



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: **Shored structure**

Structure Safety Report

Routine Element Inspection

COUNTY: JOHNSTON STRUCTURE NUMBER: 500432 FREQUENCY: 24 MONTHS

FACILITY CARRIED: SR1738 MILE POST:

LOCATION: 1.2 MI S JCT SR1700

FEATURE INTERSECTED: CATTAIL CREEK

LATITUDE: 35° 42' 5.01" LONGITUDE: 78° 18' 1.59"

SUPERSTRUCTURE: NEW TIMBER FLOOR/TIMBER JOIST

SUBSTRUCTURE: **EBTS,IBT: TIMCAP/TIMPILES;STLCAP/PILE CRUTCHES ADDED**
EBT1,BT1,BT3:STLCAP/STLPLS;EBT2&BT2:TIMCAP/TIMPILES

SPANS: **2@17.667'**
1@8', 2@8.667', 1@8.083'

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

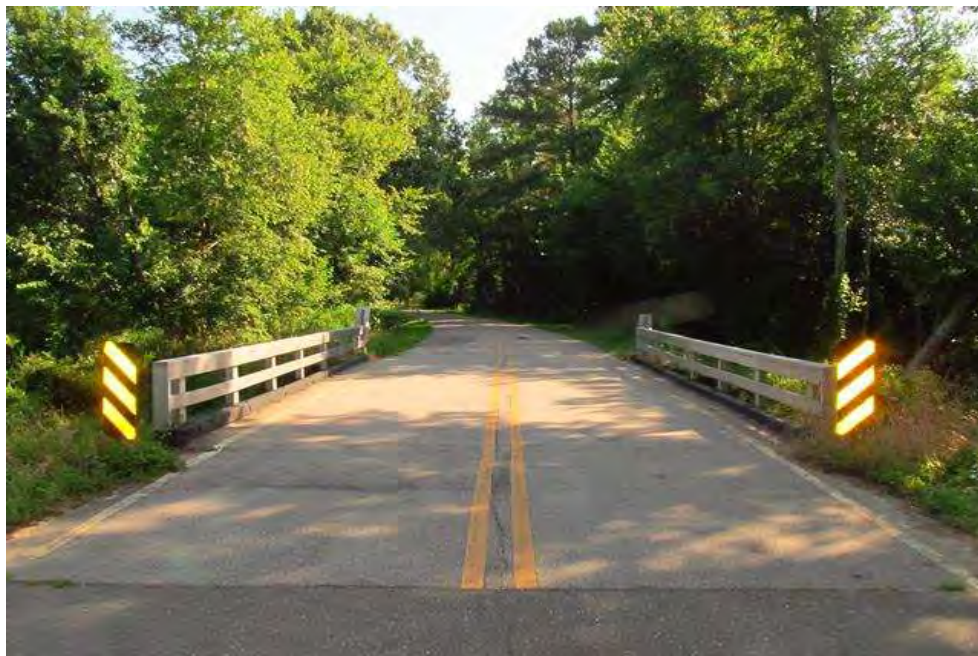
PRESENT CONDITION: Fair

INSPECTION DATE: 06/23/2015

POSTED SV: Not Posted

POSTED TTST: Not Posted

OTHER SIGNS PRESENT: 4 Delineators,2 Narrow Bridge



Looking north

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>

INSPECTED BY
Willis C May

SIGNATURE

Willis C May

ASSISTED BY Wayne T Wilkinson

BRIDGE INSPECTION RECORD AND SUMMARY FOR SHORED STRUCTURES

BRIDGE # 432 COUNTY JOHNSTON DATE 7-31-98

THE FOLLOWING SI & A ITEMS ARE TO BE CODED TO REFLECT THE FACT THAT THE STRUCTURE IS SHORED UP:

		<u>CODE</u>	<u>BY</u>
SI & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION		<u>7</u>	<u>JR</u>
SI & A ITEM 59 - SUPERSTRUCTURE		<u> </u>	<u> </u>
SI & A ITEM 60 - SUBSTRUCTURE		<u>3</u>	<u>JR</u>
SI & A ITEM 64 - OPERATING RATING	HS <u>0</u> BY <u>S.LEE</u>	<u>101</u>	<u>MR</u>
SI & A ITEM 66 - INVENTORY RATING	HS <u>0</u> BY <u>S.LEE</u>	<u>101</u>	<u>MR</u>

COMMENTS:

ADDED CRUTCH BELT AGAINST THE EXISTING END
BELT # 1.

