



NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 STRUCTURE MANAGEMENT UNIT

ATTENTION: CLEARANCES CHECKED

# Structure Safety Report

## Routine Element Inspection

COUNTY: HAYWOOD STRUCTURE NUMBER: 430249 FREQUENCY: 24 MONTHS

FACILITY CARRIED: I40 WB MILE POST: 33

LOCATION: 4.8 M.I.E.JCT.SR1660

FEATURE INTERSECTED: SR1613

LATITUDE: 35° 33' 20.96" LONGITUDE: 82° 49' 51.28"

REINFORCED CONCRETE FLOOR ON I-BEAMS(LATEX MODIFIED CONC.OVERLAY)

SUPERSTRUCTURE: REINFORCED CONCRETE FLOOR ON I-BEAMS(LAYTEX MODIFIED CONC.OVERLAY)

SUBSTRUCTURE: E.BTS:RC CAPS/H-PILES;INT.BTS:RCP&B/PILE FTG.

SPANS: 1 @ 51'-4.5;1 @ 57'-.5;1 @ 55'-9.12

FRACTURE CRITICAL     TEMPORARY SHORING     SCOUR CRITICAL     SCOUR PLAN OF ACTION

PRESENT CONDITION: Fair INSPECTION DATE: 04/25/2017

POSTED SV: Not Posted Not Posted POSTED TTST: Not Posted Not Posted

OTHER SIGNS PRESENT: NONE



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

DIRECTION OF INSPECTION W-E

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

EAST APPROACH LOOKING WEST

INSPECTED BY JOSEPH HUNTSINGER	SIGNATURE <i>Joseph Huntsinger</i>	ASSISTED BY DELVIN ADAMS
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# Structure Element Scoring

Structure Number: 430249

Inspection Date 4/25/2017

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	5160	5160	0	0	0
107	0	Steel Open Girder/Beam	Beam	656	0	656	0	0
515	107	Steel Protective Coating	Beam	5472	0	5144	328	0
205	0	Reinforced Concrete Column	Piles and Columns	4	3	1	0	0
215	0	Reinforced Concrete Abutment	Abutments	84	84	0	0	0
220	0	Reinforced Concrete Pile Cap/Footing	Footing	22	22	0	0	0
225	0	Steel Pile	Piles and Columns	12	12	0	0	0
234	0	Reinforced Concrete Pier Cap	Caps	133	93	40	0	0
302	0	Compression Joint Seal	Expansion Joints	120	120	0	0	0
311	0	Movable Bearing	Bearing Device	12	0	12	0	0
515	311	Steel Protective Coating	Bearing Device	36	0	36	0	0
313	0	Fixed Bearing	Bearing Device	12	0	12	0	0
515	313	Steel Protective Coating	Bearing Device	36	0	36	0	0
321	0	Reinforced Concrete Approach Slabs	Approaches	560	395	165	0	0
333	0	Other Bridge Railing	Bridge Rail	332	304	28	0	0
515	333	Steel Protective Coating	Bridge Rail	332	304	28	0	0
510	0	Wearing Surface	Wearing Surfaces	4599	3399	1200	0	0

# Summary of Maintenance Needs

## Maintenance By Defect

Structure Number: 430249

Inspection Date: 04/25/2017

MMS Code	Element Name	Defect Name	Recommended Quantity
3348	Reinforced Concrete Column	Patched Area	1 Each
3353	Reinforced Concrete Approach Slabs	Cracking (RC and Other)	125 Square Feet
3318	Other Bridge Railing	Damage	28 Feet
2816	Wearing Surface	Crack (Wearing Surface)	1200 Square Feet
3342	Steel Protective Coating	Effectiveness (Steel Protective Coatings)	5572 Square Feet

## Element Structure Maintenance Quantities

Structure Number: 430249

Inspection Date 04/25/2017

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	84	0	0	0	84
Approaches	3353	Maintenance of Concrete Bridge Approach Slabs	125	560	0	0	165	395
Beam	3314	Maintenance Steel Superstructure Components	0	656	0	0	656	0
Beam	3342	Clean and Paint Steel	5472	5472	0	328	5144	0
Bearing Device	3334	Bridge Bearing	0	24	0	0	24	0
Bearing Device	3342	Clean and Paint Steel	72	72	0	0	72	0
Bridge Rail	3318	Maintenance of Concrete Bridge Rail	28	332	0	0	28	304
Bridge Rail	3342	Clean and Paint Steel	28	332	0	0	28	304
Caps	3348	Maintenance of Concrete Substructure	0	133	0	0	40	93
Deck	3326	Maintenance of Concrete Deck	0	5160	0	0	0	5160
Expansion Joints	3310	Maintenance of Standard Bridge Expansion Joints	0	120	0	0	0	120
Footing	3348	Maintenance of Concrete Substructure	0	22	0	0	0	22
Piles and Columns	3348	Maintenance of Concrete Substructure	1	4	0	0	1	3
Piles and Columns	3354	Maintenance of Steel Substructure Components	0	12	0	0	0	12
Wearing Surfaces	2816	Asphalt Surface Repair	1200	4599	0	0	1200	3399

## Element Condition and Maintenance Data

Structure Number: 430249

Inspection Date: 04/25/2017

<b>Span 1</b>	<b>Beam 1</b>
<b>Plate Girder</b>	

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
107	Steel Open Girder/Beam	51	0	51	0	0 Feet
515	Steel Protective Coating	476	0	425	51	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
107	Corrosion	TOP FACE OF THE EXTERIOR HALF OF THE BOTTOM FLANGE HAS CORROSION WITH UP TO 1/16" DEEP PITTING IN RANDOM AREAS.	2	51	Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM DETERIORATED ON THE EXTERIOR HALF OF THE BOTTOM FLANGE, RESULTING IN CORROSION.	3	51	51 Square Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	425	425 Square Feet

