<b>Drawn By:</b> dlp	<b>Date:</b> 07/21/2005	<b>File Name:</b> S0098000254

# Bridge Inspection Field Sketch

Deck Width/Out to Out	28.5ft	Wearing Surface	.25 ft
Between Rails	26.25ft	Median Width	
Curb Height	0.667ft	Median Height	
Top Rail to Deck/Wearing Surface	2.417ft	Left Guardrail Width	
Clear Roadway	24ft	Right Guardrail Width	
Left Bridge Rail	Type 14	Right Bridge Rail	Type 14



Measurements for Span #	2	SPAN 3 SIMILAR	
Deck Thickness	1.5	Left Overhang	1
Top of Rail to Bottom of Beam	4.083	Right Overhang	1

No of Slabs	Slab Height	Slab Width	Comments
9	1.5 ft.	3 ft.	

MEASUREMENTS VERIFIED BY RLK 1/26/10

MEASUREMENTS VERIFIED BY RLK 12/13/11

MEASUREMENTS VERIFIED BY RLK 11/6/13

MEASUREMENTS REVISED BY RLK 11/16/15

## VOID

CHANGED OUT TO OUT , DECK OVERHANGS 11/16/15

MEASUREMENTS TAKEN AT EXTERIOR OF R.C. RAILS

**Title**

VOID 4

**Description**

Span 2

Bridge No: 770167

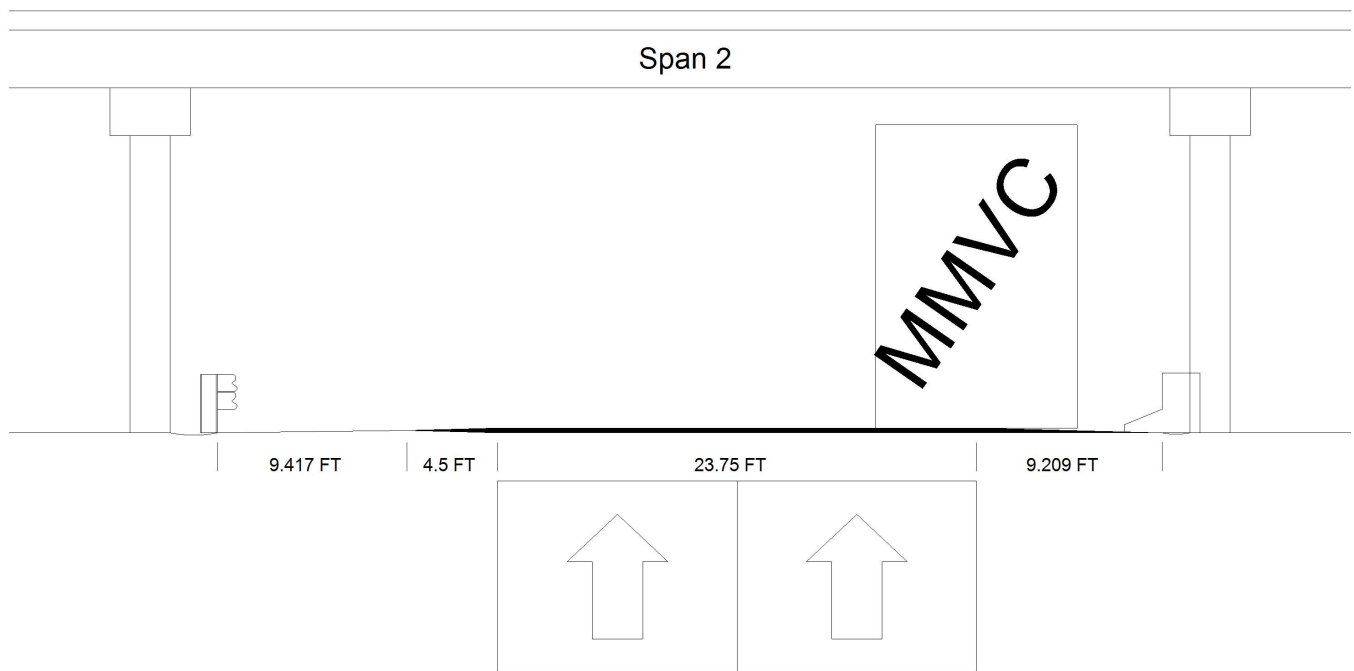
Drawn By: dlp

Date: 07/21/2005

File Name: S0098000256



# Bridge Inspection Field Sketch



Roadway 1		Direction of Traffic	South
Distance to Left Rail	13.917FT	Distance to Right Rail	9.209FT
Distance to Left Toe of Slope		Distance to Left Bent	16.25FT
Distance to Right Toe of Slope		Distance to Right Bent	10.583FT
MMVC	16.083 Ft at Beam 9, 10 FT from 10' FROM RT EDGE OF PAVEMENT		
MVC	16 Ft at Beam 9, 0 FT from AT CENTERLINE OF PAVEMENT		