RETAIN TEMP - TMS 12/01/15



Asphalt wearing surface overview

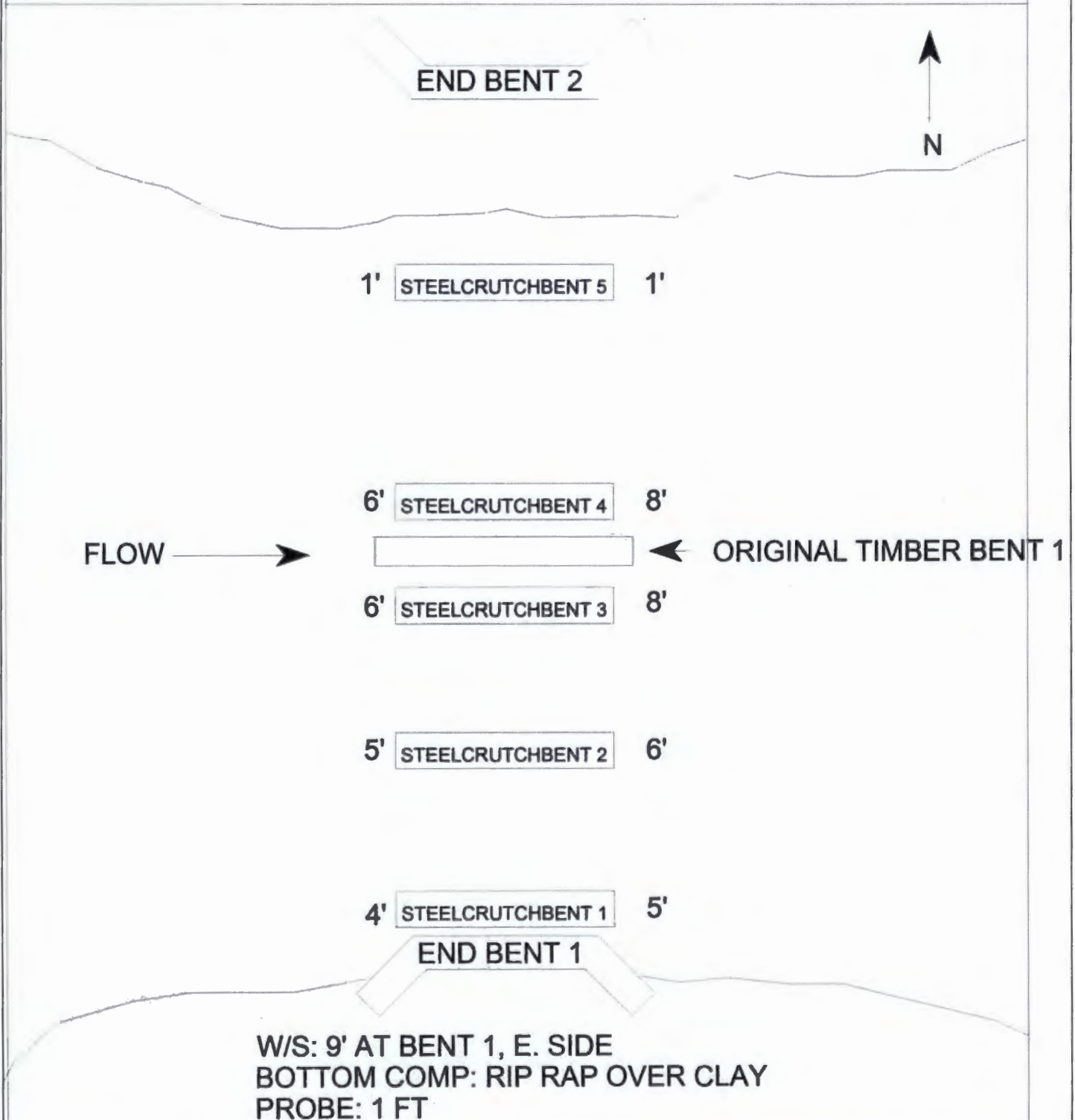


West profile

Not 2 spans
** Now 4 spans w/ cutchus*

** length of max span - 8'8" now*

Bridge Inspection Field Sketch



Title
WATERWAY

Description
PLAN VIEW

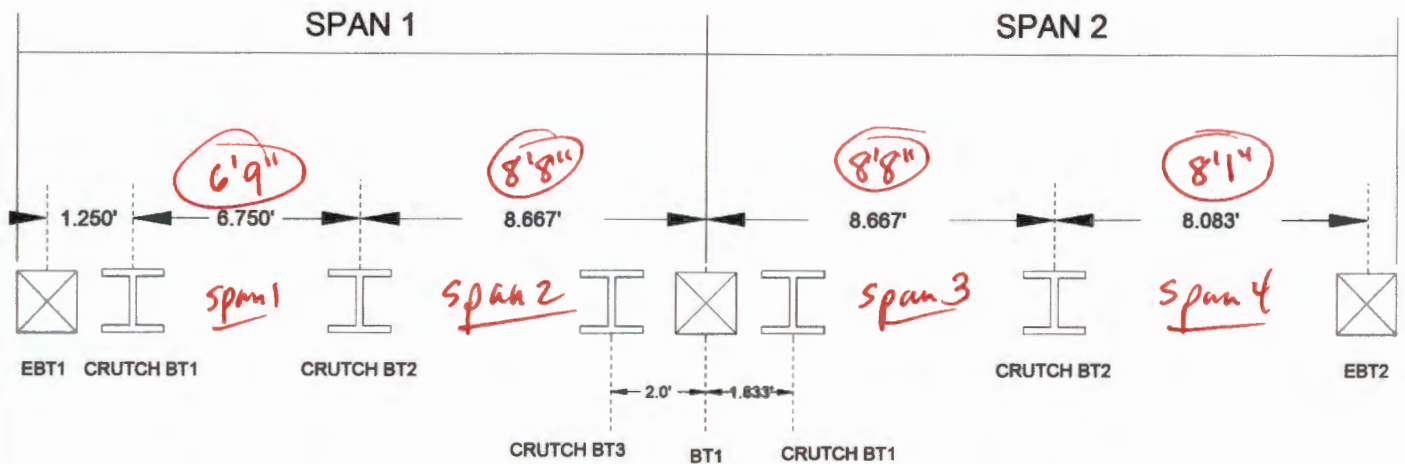
Bridge No: 500432

Drawn By: JVB

Date: 7/31/2009

File Name: S0162000239

Bridge Inspection Field Sketch



10" X 10" STEEL H-PILES AT EBT1, BT1, BT2A, BT2B, BT3

Was 2 spans:
Now 4 spans w/ crutch bts.
MH 11-19-2015

CHECKED BY: WTW 06/23/2015

Title BENT SPACINGS		Description BENT SPACINGS	
Bridge No: 500432	Drawn By: W.T. WILKINSON	Date: 7/10/2007	File Name: S0018013932

Span Element Report

Structure Number: 500432

Inspection Date: 06/23/2015

Span Number 1

Span Length 17.667 Feet

Number of Beams/Girders: 10

Element Number	Parent Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code
31		Timber Deck	135	135	0	0	0	0	3324
111		Timber Open Girder/Beam	190	86	104	0	0	104	3304
216		Timber Abutment	28	16	1	1	10	12	3346
225		Steel Pile	10	0	9	1	0	33	3354
515	225	Steel Protective Coating	516	436	5	45	30	80	3342
228		Timber Pile	3	0	2	0	1	15	3344
231		Steel Pier Cap	62	33	29	0	0	24	3354
515	231	Steel Protective Coating	285	236	0	40	9	49	3342
235		Timber Pier Cap	21	0	21	0	0	21	3344
332		Timber Bridge Railing	36	0	36	0	0	36	3316
515	332	Steel Protective Coating	253	214	24	0	15	39	3342
510		Wearing Surface	336	250	0	86	0	86	2816

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

Span Number 2

Span Length 17.667 Feet

Number of Beams/Girders: 10

Element Number	Parent Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code
31		Timber Deck	354	353	0	1	0	1	3324
111		Timber Open Girder/Beam	190	117	73	0	0	73	3304
225		Steel Pile	6	0	6	0	0	23	3354
515	225	Steel Protective Coating	239	191	0	10	38	48	3342
228		Timber Pile	3	0	2	1	0	15	3344
231		Steel Pier Cap	41	1	40	0	0	20	3354
515	231	Steel Protective Coating	189	169	0	15	5	20	3342
235		Timber Pier Cap	21	0	21	0	0	21	3344
332		Timber Bridge Railing	36	0	35	1	0	36	3316
515	332	Steel Protective Coating	253	230	0	11	12	23	3342
510		Wearing Surface	336	253	3	80	0	83	2816

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

Span Number 3

Span Length 8.667 Feet

Number of Beams/Girders: 10

Element Number	Parent Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code
216		Timber Abutment	28	26	2	0	0	2	3346
228		Timber Pile	3	0	3	0	0	9	3344
235		Timber Pier Cap	21	0	21	0	0	21	3344

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

Superstructure Detailed Element Quantities

Structure Number: 500432

Inspection Date: 06/23/2015

Span Number 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Deck	1	31	Timber Deck	135	135	0	0	0	0	3324	☐ Requested
☒ Bridge Rail	1	332	Timber Bridge Railing	18	0	18	0	0	18	3316	☐ Requested
Protective System		515	Steel Protective Coating	130	123	0	0	7	7	3342	
☒ Bridge Rail	2	332	Timber Bridge Railing	18	0	18	0	0	18	3316	☐ Requested
Protective System		515	Steel Protective Coating	123	91	24	0	8	32	3342	
☒ Wearing Surfaces		510	Wearing Surface	336	250	0	86	0	86	2816	☐ Requested
☒ Beam	1	111	Timber Open Girder/Beam	19	0	19	0	0	19	3304	☐ Requested
☒ Beam	2	111	Timber Open Girder/Beam	19	0	19	0	0	19	3304	☐ Requested
☒ Beam	3	111	Timber Open Girder/Beam	19	13	6	0	0	6	3304	☐ Requested
☒ Beam	4	111	Timber Open Girder/Beam	19	11	8	0	0	8	3304	☐ Requested
☒ Beam	5	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	6	111	Timber Open Girder/Beam	19	11	8	0	0	8	3304	☐ Requested
☒ Beam	7	111	Timber Open Girder/Beam	19	0	19	0	0	19	3304	☐ Requested
☒ Beam	8	111	Timber Open Girder/Beam	19	13	6	0	0	6	3304	☐ Requested
☒ Beam	9	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	10	111	Timber Open Girder/Beam	19	0	19	0	0	19	3304	☐ Requested

Structure Number: 500432

Inspection Date: 06/23/2015

Span Number 2

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Deck	1	31	Timber Deck	354	353	0	1	0	1	3324	☐ Requested
☒ Bridge Rail	1	332	Timber Bridge Railing	18	0	18	0	0	18	3316	☐ Requested
Protective System		515	Steel Protective Coating	123	112	0	11	0	11	3342	
☒ Bridge Rail	2	332	Timber Bridge Railing	18	0	17	1	0	18	3316	☐ Requested
Protective System		515	Steel Protective Coating	130	118	0	0	12	12	3342	
☒ Wearing Surfaces		510	Wearing Surface	336	253	3	80	0	83	2816	☐ Requested
☒ Beam	1	111	Timber Open Girder/Beam	19	0	19	0	0	19	3304	☐ Requested
☒ Beam	2	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	3	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	4	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	5	111	Timber Open Girder/Beam	19	0	19	0	0	19	3304	☐ Requested
☒ Beam	6	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	7	111	Timber Open Girder/Beam	19	11	8	0	0	8	3304	☐ Requested
☒ Beam	8	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	9	111	Timber Open Girder/Beam	19	11	8	0	0	8	3304	☐ Requested
☐ Beam	10	111	Timber Open Girder/Beam	19	0	19	0	0	19	3304	☐ Requested

Superstructure Element Defect Descriptions

Structure Number: 500432

Inspection Date: 06/23/2015

Span Number 1

Span 1	Deck	1	Component Name:	Timber Deck				
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Element: 31 Name Timber Deck Qty: 135 Lvl 2: 0 Lvl 3: 0 Lvl 4: 0 Maint. Qty 0

Defect Description:

Ends of boards soft 1/4 in deep. Bottom faces stained.

Span 1	Bridge Rail	1	Component Name:	Timber Rail				
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Element: 332 Name Timber Bridge Railing Qty: 18 Lvl 2: 18 Lvl 3: 0 Lvl 4: 0 Maint. Qty 18

Defect Description:

18 Feet of Check/Shake: Penetrates 5%-50% of the thickness of the member and not in a tension zone.

7 Square Feet of Effectiveness. Tar coating along wheel-guard missing.

Span 1	Bridge Rail	2	Component Name:	Timber Rail				
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Element: 332 Name Timber Bridge Railing Qty: 18 Lvl 2: 18 Lvl 3: 0 Lvl 4: 0 Maint. Qty 18

Defect Description:

18 Feet of Check/Shake: Penetrates 5%-50% of the thickness of the member and not in a tension zone.

10 Square Feet of Effectiveness along top rail. Metalized coating Substantially effective.

8 Square Feet of Effectiveness along wheel-guard. Tar coating missing.

14 Square Feet of Effectiveness along wheel-guard. Tar coating substantially effective.

Span 1	Wearing Surfaces		Component Name:	Asphalt Wearing Surface				
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Element: 510 Name Wearing Surface Qty: 336 Lvl 2: 0 Lvl 3: 86 Lvl 4: 0 Maint. Qty 86

Defect Description:

19 Square Feet of Cracking over End Bent 1 (Wearing Surface): Width of more than 0.05 in. or spacing of less than 1.0 ft.

67 Square Feet of transverse Cracking (Wearing Surface): Width of more than 0.05 in. or spacing of less than 1.0 ft.

Span 1	Beam	1	Component Name:	Timber Joist				
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Element: 111 Name Timber Open Girder/Beam Qty: 19 Lvl 2: 19 Lvl 3: 0 Lvl 4: 0 Maint. Qty 19

Defect Description:

19 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

Span 1	Beam	2	Component Name:	Timber Joist				
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Element: 111 Name Timber Open Girder/Beam Qty: 19 Lvl 2: 19 Lvl 3: 0 Lvl 4: 0 Maint. Qty 19

Defect Description:

19 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

Span 1	Beam	3	Component Name:	Timber Joist				
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Element: 111 Name Timber Open Girder/Beam Qty: 19 Lvl 2: 6 Lvl 3: 0 Lvl 4: 0 Maint. Qty 6

Defect Description:

6 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

Span 1	Beam	4	Component Name:	Timber Joist				
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Element: 111 Name Timber Open Girder/Beam Qty: 19 Lvl 2: 8 Lvl 3: 0 Lvl 4: 0 Maint. Qty 8

Defect Description:

8 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

Span 1	Beam	6	Component Name:	Timber Joist				
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Element: 111 Name Timber Open Girder/Beam Qty: 19 Lvl 2: 8 Lvl 3: 0 Lvl 4: 0 Maint. Qty 8

Defect Description:

8 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

Inspection Date: 06/23/2015

19 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

6 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

Span Number 2

1 Square Feet of Decay/Section Loss: in left end of board near bent 1 back 6 in.
Ends of boards soft 1/4 in deep. Bottom faces stained in spots.