General Comments

<b>Span 1</b>	<b>Beam 2</b>
<b>Plate Girder</b>	

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
107	Steel Open Girder/Beam	51	0	51	0	0 Feet
515	Steel Protective Coating	476	0	476	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
107	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	51	Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	476	476 Square Feet

General Comments

<b>Span 1</b>	<b>Beam 3</b>
<b>Plate Girder</b>	

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
107	Steel Open Girder/Beam	51	0	51	0	0 Feet
515	Steel Protective Coating	476	0	476	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
107	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	51	Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	476	476 Square Feet

General Comments

## Span 1 Beam 4

## Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	51	0	51	0	0	Feet
515	Steel Protective Coating	476	0	425	51	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	TOP FACE OF THE EXTERIOR HALF OF THE BOTTOM FLANGE HAS CORROSION WITH UP TO 1/16" DEEP PITTING IN RANDOM AREAS.	2	51		Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM DETERIORATED ON THE EXTERIOR HALF OF THE BOTTOM FLANGE, RESULTING IN CORROSION.	3	51	51	Square Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	425	425	Square Feet

General Comments

## Span 1 Right Bridge Rail

## Concrete and Metal Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
333	Other Bridge Railing	52	38	14	0	0	Feet
515	Steel Protective Coating	52	38	14	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
333	Damage	14' LONG SCRAPE DAMAGE AT THE NEAR END OF THE SPAN.	2	14	14	Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS DAMAGED FROM THE SCRAPE DAMAGE.	2	14	14	Square Feet

General Comments

## Span 1 Near Bearing

## Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	3	0	3	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet

General Comments

## Span 1 Far Bearing

## Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
311	Movable Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet

General Comments

## Span 1 Near Bearing

## Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet

General Comments

## Span 1 Far Bearing

## Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
311	Movable Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet

General Comments

## Span 1 Near Bearing

## Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each

515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet
General Comments						

## Span 1 Far Bearing

## Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
311	Movable Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet
General Comments					

## Span 1 Near Bearing

## Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet
General Comments					

## Span 1 Far Bearing

## Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
311	Movable Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet
General Comments					



## Span 1 Wearing Surface

## Concrete Wearing Surface

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
510	Wearing Surface	1,439	1,039	400	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
510	Crack (Wearing Surface)	MULTIPLE HAIRLINE CRACKS SCATTERED THROUGHOUT THE WEARING SURFACE.	2	400	400 Square Feet

General Comments

## Span 2 Beam 1

## Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
107	Steel Open Girder/Beam	57	0	57	0	0 Feet
515	Steel Protective Coating	476	0	419	57	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
107	Corrosion	TOP FACE OF THE EXTERIOR HALF OF THE BOTTOM FLANGE HAS CORROSION WITH UP TO 1/16" DEEP PITTING IN RANDOM AREAS.	2	57	Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM DETERIORATED ON THE EXTERIOR HALF OF THE BOTTOM FLANGE, RESULTING IN CORROSION.	3	57	57 Square Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	419	419 Square Feet

General Comments

## Span 2 Beam 2

## Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
107	Steel Open Girder/Beam	57	0	57	0	0 Feet
515	Steel Protective Coating	476	0	476	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
107	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	57	Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	476	476 Square Feet

General Comments

## Span 2 Beam 3

## Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
107	Steel Open Girder/Beam	57	0	57	0	0 Feet
515	Steel Protective Coating	476	0	476	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
107	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	57	Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	476	476 Square Feet

General Comments

## Span 2 Beam 4

## Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
107	Steel Open Girder/Beam	57	0	57	0	0 Feet
515	Steel Protective Coating	476	0	419	57	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
107	Corrosion	TOP FACE OF THE EXTERIOR HALF OF THE BOTTOM FLANGE HAS CORROSION WITH UP TO 1/16" DEEP PITTING IN RANDOM AREAS.	2	57	Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM DETERIORATED ON THE EXTERIOR HALF OF THE BOTTOM FLANGE, RESULTING IN CORROSION.	3	57	57 Square Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	419	419 Square Feet

General Comments

## Span 2 Right Bridge Rail

## Concrete and Metal Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
333	Other Bridge Railing	58	44	14	0	0 Feet
515	Steel Protective Coating	58	44	14	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
333	Damage	14' LONG LIGHT SCRAPE DAMAGE.	2	14	14 Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM DAMAGED FROM SCRAPE DAMAGE.	2	14	14 Square Feet

General Comments

**Span 2 Near Bearing**  
**Fixed Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	3	0	3	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet

General Comments

**Span 2 Far Bearing**  
**Movable Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	3	0	3	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet

General Comments

**Span 2 Near Bearing**  
**Fixed Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	3	0	3	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet

General Comments

**Span 2 Far Bearing**  
**Movable Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	3	0	3	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1		Each

515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet
General Comments						

## Span 2 Near Bearing

## Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet
General Comments					

## Span 2 Far Bearing

## Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
311	Movable Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet
General Comments					

## Span 2 Near Bearing

## Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet
General Comments					

## Span 2 Far Bearing

## Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	3	0	3	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet

General Comments

## Span 2 Wearing Surface

## Concrete Wearing Surface

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
510	Wearing Surface	1,598	1,198	400	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
510	Crack (Wearing Surface)	MULTIPLE HAIRLINE CRACKS SCATTERED THROUGHOUT THE WEARING SURFACE.	2	400	400	Square Feet

General Comments

## Span 3 Beam 1

## Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	56	0	56	0	0	Feet
515	Steel Protective Coating	416	0	360	56	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	TOP FACE OF THE EXTERIOR HALF OF THE BOTTOM FLANGE HAS CORROSION WITH UP TO 1/16" DEEP PITTING IN RANDOM AREAS.	2	56		Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM DETERIORATED ON THE EXTERIOR HALF OF THE BOTTOM FLANGE, RESULTING IN CORROSION.	3	56	56	Square Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	360	360	Square Feet