MEASUREMENTS VERIFIED BY RLK 11/08/17

**Title**

SPAN 2 UNDERCLEARANCE

**Description**

Span 2

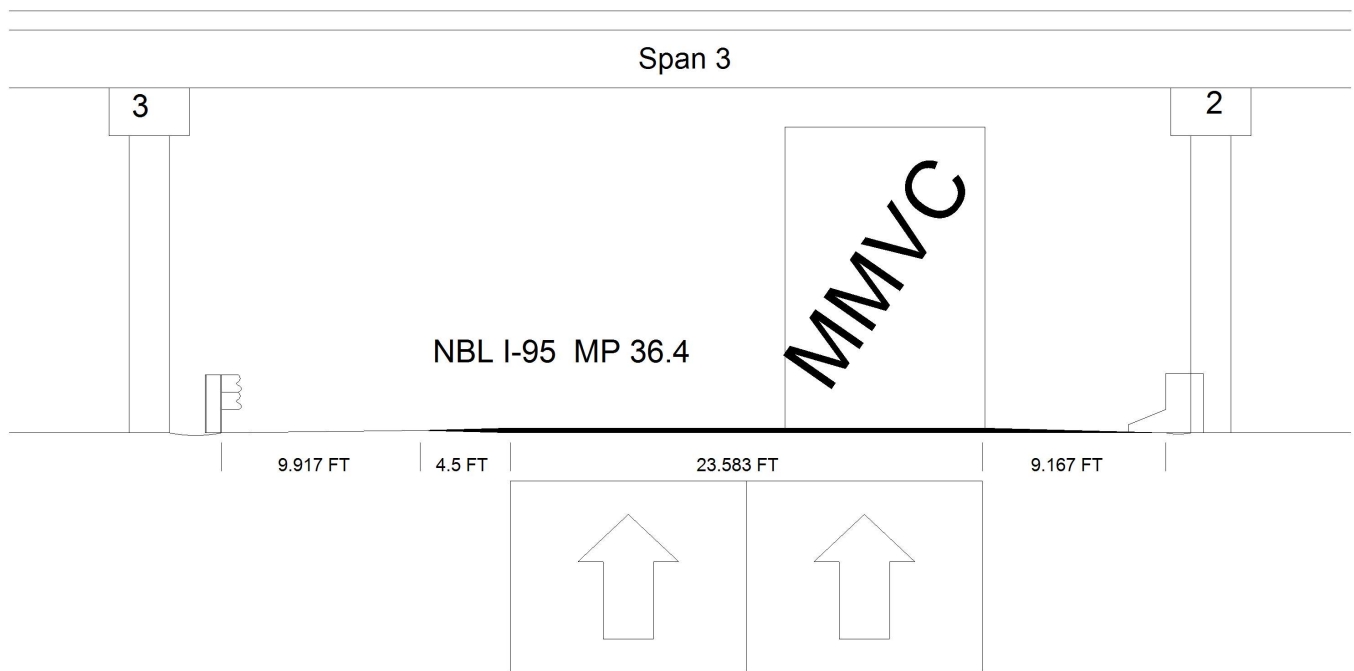
Bridge No: 770167

Drawn By: RLK

Date: 11/16/2015

File Name: S0098000257

# Bridge Inspection Field Sketch

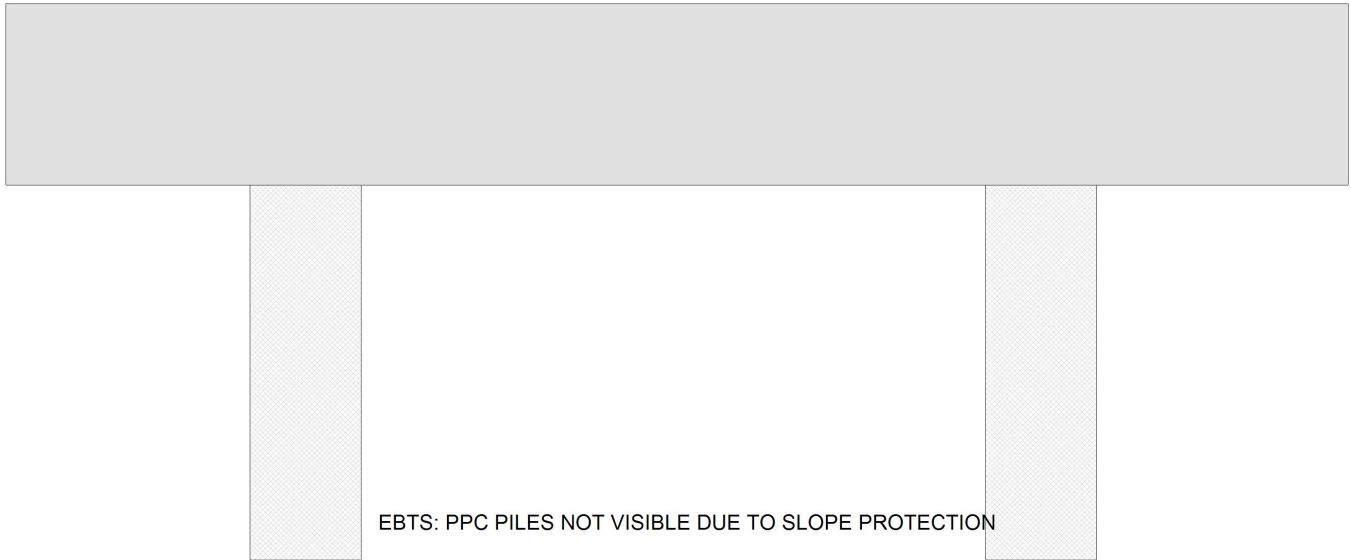


Roadway 1		Direction of Traffic	North
Distance to Left Rail	14.417FT	Distance to Right Rail	9.167FT
Distance to Left Toe of Slope		Distance to Left Bent	17.042FT
Distance to Right Toe of Slope		Distance to Right Bent	10.417FT
MMVC	16.5 Ft at Beam 9, 10 FT from 10' FROM RIGHT EDGE OF PAVEMENT		
MVC	16.417 Ft at Beam 9, 0 FT from MEASURED AT CENTERLINE OF PAVEMENT		

MEASUREMENTS VERIFIED BY RLK 11/08/17

<b>Title</b> DUPLICATE VOID		<b>Description</b> Span 3	
<b>Bridge No:</b> 770167	<b>Drawn By:</b> RLK	<b>Date:</b> 11/16/2015	<b>File Name:</b> S0098000258