11 Square Feet of Effectiveness along wheel-guard. Tar coating has Limited effectiveness.

1 Foot of Decay/Section Loss in Post No.3. Affects 10% or more of the member but does not warrant structural review.
17 Feet of Check/Shake: Penetrates 5%-50% of the thickness of the member and not in a tension zone.
1 Square Foot of Effectiveness at Post No.3. Metalized coating is missing.
11 Square Feet of Effectiveness along wheel-guard. Tar coating is missing.

80 Square Feet of transverse Cracking (Wearing Surface): Width of more than 0.05 in. or spacing of less than 1.0 ft.
3 Square Feet of Asphalt wearing surface patched. Patched area that is sound.

19 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

19 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

Span 2	Beam 7	Component Name: Timber Joist								
Element: 111	Name Timber Open Girder/Beam	Qty: 19	Lvl 2: 8	Lvl 3: 0	Lvl 4: 0	Maint. Qty: 8				
Defect Description:										

8 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

Span	2	Beam	9	Component Name:		Timber Joist							
Element:	111	Name	Timber Open Girder/Beam	Qty:	19	Lvl 2:	8	Lvl 3	0	Lvl 4	0	Maint. Qty	8
Defect Description:													

8 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

Span	2	Beam	10	Component Name:		Timber Joist							
Element:	111	Name	Timber Open Girder/Beam	Qty:	19	Lvl 2:	19	Lvl 3	0	Lvl 4	0	Maint. Qty	19
Defect Description:													

19 Feet of Check/Shake: Penetrates 5% - 50% of the thickness of the member and not in a tension zone.

Substructure Detailed Element Quantities

Structure Number: 500432

Inspection Date: 06/23/2015

End Bent 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	235	Timber Pier Cap	21	0	21	0	0	21	3344	☐ Requested
☒ Piles and Columns	1	228	Timber Pile	1	0	1	0	0	5	3344	☐ Requested
☒ Piles and Columns	2	228	Timber Pile	1	0	0	0	1	5	3344	☐ Requested
☒ Piles and Columns	3	228	Timber Pile	1	0	1	0	0	5	3344	☐ Requested
☒ Abutments	1	216	Timber Abutment	28	16	1	1	10	12	3346	☐ Requested

Span 1 Crutch Bent

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	231	Steel Pier Cap	20	8	12	0	0	12	3354	☐ Requested
☒ Piles and Columns	2	225	Steel Pile	1	0	1	0	0	5	3354	☐ Requested
☒ Piles and Columns	1	225	Steel Pile	1	0	0	1	0	5	3354	☐ Requested
☒ Piles and Columns	3	225	Steel Pile	1	0	1	0	0	4	3354	☐ Requested
☒ Piles and Columns	4	225	Steel Pile	1	0	1	0	0	1	3354	☐ Requested
☐ Caps	1	515	Steel Protective Coating	95	73	0	20	2	22	3342	☐ Requested
☐ Piles and Columns	1	515	Steel Protective Coating	47	26	0	0	21	21	3342	☐ Requested
☐ Piles and Columns	2	515	Steel Protective Coating	47	31	0	15	1	16	3342	☐ Requested
☐ Piles and Columns	3	515	Steel Protective Coating	47	40	5	0	2	7	3342	☐ Requested
☐ Piles and Columns	4	515	Steel Protective Coating	43	41	0	2	0	2	3342	☐ Requested

Structure Number: 500432

Inspection Date: 06/23/2015

Span 1 Crutch Bent

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	231	Steel Pier Cap	21	16	5	0	0	0	3354	☐ Requested
☒ Piles and Columns	1	225	Steel Pile	1	0	1	0	0	4	3354	☐ Requested
☒ Piles and Columns	2	225	Steel Pile	1	0	1	0	0	5	3354	☐ Requested
☒ Piles and Columns	3	225	Steel Pile	1	0	1	0	0	4	3354	☐ Requested
☐ Caps	1	515	Steel Protective Coating	95	90	0	0	5	5	3342	☐ Requested
☐ Piles and Columns	1	515	Steel Protective Coating	60	50	0	9	1	10	3342	☐ Requested
☐ Piles and Columns	2	515	Steel Protective Coating	60	55	0	4	1	5	3342	☐ Requested
☐ Piles and Columns	3	515	Steel Protective Coating	60	55	0	4	1	5	3342	☐ Requested

Span 1 Crutch Bent

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	231	Steel Pier Cap	21	9	12	0	0	12	3354	☐ Requested
☒ Piles and Columns	1	225	Steel Pile	1	0	1	0	0	5	3354	☐ Requested
☒ Piles and Columns	2	225	Steel Pile	1	0	1	0	0	0	3354	☐ Requested
☒ Piles and Columns	3	225	Steel Pile	1	0	1	0	0	0	3354	☐ Requested
☐ Caps	1	515	Steel Protective Coating	95	73	0	20	2	22	3342	☐ Requested
☐ Piles and Columns	1	515	Steel Protective Coating	52	47	0	4	1	5	3342	☐ Requested
☐ Piles and Columns	2	515	Steel Protective Coating	52	48	0	3	1	4	3342	☐ Requested
☐ Piles and Columns	3	515	Steel Protective Coating	48	43	0	4	1	5	3342	☐ Requested

Bent 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	235	Timber Pier Cap	21	0	21	0	0	21	3344	☐ Requested
☒ Piles and Columns	1	228	Timber Pile	1	0	0	1	0	5	3344	☐ Requested
☒ Piles and Columns	2	228	Timber Pile	1	0	1	0	0	5	3344	☐ Requested
☒ Piles and Columns	3	228	Timber Pile	1	0	1	0	0	5	3344	☐ Requested

Structure Number: 500432

Inspection Date: 06/23/2015

Span 2 Crutch Bent

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	231	Steel Pier Cap	21	1	20	0	0	20	3354	☐ Requested
☒ Piles and Columns	2	225	Steel Pile	1	0	1	0	0	0	3354	☐ Requested
☒ Piles and Columns	1	225	Steel Pile	1	0	1	0	0	5	3354	☐ Requested
☒ Piles and Columns	3	225	Steel Pile	1	0	1	0	0	5	3354	☐ Requested
☐ Caps	1	515	Steel Protective Coating	95	75	0	15	5	20	3342	☐ Requested
☐ Piles and Columns	1	515	Steel Protective Coating	52	47	0	4	1	5	3342	☐ Requested
☐ Piles and Columns	2	515	Steel Protective Coating	52	49	0	2	1	3	3342	☐ Requested
☐ Piles and Columns	3	515	Steel Protective Coating	48	43	0	4	1	5	3342	☐ Requested

Span 2 Crutch Bent

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	231	Steel Pier Cap	20	0	20	0	0	0	3354	☐ Requested
☒ Piles and Columns	1	225	Steel Pile	1	0	1	0	0	4	3354	☐ Requested
☒ Piles and Columns	2	225	Steel Pile	1	0	1	0	0	4	3354	☐ Requested
☒ Piles and Columns	3	225	Steel Pile	1	0	1	0	0	5	3354	☐ Requested
☐ Caps	1	515	Steel Protective Coating	94	94	0	0	0	0	3342	☐ Requested
☐ Piles and Columns	1	515	Steel Protective Coating	29	19	0	0	10	10	3342	☐ Requested
☐ Piles and Columns	2	515	Steel Protective Coating	29	19	0	0	10	10	3342	☐ Requested
☐ Piles and Columns	3	515	Steel Protective Coating	29	14	0	0	15	15	3342	☐ Requested

Bent 2

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	235	Timber Pier Cap	21	0	21	0	0	21	3344	☐ Requested
☒ Piles and Columns	1	228	Timber Pile	1	0	1	0	0	3	3344	☐ Requested
☒ Piles and Columns	2	228	Timber Pile	1	0	1	0	0	3	3344	☐ Requested
☒ Piles and Columns	3	228	Timber Pile	1	0	1	0	0	3	3344	☐ Requested
☒ Abutments	1	216	Timber Abutment	28	26	2	0	0	2	3346	☐ Requested

Substructure Element Defect Descriptions

Structure Number: 500432

Inspection Date: 06/23/2015

End Bent 1

End Bent 1	Row 1	Caps	1
Element: 235	Name	Timber Pier Cap	Qty: 21 Lvl 2: 21 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 21
Defect Description:			

21 Feet of Check/Shake in faces: Penetrates 5%-50% of the thickness of the member and not in a tension zone.

End Bent 1	Row 1	Piles and Columns	1
Element: 228	Name	Timber Pile	Qty: 1 Lvl 2: 1 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 5
Defect Description:			

1 Each of Check/Shake: Penetrates 5%-50% of the thickness of the member and not in the tension zone.

End Bent 1	Row 1	Piles and Columns	2
Element: 228	Name	Timber Pile	Qty: 1 Lvl 2: 0 Lvl 3: 0 Lvl 4: 1 Maint. Qty: 5
Defect Description:			

1 Each of Connection: Top pile is leaning toward bent 1 and is not making contact with cap. Steel crutch bent has been placed at end bent 1.