General Comments

## Span 3 Beam 2

## Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	56	0	56	0	0	Feet
515	Steel Protective Coating	416	0	416	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE,	2	56		Feet

515	Effectiveness (Steel Protective Coatings)	ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES. PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	416	416	Square Feet
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General Comments

**Span 3 Beam 3**  
**Plate Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	56	0	56	0	0	Feet
515	Steel Protective Coating	416	0	416	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	56		Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	416	416	Square Feet

General Comments

**Span 3 Beam 4**  
**Plate Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	56	0	56	0	0	Feet
515	Steel Protective Coating	416	0	360	56	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	TOP FACE OF THE EXTERIOR HALF OF THE BOTTOM FLANGE HAS CORROSION WITH UP TO 1/16" DEEP PITTING IN RANDOM AREAS.	2	56		Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM DETERIORATED ON THE EXTERIOR HALF OF THE BOTTOM FLANGE, RESULTING IN CORROSION.	3	56	56	Square Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND FLANGES.	2	360	360	Square Feet

General Comments

**Span 3 Near Bearing**  
**Movable Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	3	0	3	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet

General Comments

## Span 3 Far Bearing

## Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	3	0	3	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet

General Comments

## Span 3 Near Bearing

## Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	3	0	3	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet

General Comments

## Span 3 Far Bearing

## Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	3	0	3	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet

General Comments

## Span 3 Near Bearing

## Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	3	0	3	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE,	2	1		Each

515	Effectiveness (Steel Protective Coatings)	ALLOWING FRECKLED RUST PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3	Square Feet
General Comments						

**Span 3 Far Bearing**  
**Fixed Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet
General Comments					

**Span 3 Near Bearing**  
**Movable Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
311	Movable Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
311	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet
General Comments					

**Span 3 Far Bearing**  
**Fixed Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	3	0	3	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
313	Corrosion	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	1	Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST	2	3	3 Square Feet
General Comments					



**Span 3 Wearing Surface**  
**Concrete Wearing Surface**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
510	Wearing Surface	1,562	1,162	400	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
510	Crack (Wearing Surface)	MULTIPLE HAIRLINE CRACKS SCATTERED THROUGHOUT THE WEARING SURFACE.	2	400	400 Square Feet

General Comments

**End Bent 1 Steel Pile 1**  
**Steel Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
225	Steel Pile	1	1	0	0	0 Each

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

END BENT FOUNDATION PILES ARE NOT VISIBLE.

**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	16	14	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
234	Patched Area	MULTIPLE PATCHED AREAS THAT ARE SOUND.	2	14	Feet

General Comments

**Bent 1 Reinforced Concrete Column 2**  
**Reinforced Concrete Column**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
205	Reinforced Concrete Column	1	0	1	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
205	Patched Area	SOUND PATCHED AREAS AT THE CORNERS OF THE COLUMN	2	1	1 Each

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	30	18	12	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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234	Patched Area	MULTIPLE SOUND PATCHED AREAS	2	12	Feet
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## General Comments

### End 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	37	23	14	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
234	Patched Area	MULTIPLE SOUND PATCHES.	2	14	Feet

## General Comments

### End Bent 2 Steel Pile 1

#### Steel Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
225	Steel Pile	1	1	0	0	0 Each

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

END BENT FOUNDATION PILES ARE NOT VISIBLE.

### Approach 1 Reinforced Concrete Approach Slab 1

#### Reinforced Concrete Approach Slab

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
321	Reinforced Concrete Approach Slabs	280	210	70	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
321	Cracking (RC and Other)	MULTIPLE HAIRLINE CRACKS THROUGHOUT THE SLAB.	2	50	50 Square Feet
321	Patched Area	SOUND PATCHES ALONG THE EDGE OF THE SLAB	2	20	Square Feet

## General Comments

### Approach 2 Reinforced Concrete Approach Slab 2

#### Reinforced Concrete Approach Slab

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
321	Reinforced Concrete Approach Slabs	280	185	95	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
321	Cracking (RC and Other)	DIAGONAL AND LONGITUDINAL CRACKS THROUGHOUT	2	75	75 Square Feet
321	Patched Area	SOUND PATHCES ALONG THE EDGE OF THE SLAB.	2	20	Square Feet

## General Comments

## Elements Verified

Location	Name	Component	Element Name	Amount
Span 1	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1615
Span 1	Beam 1	Plate Girder	Steel Open Girder/Beam	51
Span 1	Beam 2	Plate Girder	Steel Open Girder/Beam	51
Span 1	Beam 3	Plate Girder	Steel Open Girder/Beam	51
Span 1	Beam 4	Plate Girder	Steel Open Girder/Beam	51
Span 1	Left Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	52
Span 1	Right Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	52
Span 1	Expansion Joint	Compression Seal	Compression Joint Seal	30
Span 1	Wearing Surface	Concrete Wearing Surface	Wearing Surface	1439
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 1	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 1	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 1	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 1	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 2	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1793
Span 2	Beam 1	Plate Girder	Steel Open Girder/Beam	57
Span 2	Beam 2	Plate Girder	Steel Open Girder/Beam	57
Span 2	Beam 3	Plate Girder	Steel Open Girder/Beam	57
Span 2	Beam 4	Plate Girder	Steel Open Girder/Beam	57
Span 2	Left Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	58
Span 2	Right Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	58
Span 2	Expansion Joint	Compression Seal	Compression Joint Seal	30
Span 2	Wearing Surface	Concrete Wearing Surface	Wearing Surface	1598
Span 2	Far Bearing	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 2	Far Bearing	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 2	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 2	Far Bearing	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 2	Far Bearing	Movable Bearing	Movable Bearing	1
Span 3	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1752
Span 3	Beam 1	Plate Girder	Steel Open Girder/Beam	56
Span 3	Beam 2	Plate Girder	Steel Open Girder/Beam	56
Span 3	Beam 3	Plate Girder	Steel Open Girder/Beam	56
Span 3	Beam 4	Plate Girder	Steel Open Girder/Beam	56
Span 3	Left Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	56
Span 3	Right Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	56
Span 3	Expansion Joint	Compression Seal	Compression Joint Seal	30
Span 3	Expansion Joint	Compression Seal	Compression Joint Seal	30
Span 3	Wearing Surface	Concrete Wearing Surface	Wearing Surface	1562
Span 3	Far Bearing	Fixed Bearing	Fixed Bearing	1