# Bridge Inspection Field Sketch

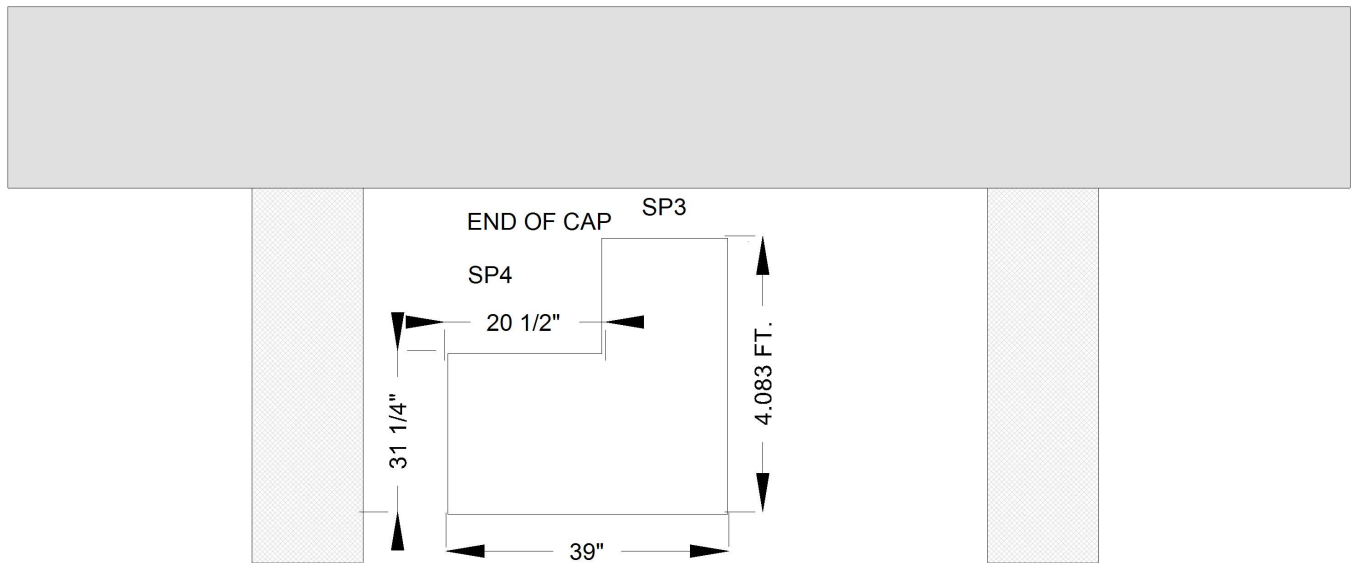


EBTS: PPC PILES NOT VISIBLE DUE TO SLOPE PROTECTION

<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.				
30.250 ft.	2.250 ft.	4.083 ft.	6.750 ft.	6.917 ft.	3.500 ft.	2.375 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		2.5 ft.			Vertical	No	No	No	No
2	Concrete	16.583 ft.	2.5 ft.			Vertical	No	No	No	No
MEASUREMENTS VERIFIED BY RLK 12/13/11 MEASUREMENTS VERIFIED BY RLK 11/6/13 MEASUREMENTS VERIFIED BY RLK 11/16/15 MEASUREMENTS VERIFIED BY RLK 11/08/17										
<b>Bent/Abutment #:</b> 2			<b>Similar Bents:</b> NONE							

<b>Title</b> DUPLICATE VOID 1				<b>Description</b> BENT 2			
<b>Bridge No:</b> 770167		<b>Drawn By:</b> RLK		<b>Date:</b> 1/26/2010		<b>File Name:</b> S0098000984	

# Bridge Inspection Field Sketch



<b>Cap Information</b>			Material Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
30.250 ft.	2.250 ft.	4.083 ft.	6.750 ft.	6.917 ft.	4.333 ft.	4.167 ft.				
<b>Subcap Information</b>			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
<b>Sill Information</b>			Material							
Length	Width	Height								
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Concrete		2.5 ft.			Vertical	No	No	No	No
2	Concrete	16.583 ft.	2.5 ft.			Vertical	No	No	No	No
MEASUREMENTS VERIFIED BY RLK 12/13/11 MEASUREMENTS VERIFIED BY RLK 11/6/13 MEASUREMENTS VERIFIED BY RLK 11/16/15 MEASUREMENTS VERIFIED BY RLK 11/08/17										
<b>Bent/Abutment #:</b> 3			<b>Similar Bents:</b> BENT 1							

<b>Title</b> VOID 2				<b>Description</b> BENT 3			
<b>Bridge No:</b> 770167		<b>Drawn By:</b> RLK		<b>Date:</b> 1/26/2010		<b>File Name:</b> S0098000985	