End Bent 1	Row 1	Piles and Columns	3
Element: 228	Name	Timber Pile	Qty: 1 Lvl 2: 1 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 5
Defect Description:			

1 Each of Check/Shake: Penetrates 5%-50% of the thickness of the member and not in the tension zone.

End Bent 1	Row 1	Abutments	1
Element: 216	Name	Timber Abutment	Qty: 28 Lvl 2: 1 Lvl 3: 1 Lvl 4: 10 Maint. Qty: 12
Defect Description:			

10 Feet of Connection: The bulkhead boards at waterline are separated and bowed out 12 in between pile 1 and 3. Sheet pile has been placed behind bulkhead in this area.

1 Feet of Decay: Right end of bulkhead board at waterline is decayed thru back 1 ft.

1 Feet of decay : right bulkhead pile decayed 1 in deep x 8 in x 12 in .

Span 1	Row 1	Caps	1
Crutch Bent			
Element: 231	Name	Steel Pier Cap	Qty: 20 Lvl 2: 12 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 12
Defect Description:			

12 Feet of Corrosion: Freckled Rust. Corrosion of the steel has initiated.

20 Square Feet of Peeling/Bubbling/Cracking (steel Protective Coatings): Finish and primer coats.

2 Square Feet of Peeling/Bubbling/Cracking (steel Protective Coatings): Exposure of bare metal.

Span 1	Row 1	Piles and Columns	2
Crutch Bent			
Element: 225	Name	Steel Pile	Qty: 1 Lvl 2: 1 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 5
Defect Description:			

1 Each of Corrosion: Section loss in edge of flanges with 15/32 in remaining at waterline.

15 Square Feet of Peeling/Bubbling/Cracking (steel Protective Coatings): Finish and primer coats.

1 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.

Span 1	Row 1	Piles and Columns	1
Crutch Bent			
Element: 225	Name	Steel Pile	Qty: 1 Lvl 2: 0 Lvl 3: 1 Lvl 4: 0 Maint. Qty: 5
Defect Description:			

1 Each of Corrosion: Section loss in edge of flanges with 7/16 in remaining at waterline.

20 Square Feet of Peeling/Bubbling/Cracking (steel Protective Coatings): Exposure of bare metal.

1 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.

Span 1 Crutch Bent	Row 1	Piles and Columns	3							
Element: 225	Name	Steel Pile	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0 Maint. Qty
Defect Description:										

- 1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
 2 Square Feet of Peeling/Bubbling/Cracking (steel Protective Coatings): Exposure of bare metal.
 5 Square Feet of Oxide Film Degradation Color/Texture Adherence (Steel Protective Coatings): Granular texture.

Span 1 Crutch Bent	Row 1	Piles and Columns	4							
Element: 225	Name	Steel Pile	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0 Maint. Qty
Defect Description:										

- 1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
 2 Square Feet of Peeling/Bubbling/Cracking (steel Protective Coatings): Finish and primer coats.

Span 1 Crutch Bent	Row 1	Caps	1							
Element: 231	Name	Steel Pier Cap	Qty:	21	Lvl 2:	5	Lvl 3	0	Lvl 4	0 Maint. Qty
Defect Description:										

- 5 Feet of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
 5 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.

Span 1 Crutch Bent	Row 1	Piles and Columns	1							
Element: 225	Name	Steel Pile	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0 Maint. Qty
Defect Description:										

- 1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
 1 Square Feet of Peeling/Bubbling/Cracking (steel Protective Coatings): Exposure of bare metal.
 9 Square Feet of Effectiveness (Steel Protective Coatings): Limited effectiveness.

Span 1 Crutch Bent	Row 1	Piles and Columns	2							
Element: 225	Name	Steel Pile	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0 Maint. Qty
Defect Description:										

- 1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
 4 Square Feet of Effectiveness (Steel Protective Coatings): Limited effectiveness.
 1 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.

Span 1 Crutch Bent	Row 1	Piles and Columns	3							
Element: 225	Name	Steel Pile	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0 Maint. Qty
Defect Description:										

- 1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
 1 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.
 4 Square Feet of Effectiveness (Steel Protective Coatings): Limited effectiveness.

Span 1 Crutch Bent	Row 1	Caps	1							
Element: 231	Name	Steel Pier Cap	Qty:	21	Lvl 2:	12	Lvl 3	0	Lvl 4	0 Maint. Qty
Defect Description:										

- 12 Feet of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
 2 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.
 20 Square Feet of Effectiveness (Steel Protective Coatings): Limited effectiveness.

Span 1 Crutch Bent	Row 1	Piles and Columns	1							
Element: 225	Name	Steel Pile	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0 Maint. Qty
Defect Description:										

- 1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.

1 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.

4 Square Feet of Effectiveness (Steel Protective Coatings): Limited effectiveness.

Span 1	Row 1	Piles and Columns	2
Crutch Bent			
Element: 225	Name Steel Pile	Qty: 1	Lvl 2: 1 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 0
Defect Description:			

1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.

1 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.

3 Square Feet of Effectiveness (Steel Protective Coatings): Limited effectiveness.

Span 1	Row 1	Piles and Columns	3
Crutch Bent			
Element: 225	Name Steel Pile	Qty: 1	Lvl 2: 1 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 0
Defect Description:			

1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.

1 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.

4 Square Feet of Effectiveness (Steel Protective Coatings): Limited effectiveness.

Bent 1	Row 1	Caps	1
Element: 235	Name Timber Pier Cap	Qty: 21	Lvl 2: 21 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 21
Defect Description:			

2 Feet of Decay in top of left end of cap 2 in high x 12 in wide x 8 in long and top of right end of cap is decayed 3 in high x 4 in wide x 9 in long.

19 Feet of Check/Shake: Penetrates 5%-50% of the thickness of the member and not in a tension zone.

Bent 1	Row 1	Piles and Columns	1
Element: 228	Name Timber Pile	Qty: 1	Lvl 2: 0 Lvl 3: 1 Lvl 4: 0 Maint. Qty: 5
Defect Description:			

1 Each of Decay in left side 2 in deep x 4 in wide from cap to waterline.

1 Each of Check/Shake: Penetrates 5%-50% of the thickness of the member and not in the tension zone.

Bent 1	Row 1	Piles and Columns	2
Element: 228	Name Timber Pile	Qty: 1	Lvl 2: 1 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 5
Defect Description:			

1 Each of Decay: 1 in deep in span 2 side 6 in wide x 4 ft high.

1 Each of Check/Shake: Penetrates 5%-50% of the thickness of the member and not in the tension zone.

Bent 1	Row 1	Piles and Columns	3
Element: 228	Name Timber Pile	Qty: 1	Lvl 2: 1 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 5
Defect Description:			

1 Each of Decay: 1 in deep x 4 in diameter in right side. Pile sounds hollow.

1 Each of Check/Shake: Penetrates 5%-50% of the thickness of the member and not in the tension zone.

Span 2	Row 1	Caps	1
Crutch Bent			
Element: 231	Name Steel Pier Cap	Qty: 21	Lvl 2: 20 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 20
Defect Description:			

20 Feet of Corrosion: Freckled Rust. Corrosion of the steel has initiated.

5 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.

15 Square Feet of Effectiveness (Steel Protective Coatings): Limited effectiveness.

Span 2	Row 1	Piles and Columns	2
Crutch Bent			
Element: 225	Name Steel Pile	Qty: 1	Lvl 2: 1 Lvl 3: 0 Lvl 4: 0 Maint. Qty: 0
Defect Description:			

1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.

2 Square Feet of Effectiveness (Steel Protective Coatings): Limited effectiveness.

1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
1 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.
4 Square Feet of Oxide Film Degradation Color/Texture Adherence (Steel Protective Coatings): Small flakes, less than 1/2-in. diameter.

1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
1 Square Feet of Effectiveness (Steel Protective Coatings): Failed; no protection of the underlying metal.
4 Square Feet of Effectiveness (Steel Protective Coatings): Limited effectiveness.

20 Feet of Corrosion: Freckled Rust. Corrosion of the steel has initiated.

1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
10 Square Feet of Peeling/Bubbling/Cracking (steel Protective Coatings): Exposure of bare metal.

1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
10 Square Feet of Peeling/Bubbling/Cracking (steel Protective Coatings): Exposure of bare metal.

1 Each of Corrosion: Freckled Rust. Corrosion of the steel has initiated.
15 Square Feet of Peeling/Bubbling/Cracking (steel Protective Coatings): Exposure of bare metal.