## Elements Verified

Location	Name	Component	Element Name	Amount
Span 3	Near Bearing	Movable Bearing	Movable Bearing	1
Span 3	Far Bearing	Fixed Bearing	Fixed Bearing	1
Span 3	Near Bearing	Movable Bearing	Movable Bearing	1
Span 3	Near Bearing	Movable Bearing	Movable Bearing	1
Span 3	Far Bearing	Fixed Bearing	Fixed Bearing	1
Span 3	Near Bearing	Movable Bearing	Movable Bearing	1
Span 3	Far Bearing	Fixed Bearing	Fixed Bearing	1
Bent 1		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	30
Bent 1		Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1		Reinforced Concrete Column	Reinforced Concrete Column	1
End Bent 1		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	36
End Bent 1		Reinforced Concrete Abutment	Reinforced Concrete Abutment	42
Bent 2		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	30
Bent 2		Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 2		Reinforced Concrete Column	Reinforced Concrete Column	1
End Bent 2		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	37
End Bent 2		Reinforced Concrete Abutment	Reinforced Concrete Abutment	42

# General Inspection Notes

Bent 1

END BENT FOUNDATION PILES ARE NOT VISIBLE.

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Bent 2

END BENT FOUNDATION PILES ARE NOT VISIBLE.

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# National Bridge and NC Inspection Items

Structure Number: 430249

Inspection Date: 04/25/2017

## National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	7
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	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			
Wingwall	G, F, P, or C		0	3350
Field Scour Evaluation		N		
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	30		
Superstructure Paint Code		A		

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	6
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: 430249

Inspection Date: 04/25/2017

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Item	Grade	Maint Code	Qty.
Details			



Bent 1 Cap 1: MULTIPLE PATCHED AREAS THAT ARE SOUND.



Bent 2 Cap 1: MULTIPLE SOUND PATCHED AREAS





Approach 2: DIAGONAL AND LONGITUDINAL CRACKS THROUGHOUT



Span 3 Wearing Surface: MULTIPLE HAIRLINE CRACKS SCATTERED THROUGHOUT THE WEARING SURFACE.



Span 1 Right Bridge Rail: 14' LONG SCRAPE DAMAGE AT THE NEAR END OF THE SPAN.



Approach 1: SOUND PATCHES ALONG THE EDGE OF THE SLAB



INSPECTION LADDER



TYPICAL BEARING



BENT 1



BENT 2



DECK UNDERSIDE



END BENT 1



SOUTH PROFILE



END BENT 2



STRUCTURE INFO PLATE AT THE NORTH WEST CORNER.



RETROFIT RAIL BASE



EAST APPROACH LOOKING WEST



RETROFIT RAIL IS CONTINUOUS WITH APPROACH RAIL.