21 Feet of Check/Shake: Penetrates 5%-50% of the thickness of the member and not in a tension zone.

1 Each of Check/Shake: Penetrates 5%-50% of the thickness of the member and not in the tension zone.

Bent 2	Row 1	Piles and Columns	2
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Structure Number: 500432

Inspection Date: 06/23/2015

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

1 Each of Check/Shake: Penetrates 5%-50% of the thickenss of the member and not in the tension zone.

Bent 2	Row 1	Piles and Columns	3
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Element: 228 Name Timber Pile Qty: 1 Lvl 2: 1 Lvl 3 0 Lvl 4 0 Maint. Qty 3
Defect Description:

1 Each of Check/Shake: Penetrates 5%-50% of the thickenss of the member and not in the tension zone.

Bent 2	Row 1	Abutments	1
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Element: 216 Name Timber Abutment Qty: 28 Lvl 2: 2 Lvl 3 0 Lvl 4 0 Maint. Qty 2
Defect Description:

2 Feet of Check/Shake in bulkhead piles. Penetrates 5%-50% of the thickness of teh member and not in a tension zone.

National Bridge and NC Inspection Items

Structure Number: 500432

Inspection Date: 06/23/2015

National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	7
Item 59: Superstructure	0 - 9 , N	7
Item 60: Substructure	0 - 9 , N	5
Item 61: Channel and Channel Protection	0 - 9 , N	7
Item 62: Culvert	0 - 9 , N	
Item 71: Waterway Adequacy	0 - 9 , N	5
Item 72: Approach Roadway Alignment	0 - 9 , N	8

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

NC SMU Inspection Items

Item	Grade Scale	Grade	Maint. Qty.	Maint. Code
Deck Debris	G, F, P, or C	G	0	3376
Drainage System	G, F, P, or C	P	0	3332
Utilities	G, F, P, or C			
Slope Protection	G, F, P, or C	G	0	3352
Wingwall	G, F, P, or C	F	40	3350
Scour	G, F, P, or C	G		
Field Scour Evaluation		O		
Drift	G, F, P, or C	G	0	3366
Fender System	G, F, P, or C		0	3364
Response to Live Load	G, F, P, or C	G		
Estimated Remaining Life	0 - 100 Years	12		

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	12
Traffic Control Time	Hours	
Snooper Time	Hours	
Ladder Used	YES/NO	N
Bucket Truck Used	YES/NO	N
Boat Used	YES/NO	Y
Other Equipment Used	YES/NO	N

National Bridge and NC SMU Inspection Item Details

Structure Number: 500432

Inspection Date: 06/23/2015

Item	Waterway Adequacy - Item 71	Grade	5	Maint Code	Qty.	0
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Details Drift on top of caps.

Item	Drainage System	Grade	P	Maint Code	3332	Qty.	0
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Details Asphalt up to bottom of wheelguards blocking drainage.

Item	Slope Protection	Grade	G	Maint Code	3352	Qty.	0
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Details Rip rap on s2 slope.

Item	Wingwalls	Grade	F	Maint Code	3350	Qty.	40
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Details End bent 1

Left wingwall pile decayed 8 in deep with a 1 in shell remaining in 1/2 the circumference.

End of left wingwall boards soft and decayed back 1 in.

Right short wingwall pile decayed 2 ft high x 8 in wide x 6 in deep.

Right tall wingwall pile split off in the top 12 in high x 8 in wide x 2 in deep.

End bent 2

Left wingwall pile decayed thru. 1 in shell remaining 6 in wide.

Left top wingwall board missing and boards 3 & 4 decayed through with exposed rebar fill.

Right wingwall pile decayed 1/2 in deep all around circumference.

Item	Field Scour Evaluation	Grade	O	Maint Code	Qty.	0
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Details Plan of action code Z: No change in mudline from established baseline.



Dirt buildup between wheelguard and deck boards - Full length of each span



Split-off in the post No.3 along the Right side of Span 2



Random vertical checking throughout guardrail posts



Transverse cracking throughout Asphalt wearing surface



Longitudinal checking along wheelguards



Longitudinal checking along top rail of guardrails



Cracking in Wearing surface over End Bent 1



Spots of Peeling paint with Surface rust to exposed steel throughout crutch piles



Peeling paint with Surface rust to exposed steel in random spots along crutch caps