LOOKING NORTH FROM TOP OF STRUCTURE



GUARDRAIL LOOKING EAST



GUARDRAIL LOOKING WEST



LOOKING SOUTH FROM TOP OF STRUCTURE



WEST APPROACH LOOKING EAST

IDENTIFICATION				CLASSIFICATION			
(1) STATE NAME -NORTH CAROLINA	BRIDGE	430249		SUFFICIENCY RATING =			76.54
(8) STRUCTURE NUMBER(FEDERAL)		00000000870249		STATUS =	Functionally Obsolete		
(5) INVENTORY ROUTE (ON/UNDER) - ON		11000400					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		2					
(3) COUNTY CODE	87	(4) PLACE CODE	0	(112)NBIS BRIDGE SYSTEM -			YES
(6) FEATURE INTERSECTED - SR1613				(104)HIGHWAY SYSTEM	Is on the NHS		1
(7) FACILITY CARRIED I40 WB				(26) FUNCTIONAL CLASS -	Arterial - Interstate		01
(9) LOCATION 4.8 M.I.E.JCT.SR1660				(100)STRAHNET HIGHWAY -	Interstate STRAHNET Route		1
(11)MILEPOINT		33		(101)PARALLEL STRUCTURE -	Left Parallel Structure		L
(16)LAT 35° 33' 20.96"	(17)LONG	82° 49' 51.28"		(102)DIRECTION OF TRAFFIC -	1-way Traffic		1
(98)BORDER BRIDGE STATE CODE		PCT SHARE		(103)TEMPORARY STRUCTURE -			
(99)BORDER BRIDGE STRUCTURE NO				(110)DESIGNATED NATIONAL NETWORK -	On the National Network		1
				(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				CONDITION			
(43) STRUCTURE TYPE MAIN: Steel				(58) DECK			7
TYPE - Stringer Mutlibeam or Girder		CODE 302		(59) SUPERSTRUCTURE			6
(44) STRUCTURE TYPE APPR :				(60) SUBSTRUCTURE			6
TYPE -		CODE 000		(61) CHANNEL & CHANNEL PROTECTION			N
(45) NUMBER OF SPANS IN MAIN UNIT		3		(62) CULVERTS			N
(46) NUMBER OF APPROACH SPANS				LOAD RATING AND POSTING			
(107)DECK STRUCTURE TYPE - 1		CODE		(31) DESIGN LOAD	HS 20 + MOD		6
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(63) OPERATING RATING METHOD -	Load Factor		1
(A) TYPE OF WEARING SURFACE -		CODE		(64) OPERATING RATING -	HS-50		90
(B) TYPE OF MEMBRANE -		CODE		(65) INVENTORY RATING METHOD -	Load Factor		1
(C) TYPE OF DECK PROTECTION -		CODE		(66) INVENTORY RATING -	HS-30		54
				(70) BRIDGE POSTING -	No Posting Required		5
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED			A
				DESCRIPTION -	Open, No Restriction		
AGE AND SERVICE				APPRAISAL			
(27) YEAR BUILT		1961		(67) STRUCTURAL EVALUATION			6
(106)YEAR RECONSTRUCTED		2011		(68) DECK GEOMETRY			2
(42) TYPE OF SERVICE : ON - Highway				(69) UNDERCLEARANCES,VERTI & HORIZ			6
UNDER - Highway		CODE 11		(71) WATERWAY ADEQUACY			N
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE		2		(72) APPROACH ROADWAY ALIGNMENT			8
(29) AVERAGE DAILY TRAFFIC		25500		(36) TRAFFIC SAFETY FEATURES			1011
(30) YEAR OF ADT 2015	(109) TRUCK ADT PCT	23%		(113)SCOUR CRITICAL BRIDGES			N
(19) BYPASS OR DETOUR LENGTH		1 MI		PROPOSED IMPROVEMENTS			
GEOMETRIC DATA				(75) TYPE OF WORK -			CODE
(48) LENGTH OF MAXIMUM SPAN		56 FT		(76) LENGTH OF STRUCTURE IMPROVEMENT			
(49) STRUCTURE LENGTH		164 FT		(94) BRIDGE IMPROVEMENT COST			
(50)CURB OR SIDEWALK: LEFT 0 FT RIGHT 0 FT				(95) ROADWAY IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		28 FT		(96) TOTAL PROJECT COST			
(52) DECK WIDTH OUT TO OUT		31.417 FT		(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		39 FT		(114)FUTURE ADT 51000	(115) YEAR FUTURE ADT	2025	
(33) BRIDGE MEDIAN - No Median		CODE 1		INSPECTIONS			
(34) SKEW 22°	(35) STRUCTURE FLARED	0		(90) INSPECTION DATE			04/25/2017
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9 FT		(92) CRITICAL FEATURE INSPECTION :			(93) CFI DATE
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		28 FT		A) FRACTURE CRIT DETAIL -	NO		A)
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9 FT		B) UNDERWATER INSP -	NO		B)
(54) MIN VERT UNDERCLEAR REF Highway		15.25 FT		C) OTHER SPECIAL INSP	NO		C)
(55) MIN LAT UNDERCLEAR RT REF Highway		12 FT		SCOUR			
(56) MIN LAT UNDERCLEAR LT REF -		0 FT		NAVIGATION DATA			
(38) NAVIGATION CONTROL - Not Applicable		CODE N		(39) NAVIGATION VERTICAL CLEARANCE			0
(111)PIER PROTECTION -		CODE		(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR			FT
(39) NAVIGATION VERTICAL CLEARANCE		0		(40) NAVIGATION HORIZONTAL CLEARANCE			0 FT
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR		FT					
(40) NAVIGATION HORIZONTAL CLEARANCE		0 FT					

Structure No: 430249

County: HAYWOOD

Run Date:

Span Number	Feature Intersected	Inventory Route	Minimum Maximum Vertical Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Nuner 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	SR 1613	31016130	15.52		0			9	2	2400	2014	49	H	15.25	12		9	0	2	0

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: 10/23/2017

COUNTY : HAYWOOD      DIVISION : 14      DISTRICT : 2      STRUCTURE NUMBER : 430249      LENGTH : 164 FEET

ROUTE CARRIED : I40 WB      FEATURE INTERSECTED : SR1613

LOCATED : 4.8 MI.E.JCT.SR1660      BRIDGE NAME :      CITY :

FUNC. CLASS : 01      SYST.ON : FA      SYST.UNDER : NFA      ADT & YR : 25500 2015      RAIL TYPE : LT 333 RT 333

BUILT : 1961      BY : SHC      PROJ : 8.19431      FED.AID PROJ : I-40-1(8)3      DESIGN LOAD : HS 20 + MOD

REHAB : 2011      BY : DOH      PROJ : 8.1940205      ALIGNMENT : RT      SKEW : 68      LANES : ON 2 UNDER 2

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

SUPERSTRUCTURE : REINFORCED CONCRETE FLOOR ON I-BEAMS(LAYTEX MODIFIED CONC.OVERLAY)

SUBSTRUCTURE : E.BTS:RC CAPS/H-PILES;INT.BTS:RCP&B/PILE FTG.