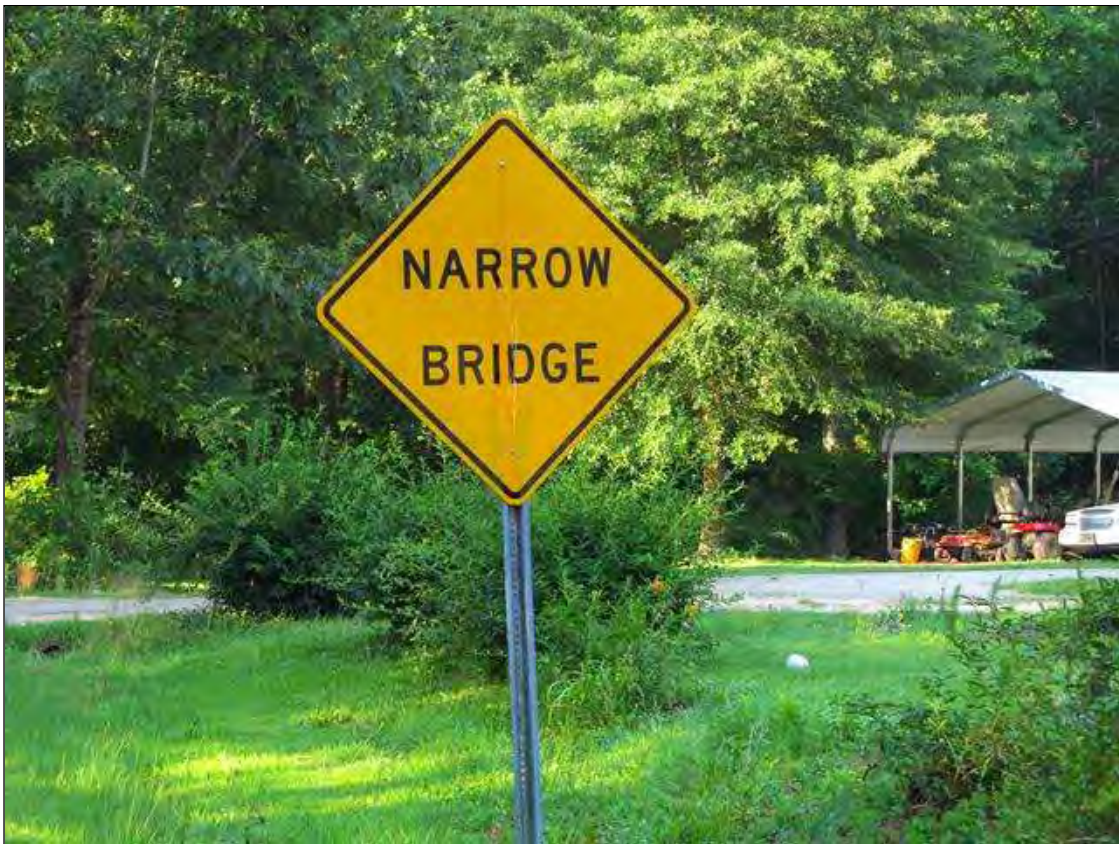
Decay in left End of cap at Bent 1



Decay and Delamination in the Left side of Pile 1 from waterline to cap



Decay in right End of cap at Bent 1



Narrow bridge sign - Southbound lane



East profile



End Bent 2 overview



Crutch bent at midspan of span 2 - other crutch bents similar



Right End of cap at Bent 1 and Adjacent crutch bents



Looking east downstream



Crutch bent at Span 2 side of Bent 1



Looking south



Looking west upstream



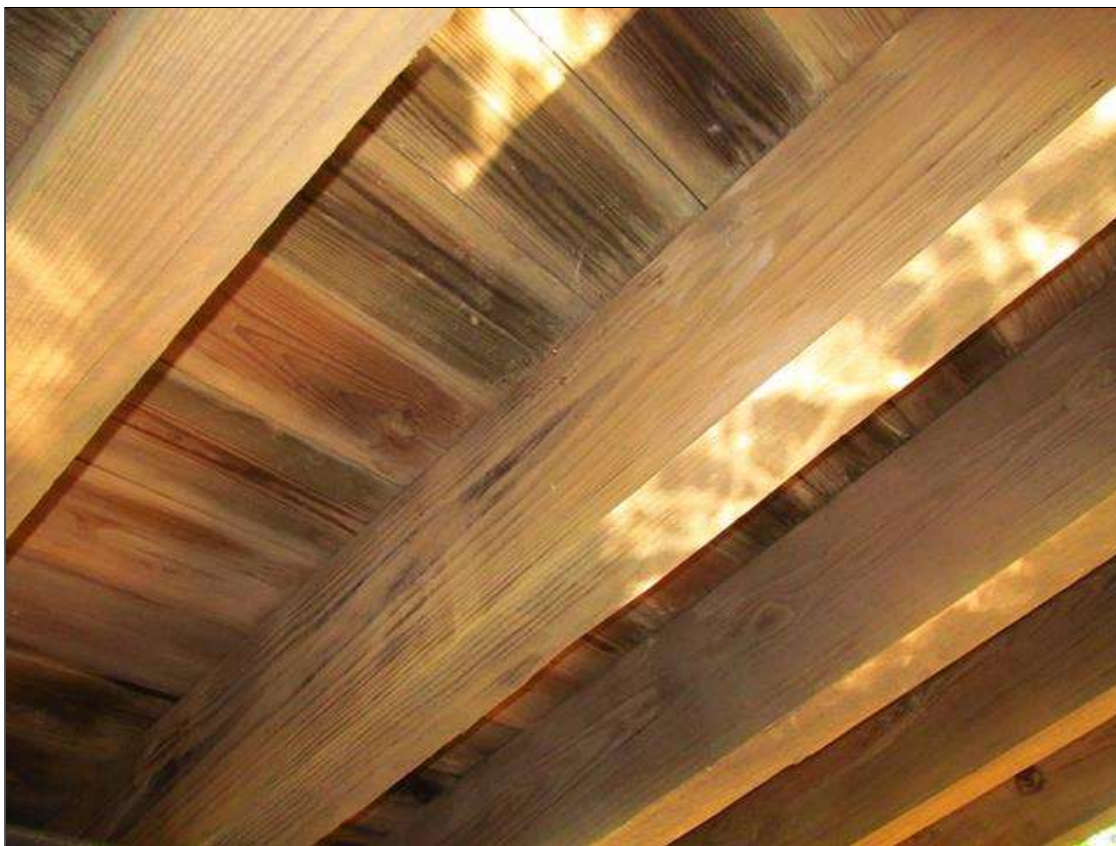
Looking north



Asphalt wearing surface overview



West profile



Superstructure overview



End Bent 1 overview



Crutch bent at mid-span of Span 1

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

Run Date: 11/25/2015

IDENTIFICATION							
(1) STATE NAME -NORTH CAROLINA	BRIDGE	500432		SUFFICIENCY RATING =		6	
(8) STRUCTURE NUMBER(FEDERAL)		000000001010432		STATUS =	Structurally Deficient		
(5) INVENTORY ROUTE (ON/UNDER) - ON		31017380					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		3		CLASSIFICATION		CODE	
(3) COUNTY CODE 101 (4) PLACE CODE		0		(112)NBIS BRIDGE SYSTEM -		YES	
(6) FEATURE INTERSECTED - CATTAIL CREEK				(104)HIGHWAY SYSTEM Is not on NHS		0	
(7) FACILITY CARRIED SR1738				(26) FUNCTIONAL CLASS - Local		09	
(9) LOCATION 1.2 MI S JCT SR1700				(100)STRAHNET HIGHWAY - Not a STRAHNET Route		0	
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE - No Parallel Structure		N	
(16)LAT 35° 42' 5.01" (17)LONG 78° 18' 1.59"				(102)DIRECTION OF TRAFFIC - 2-way Traffic		2	
(98)BORDER BRIDGE STATE CODE	PCT SHARE			(103)TEMPORARY STRUCTURE - Temporary Structure/Conditions		T	
(99)BORDER BRIDGE STRUCTURE NO				(110)DESIGNATED NATIONAL NETWORK - Not on the National Network		0	
				(20) TOLL On Free Road		3	
STRUCTURE TYPE AND MATERIAL				(31) MAINTAIN - State Highway Agency		01	
(43) STRUCTURE TYPE MAIN: Wood or Timber				(22) OWNER - State Highway Agency		01	
TYPE - Stringer Multibeam or Girder	CODE	702		(37) HISTORICAL SIGNIFICANCE - Not Eligible		5	
(44) STRUCTURE TYPE APPR :				CONDITION		CODE	
TYPE -	CODE	000		(58) DECK		7	
(45) NUMBER OF SPANS IN MAIN UNIT		4		(59) SUPERSTRUCTURE		7	
(46) NUMBER OF APPROACH SPANS				(60) SUBSTRUCTURE		3	
(107)DECK STRUCTURE TYPE - 8	CODE			(61) CHANNEL & CHANNEL PROTECTION		7	
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(62) CULVERTS		N	
(A) TYPE OF WEARING SURFACE -	CODE			LOAD RATING AND POSTING		CODE	
(B) TYPE OF MEMBRANE -	CODE			(31) DESIGN LOAD Unknown		0	
(C) TYPE OF DECK PROTECTION -	CODE			(63) OPERATING RATING METHOD - Allowable Stress		2	
				(64) OPERATING RATING - HS-1		1	
(27) YEAR BUILT		1955		(65) INVENTORY RATING METHOD - Allowable Stress		2	
(106)YEAR RECONSTRUCTED				(66) INVENTORY RATING - HS-1		1	
(42) TYPE OF SERVICE : ON - Highway				(70) BRIDGE POSTING - No Posting Required		5	
UNDER - Waterway	CODE	15		(41) STRUCTURE OPEN, POSTED ,OR CLOSED		D	
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE		0		DESCRIPTION - Open Temporary Shoring			
(29) AVERAGE DAILY TRAFFIC		130		APPRAISAL		CODE	
(30) YEAR OF ADT 2000 (109) TRUCK ADT PCT		6%		(67) STRUCTURAL EVALUATION		3	
(19) BYPASS OR DETOUR LENGTH		199 MI		(68) DECK GEOMETRY		3	
GEOMETRIC DATA				(69) UNDERCLEARANCES,VERTI & HORIZ		N	
(48) LENGTH OF MAXIMUM SPAN		9 FT		(71) WATERWAY ADEQUACY		5	
(49) STRUCTURE LENGTH		33 FT		(72) APPROACH ROADWAY ALIGNMENT		8	
(50)CURB OR SIDEWALK: LEFT .2915 FT RIGHT .2915 FT				(36) TRAFFIC SAFETY FEATURES		0000	
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		19 FT		(113)SCOUR CRITICAL BRIDGES		U	
(52) DECK WIDTH OUT TO OUT		20 FT		PROPOSED IMPROVEMENTS		CODE	
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		18 FT		(75) TYPE OF WORK -			
(33) BRIDGE MEDIAN - No Median	CODE	0		(76) LENGTH OF STRUCTURE IMPROVEMENT			
(34) SKEW 0° (35) STRUCTURE FLARED		0		(94) BRIDGE IMPROVEMENT COST			
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9 FT		(95) ROADWAY IMPROVEMENT COST			
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		19 FT		(96) TOTAL PROJECT COST			
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9 FT		(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad		0 FT		(114)FUTURE ADT 260 (115) YEAR FUTURE ADT 2025			
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad		000 FT		INSPECTIONS			
(56) MIN LAT UNDERCLEAR LT REF -		000 FT		(90) INSPECTION DATE		06/23/2015	
NAVIGATION DATA				(92) CRITICAL FEATURE INSPECTION :		(93) CFI DATE	
(38) NAVIGATION CONTROL - No Navigational Control	CODE	0		A) FRACTURE CRIT DETAIL - NO		A)	
(111)PIER PROTECTION -	CODE			B) UNDERWATER INSP - YES 48Mo		B)	07/11/2013
(39) NAVIGATION VERTICAL CLEARANCE		0		C) OTHER SPECIAL INSP NO		C)	
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR	FT			SCOUR			
(40) NAVIGATION HORIZONTAL CLEARANCE		0 FT					

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 11/25/2015

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
JOHNSTON	4	3	500432	33	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1738	CATTAIL CREEK

LOCATED :	BRIDGE NAME :	CITY :
1.2 MI S JCT SR1700		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	130 2000	LT 227 RT 227

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1955	BMU			Unknown

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

NAVIGATION :			HT. CRN. TO BED :		WATER DEPTH :		
VC 0 FT	HC 0 FT		13 FT		6		FT

SUPERSTRUCTURE :	NEW TIMBER FLOOR/TIMBER JOIST
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SUBSTRUCTURE :	EBT1,BT1,BT3:STLCAP/STLPLS;EBT2&BT2:TIMCAP/TIMPILES
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SPANS :	1@6'9"; 2@8'8"; 1@8'1"
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BEAMS OR GIRDERS :	10 LINES 6X12 TIMBER JOIST @ VAR. CTS.
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FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
4X8TIM./3" AWS		20 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
19 FT	19.583 FT	LT .2915 FT RT .2915 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :		DATE
HS-1	HS-1	Joist	SV	TTST	10/15/1996

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

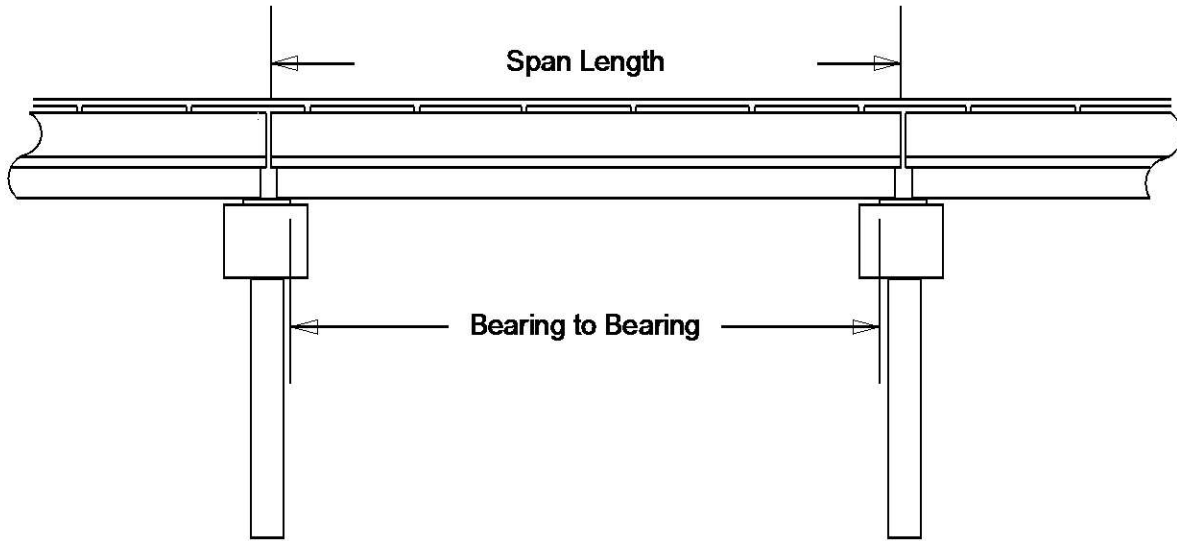
UNDER ROUTES AND CLEARANCES

REMARKS :

Structure Data Worksheet

Spans

County: JOHNSTON Structure No: 500432 Date: Inspected By: WCM



Span No	Span Length	Bearing to Bearing	Comments
1	6.750'	16.417 FT.	
1	17.667 FT.	16.417 FT.	
2	8.667'	16.417 FT.	
2	17.667 FT.	16.417 FT.	NBIS LENGTH : 32.834 FT.
3	8.667'		
4	9.0'		

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 500432 County: JOHNSTON Date: _____ By: WCM