SPANS : 1 @ 51'-4.5;1 @ 57'-.5;1 @ 55'-9.12

BEAMS OR GIRDERS : 4 LINES 33 I-BEAMS @ 8'CENTERS

FLOOR : 9 RC/NO AWS      ENCROACHMENT :      DECK (OUT TO OUT) : 31.417 FT

CLEAR ROADWAY : 28 FT      BETWEEN RAILS : 28 FT      SIDEWALK OR CURB : LT 0 FT RT 0 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-30      OPE.RTG. : HS-50      CONTR.MEMBER : int bm c      POSTED : SV      TTST      DATE

SYSTEM : Primary Interstate      GREEN LINE ROUTE : Y

UNDER ROUTES AND CLEARANCES

Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
2	SR 1613	15.5170	15.25	490		12

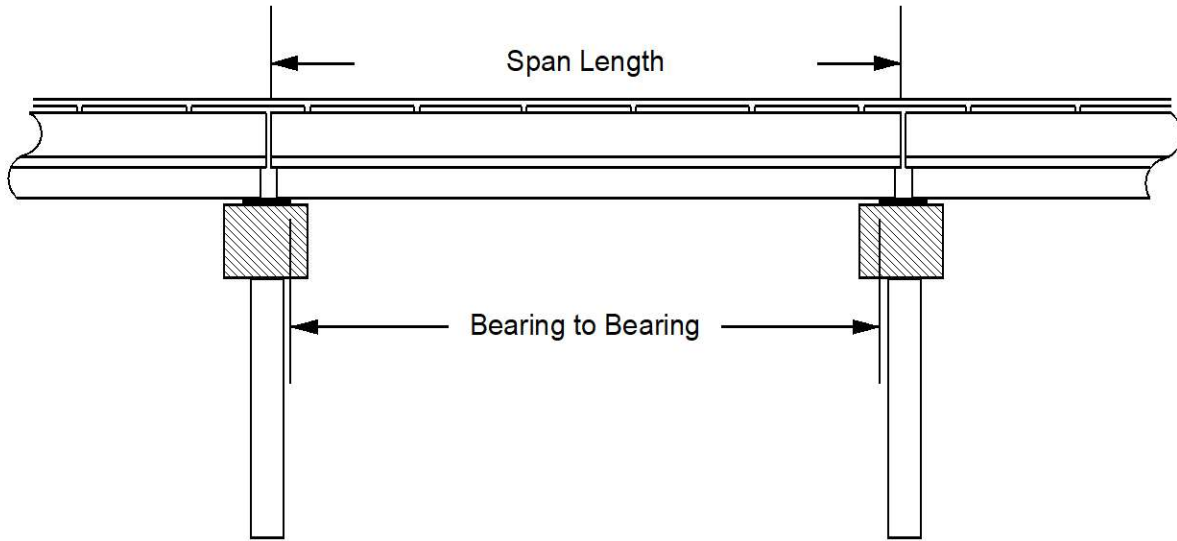
Note: All measurements are in feet.

REMARKS :

# Structure Data Worksheet

Spans

County: HAYWOOD      Structure No: 430249      Date: 04/25/2017      Inspected By: JCH



Span No	Span Length	Bearing to Bearing	Comments
0	0	0	
1	51'- 4 1/2"	49' 7"	
2	57'- 0 1/2"	55' 8"	
3	55'- 9 1/8"	53' 9"	NBIS = 158' 2"

# Bridge Inspection Field Sketch

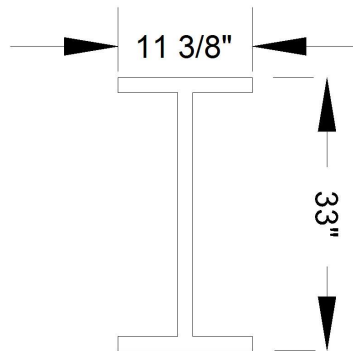
Deck Width/Out to Out	31.417ft	Wearing Surface	
Between Rails	28.000ft	Median Width	
Curb Height	0.750ft	Median Height	
Top Rail to Deck/Wearing Surface	2.667ft	Left Guardrail Width	
Clear Roadway	28.000ft	Right Guardrail Width	
Left Bridge Rail	Type 33	Right Bridge Rail	Type 33



Measurements for Span #	1		
Deck Thickness	0.750	Left Overhang	3.708
Top of Rail to Bottom of Beam	8.083	Right Overhang	3.708

Beam No	Beam Type	Spacing
1 thru 4	Steel I Beam	8.000ft

## BEAMS (NON-TAPERED FLANGES)



FLANGES = 7/8"

WEB = 5/8"