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

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

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	0	TOP OF RAIL			
1	9.8	Water Surface/Water Edge (WSWE)			
1.1	13.8	END BENT 1	1.1	12.5	END BENT 1
2	14.1				
9	16	CRUTCH BENT	9	16	CRUTCH BENT
17.5	14.8	BENT 1	17.5	13.1	BENT 1
25	9.8	Water Surface/Water Edge (WSWE)			
26	10.2	CRUTCH BENT	26	10	CRUTCH BENT
36	6	END BENT 2	36	6.3	END BENT 2
36.1	0	TOP OF RAIL			

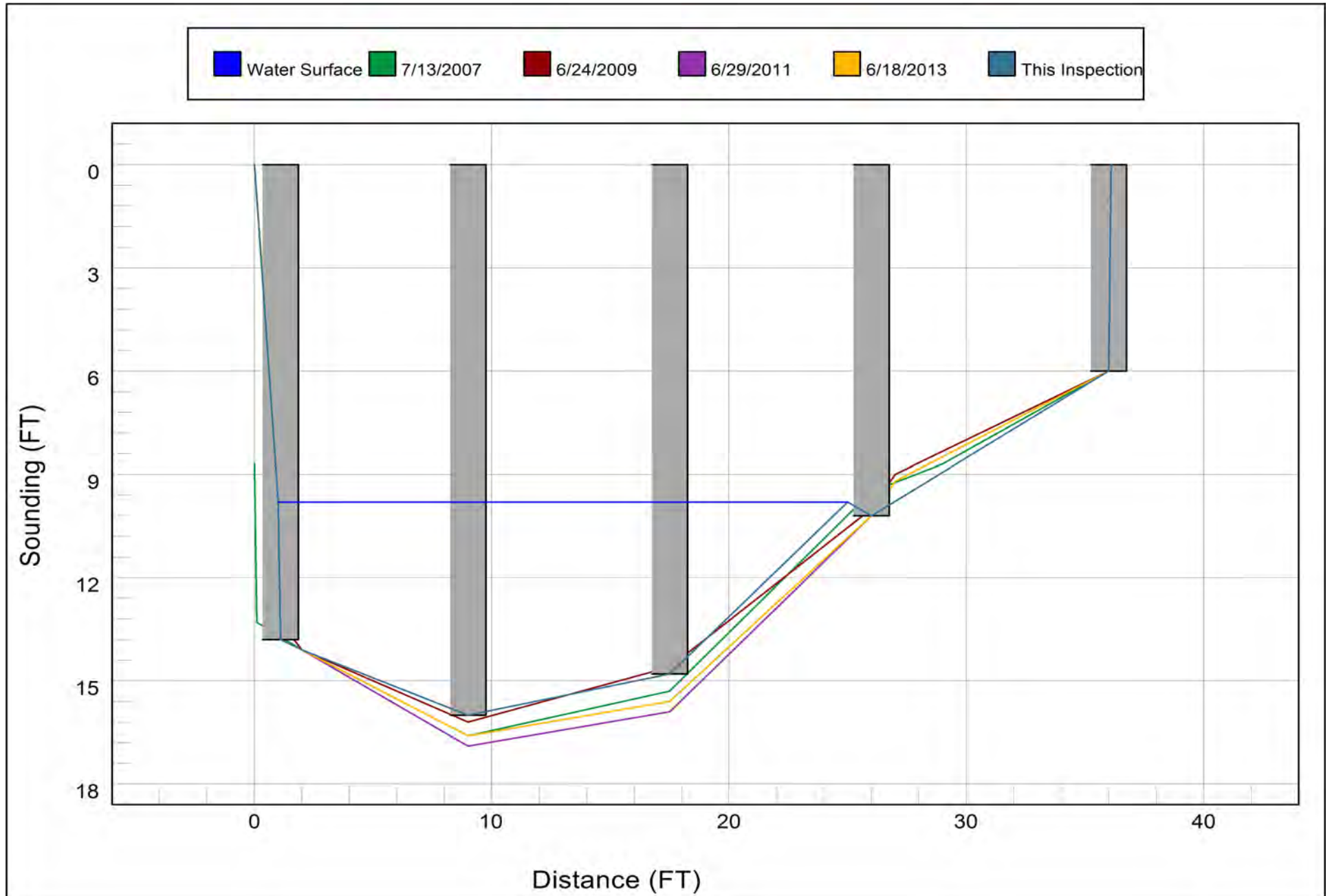
Bridge: 500432

County JOHNSTON

Date:

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch



Roadway	18ft Wide	2 Paved Lanes	Looking North
Left Shoulder	3ft Wide		3ft Unpaved
Right Shoulder	3ft Wide		3ft Unpaved
Left Guardrail			
Right Guardrail			

CHECKED BY: WTW 06|23|2015

Title
APPROACH ROADWAY WIDTH

Description
LOOKING NORTH

Bridge No: 500432

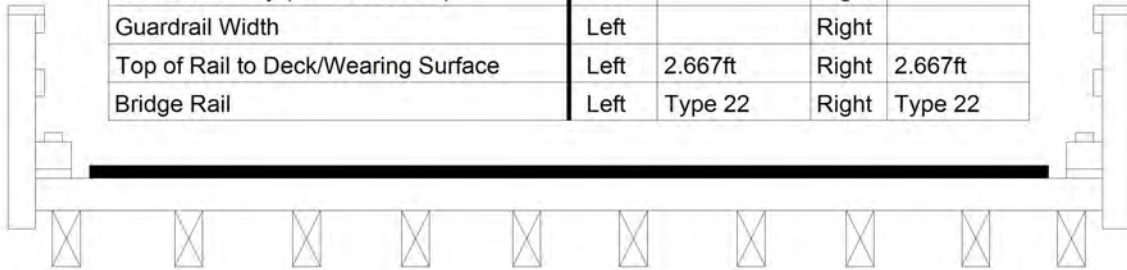
Drawn By: W.T. WILKINSON

Date: 7/10/2007

File Name: S0018013933

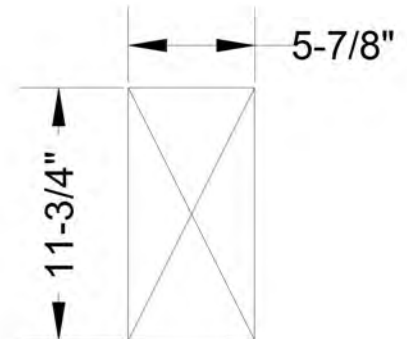
Bridge Inspection Field Sketch

Deck Width/Out to Out	20ft	Between Rails				19.583ft
Clear Roadway	19ft	Wearing Surface				0.25ft
Median Width		Median Height				
Curb Height		Left	0.5ft	Right	0.5ft	
Sidewalk Width		Left		Right		
Clear Roadway (Rail to Median)		Left		Right		
Guardrail Width		Left		Right		
Top of Rail to Deck/Wearing Surface		Left	2.667ft	Right	2.667ft	
Bridge Rail		Left	Type 22	Right	Type 22	



Measurements for Span #	1		
Deck Thickness	0.645	Left Overhang	0.583
Top of Rail to Bottom of Beam	4	Right Overhang	0.583

Beam Number	Beam Type	Spacing	Comments
1	Timber (Rectangular)	2.291ft	
2	Timber (Rectangular)	2.208ft	
3	Timber (Rectangular)	2.041ft	
4	Timber (Rectangular)	2.083ft	
5	Timber (Rectangular)	2.000ft	
6	Timber (Rectangular)	2.208ft	
7	Timber (Rectangular)	2.041ft	
8	Timber (Rectangular)	2.166ft	
9	Timber (Rectangular)	1.791ft	
10	Timber (Rectangular)	ft	



CHECKED BY: WTW 06|23|2015

Title
TYPICAL SECTION

Description
TYPICAL SECTION

Bridge No: 500432

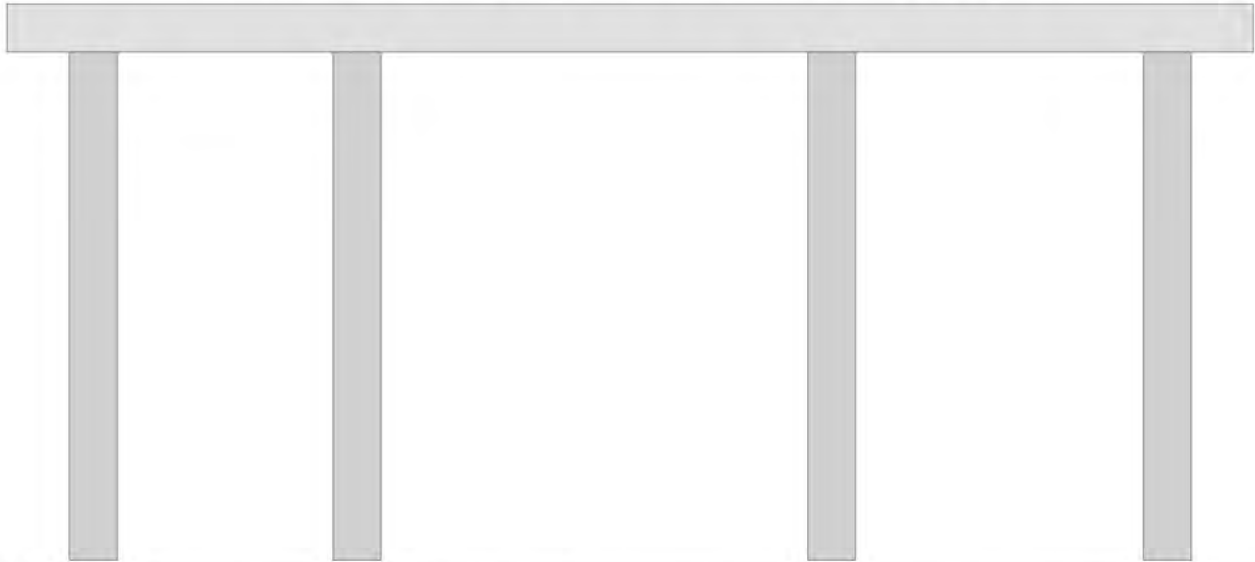
Drawn By: W.T. WILKINSON

Date: 7/10/2007

File Name: S0018013934

[illegible]