4/25/17 - J.C.HUNTSINGER

**Title**

Typical Section

**Description**

Data Worksheet

Bridge No: 430249

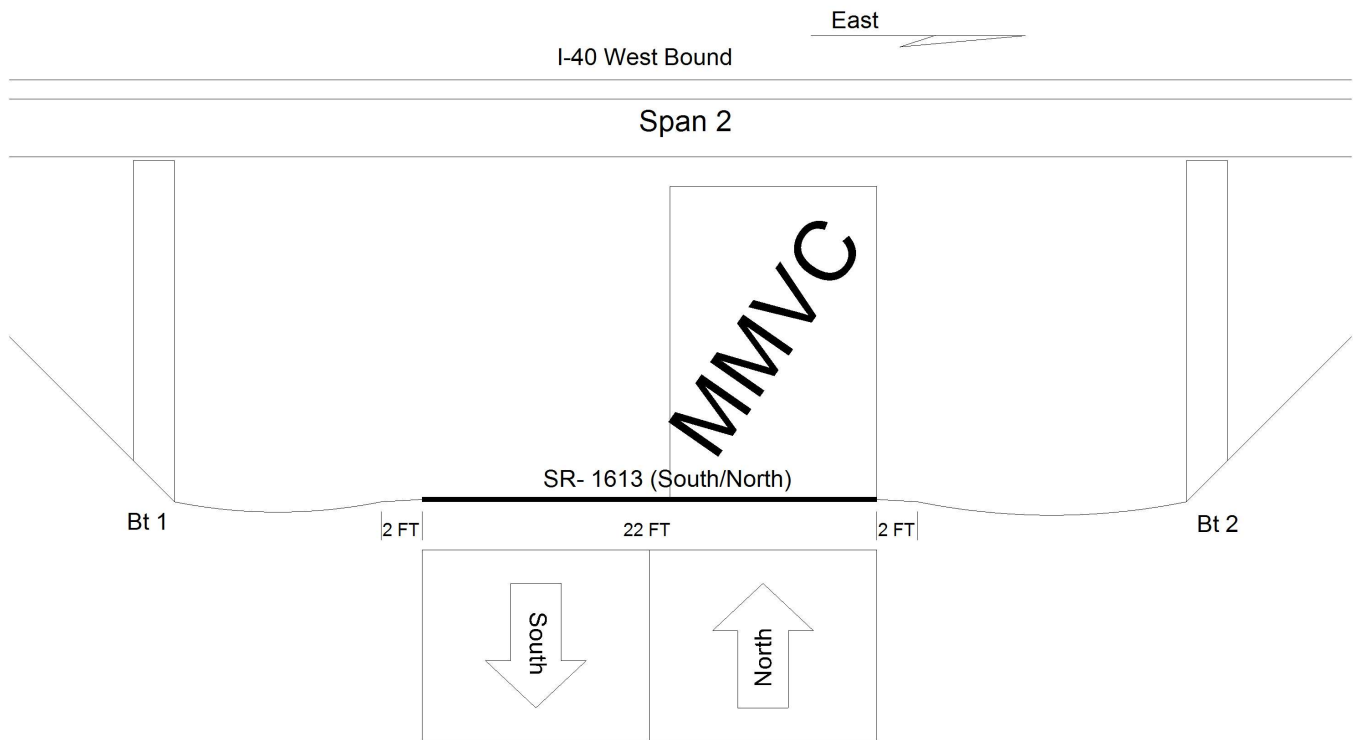
Drawn By: Roy W. Shook

Date: 07/29/2005

File Name: S0106000225



# Bridge Inspection Field Sketch



Roadway 1		Direction of Traffic	North South
Distance to Left Rail		Distance to Right Rail	
Distance to Left Toe of Slope	12FT	Distance to Left Bent	12FT
Distance to Right Toe of Slope	15FT	Distance to Right Bent	15FT
MMVC	15.517 Ft at Beam 4, 10 FT from Right Edge of Roadway		
MVC	15.25 Ft at Beam 4, 0.1 FT from Left Edge of Roadway		

**CLEARANCES CHANGED 4-22-2013**

4/25/17 - J.C.HUNTSINGER

<b>Title</b>		<b>Description</b>	
Underclearance		Data Worksheet	
<b>Bridge No:</b> 430249	<b>Drawn By:</b> Roy W. Shook	<b>Date:</b> 07/29/2005	<b>File Name:</b> S0106000228

# Bridge Inspection Field Sketch

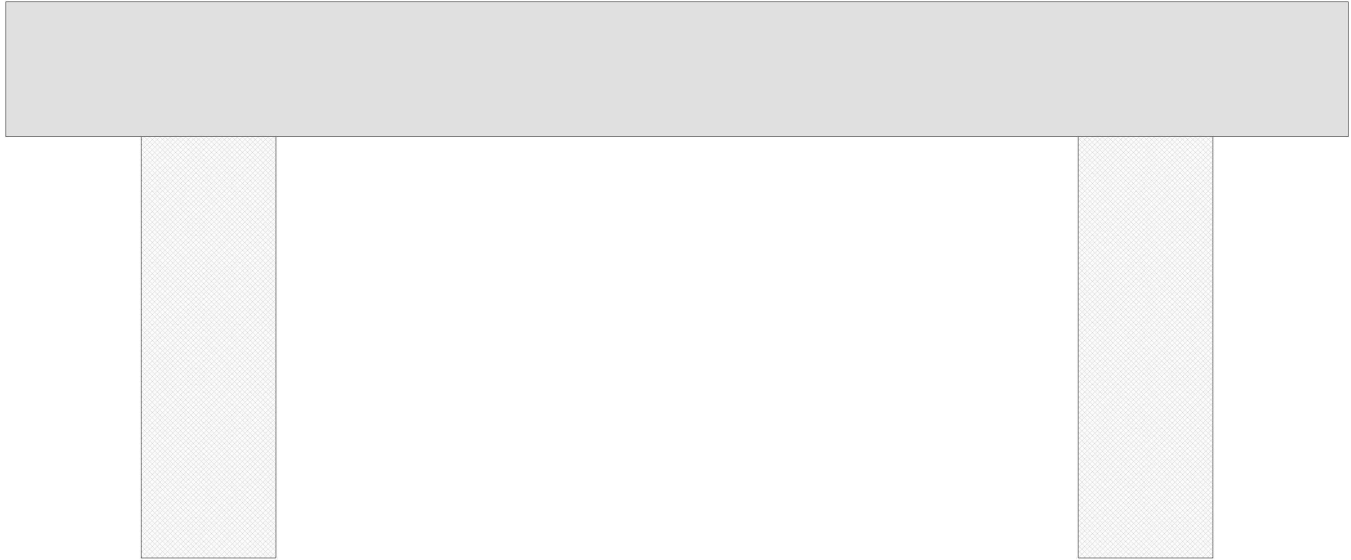


Roadway	24ft Wide	2 Paved Lanes	Looking West
Left Shoulder	6ft Wide	4.0ft Paved	2.0ft Unpaved
Right Shoulder	12ft Wide	11.3ft Paved	0.7ft Unpaved
Left Guardrail	6.0ft from road		
Right Guardrail	12.0ft from road		

4/25/17 - J.C.HUNTSINGER

<b>Title</b> Approach Roadway		<b>Description</b> Data Worksheet	
<b>Bridge No:</b> 430249	<b>Drawn By:</b> Roy W. Shook	<b>Date:</b> 07/29/2005	<b>File Name:</b> S0106000224