Bridge Inspection Field Sketch



Cap Information			Material Steel							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
20.000 ft.	.833 ft.	.833 ft.	1.500 ft.	1.500 ft.	.708 ft.	.708 ft.				
Subcap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information			Material							
Length	Width	Height	CHECKED BY: WTW 06 23 2015							
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Steel	4.583 ft.	.833 ft.			Vertical	Yes	No	No	No
2	Steel	8.250 ft.	.833 ft.			Vertical	Yes	No	No	No
3	Steel	4.166 ft.	.833 ft.			Vertical	Yes	No	No	No
4	Steel		0.833 ft.			Vertical	Yes	No	No	No
Bent/Abutment No			Similar Bents							

Title CRUTCH BENT 1 / SPAN 1		Description END BENT 1 CRUTCH BENT PILE DIAGRAM	
Bridge No: 500432	Drawn By: WTW	Date: 7/10/2007	File Name: S0018013936

[illegible]

[illegible]

Bridge Inspection Field Sketch

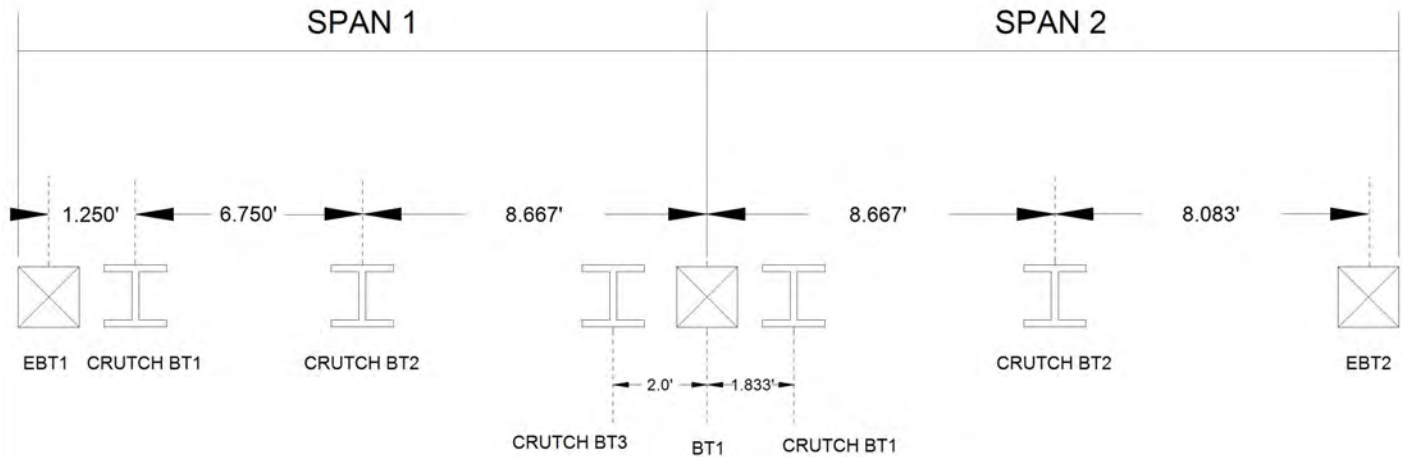


Cap Information			Material Steel							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
20.000 ft.	.750 ft.	.750 ft.	1.500 ft.	1.500 ft.	.708 ft.	.708 ft.				
Subcap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information			Material							
Length	Width	Height	CHECKED BY: WTW 06 23 2015							
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Steel	8.166 ft.	.833 ft.			Vertical	Yes	No	No	No
2	Steel	8.833 ft.	0.833 ft.			Vertical	Yes	No	No	No
3	Steel					Vertical	Yes	No	No	No
3			Similar Bents:							

Title CRUTCH BENT 2 / SPAN 2		Description CRUTCH BENT 2 / SPAN 2	
Bridge No: 500432	Drawn By: W.T. WILKINSON	Date: 7/9/2007	File Name: S0018013930

Bridge Inspection Field Sketch										
Cap Information						Material Timber				
Length 20.333 ft.	Width 1.000 ft.	Height 1.000 ft.	Left Overhang 1.667 ft.	Right Overhang 1.667 ft.	Left Beam to End of Cap. .708 ft.	Right Beam to End of Cap. .708 ft.				
Subcap Information						Material				
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information						Material				
Length	Width	Height								
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Timber	8.5 ft.	1.0 ft.			Vertical	Yes	No	No	No
2	Timber	8.5 ft.	1.0 ft.			Vertical	Yes	No	No	No
3	Timber		1.0 ft.			Vertical	Yes	No	No	Yes
Bent/Abutment No			Similar Bents							
Title END BENT 2						Description END BENT 2				
Bridge No: 500432			Drawn By: W.T. WILKINSON			Date: 7/10/2007		File Name: S0018013935		

Bridge Inspection Field Sketch



10" X 10" STEEL H-PILES AT EBT1, BT1, BT2A, BT2B, BT3

CHECKED BY: WTW 06/23/2015

Title
BENT SPACINGS

Description
BENT SPACINGS

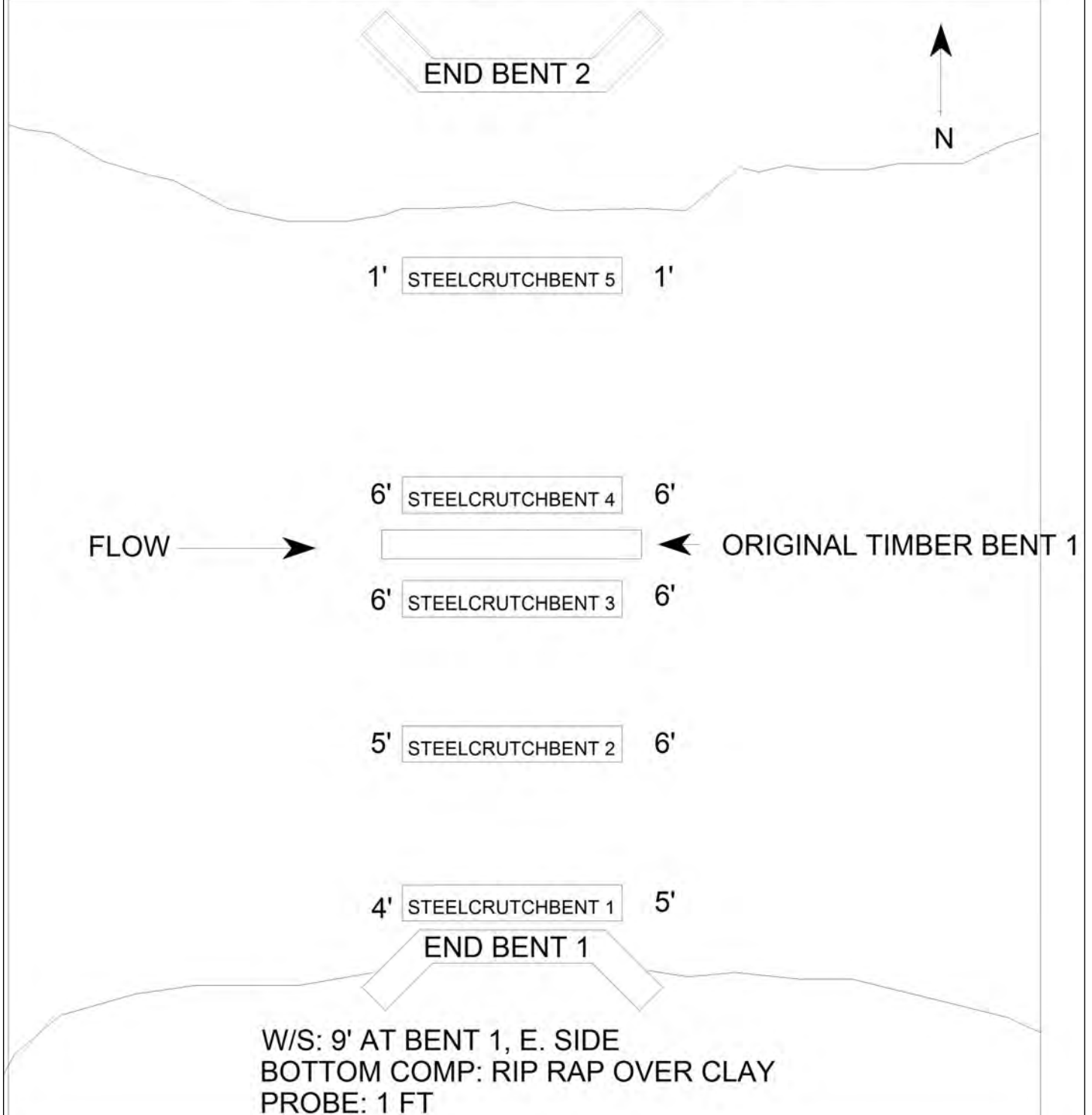
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Drawn By: W.T. WILKINSON

Date: 7/10/2007

File Name: S0018013932

Bridge Inspection Field Sketch



Title
WATERWAY

Description
PLAN VIEW

Bridge No: 500432

Drawn By: JVB

Date: 7/31/2009

File Name: S0162000239