# Bridge Inspection Field Sketch



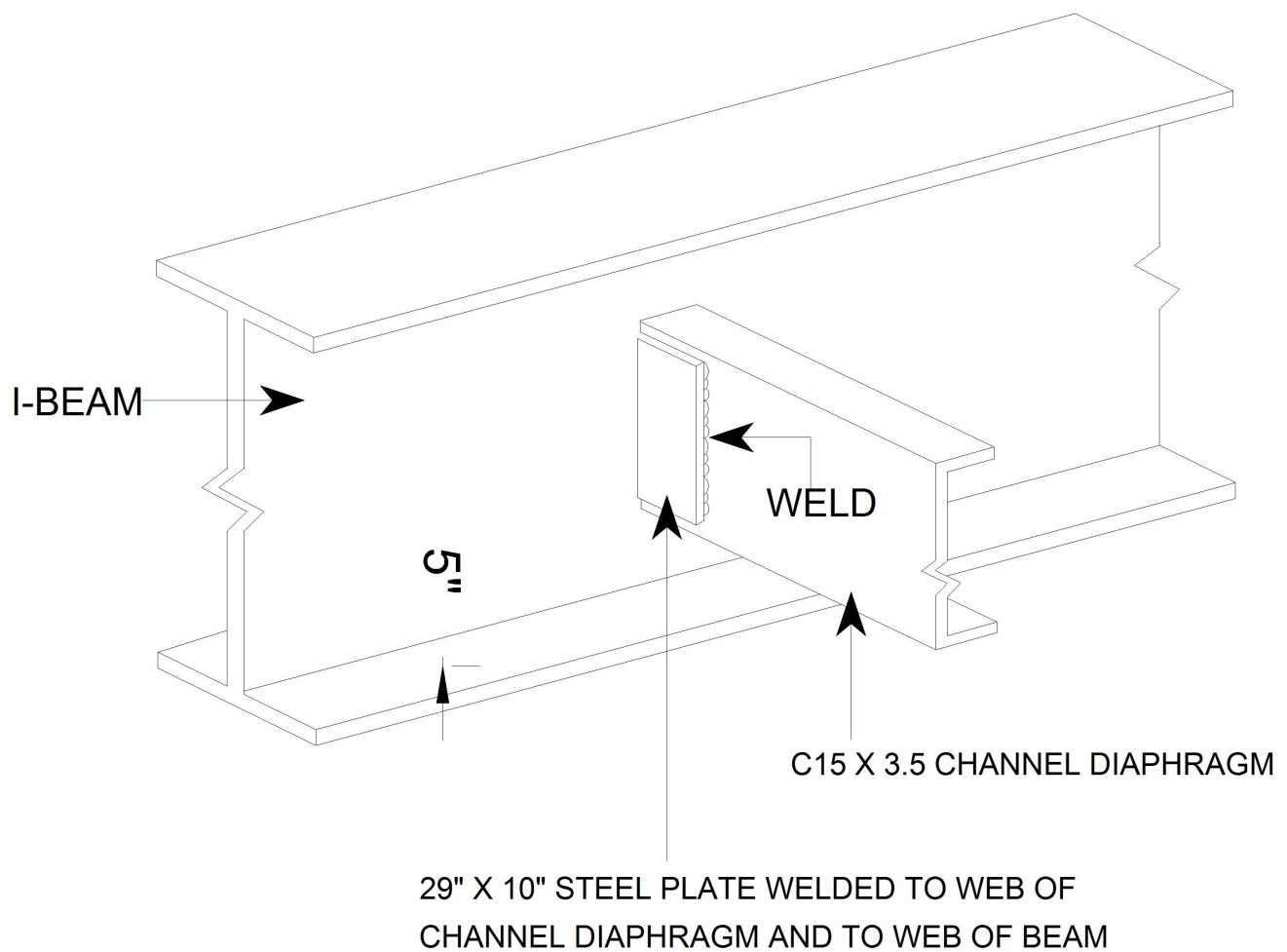
<b>Cap Information</b>			<b>Material</b> Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
29.833 ft.	3.000 ft.	3.000 ft.	4.500 ft.	4.500 ft.	1.833 ft.	1.833 ft.				
<b>Subcap Information</b>			<b>Material</b>							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
<b>Sill Information</b>			<b>Material</b>							
Length	Width	Height								
<b>Pile #</b>	<b>Material</b>	<b>Spacing</b>	<b>Width/Dia.</b>	<b>Height</b>	<b>Length</b>	<b>Orientation</b>	<b>Driven?</b>	<b>Replacement?</b>	<b>Removed?</b>	<b>Collar?</b>
1	Concrete	20.833 ft.	3 ft.	3 ft.		Vertical	No	No	No	No
2	Concrete		3 ft.	3 ft.		Vertical	No	No	No	No
<b>Bent/Abutment #:</b> 1			<b>Similar Bents:</b> 2							

<b>Title</b> 4/25/17 - J.C.HUNTSINGER				<b>Description</b>			
INTERIOR BENTS				SUBSTRUCTURE DETAILS			
<b>Bridge No:</b> 430249		<b>Drawn By:</b> JOE C. HUNTSINGER		<b>Date:</b> 4/22/2013		<b>File Name:</b> S0106001611	

# Bridge Inspection Field Sketch

## DIAPHRAGM DETAILS

LOCATED AT THE 1/3 POINTS OF ALL SPANS



4/25/17 - J.C.HUNTSINGER

**Title**  
INTERMEDIATE DIAPHRAGMS

**Description**  
SUPERSTRUCTURE DETAILS

**Bridge No:** 430249

**Drawn By:** JOE C. HUNTSINGER

**Date:** 4/22/2013

**File Name:** S0106001612