



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: **PRIORITY MAINTENANCE ISSUED (BENT 1 CAP)
TEMPORARY REPAIR (ENCASED PILE)**

Structure Safety Report

Routine Element Inspection

COUNTY: HALIFAX STRUCTURE NUMBER: 410015 FREQUENCY: 24 MONTHS

FACILITY CARRIED: SR1001 MILE POST:

LOCATION: 0.8 MI N JCT SR1206

FEATURE INTERSECTED: BEAVERDAM SWAMP

LATITUDE: 36° 12' 52.34" LONGITUDE: 77° 40' 24.48"

SUPERSTRUCTURE: TIMBER DECK/TIMBER JOIST

SUBSTRUCTURE: E.BTS&INT.BTS:TIMBER CAPS/TIMBER PILES

SPANS: 1@17.5';1@17';1@17.5'
1@17.5';1@17';1@17.5'

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

PRESENT CONDITION: Fair INSPECTION DATE: 08/19/2015

POSTED SV: 24 POSTED TTST: 39

OTHER SIGNS PRESENT: 4 DELINEATORS



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
Z.S DUNLOW

SIGNATURE

Z.S. Dunlow

ASSISTED BY G.L. HARRINGTON

Span Element Report

Structure Number: 410015

Inspection Date: 08/19/2015

Span Number 1

Span Length 17.5 Feet

Number of Beams/Girders: 23

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	420	420	0	0	0	0	3324
111		Timber Open Girder/Beam	437	437	0	0	0	0	3304
218		Other Abutments	30	30	0	0	0	0	3350
228		Timber Pile	5	5	0	0	0	0	3344
235		Timber Pier Cap	24	24	0	0	0	0	3344
330		Metal Bridge Railing	36	36	0	0	0	0	3322
510		Wearing Surface	0	-60	60	0	0	60	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 Feet

Number of Beams/Girders: 22

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	408	408	0	0	0	0	3324
111		Timber Open Girder/Beam	414	414	0	0	0	0	3304
228		Timber Pile	5	5	0	0	0	0	3344
235		Timber Pier Cap	24	23	0	1	0	1	3344
330		Metal Bridge Railing	34	34	0	0	0	0	3322
510		Wearing Surface	0	-50	50	0	0	50	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 17.5 Feet

Number of Beams/Girders: 23

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	420	420	0	0	0	0	3324
111		Timber Open Girder/Beam	437	437	0	0	0	0	3304
218		Other Abutments	30	30	0	0	0	0	3350
228		Timber Pile	10	10	0	0	0	0	3344
235		Timber Pier Cap	48	48	0	0	0	0	3344
330		Metal Bridge Railing	36	36	0	0	0	0	3322
510		Wearing Surface	0	-40	40	0	0	40	2816

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

Superstructure Detailed Element Quantites

Structure Number: 410015

Inspection Date: 08/19/2015

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	420	420	0	0	0	0	3324	☐ Requested
☒ Bridge Rail	1	330	Metal Bridge Railing	18	18	0	0	0	0	3322	☐ Requested
☒ Bridge Rail	2	330	Metal Bridge Railing	18	18	0	0	0	0	3322	☐ Requested
☒ Wearing Surfaces		510	Wearing Surface	0	-60	60	0	0	60	2816	☐ Requested
☒ Beam	1	111	Timber Open Girder/Beam	19	19	0	0	0	0	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	19	0	0	0	0	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	19	0	0	0	0	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	19	0	0	0	0	3304	☐ Requested
☒ Beam	10	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	11	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	12	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	13	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	14	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	15	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	16	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	17	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	18	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	19	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	20	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	21	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	22	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	23	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested

Structure Number: 410015
Span Number 2

Inspection Date: 08/19/2015

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	408	408	0	0	0	0	3324	☐ Requested
☒ Bridge Rail	1	330	Metal Bridge Railing	17	17	0	0	0	0	3322	☐ Requested
☒ Bridge Rail	2	330	Metal Bridge Railing	17	17	0	0	0	0	3322	☐ Requested
☒ Wearing Surfaces		510	Wearing Surface	0	-50	50	0	0	50	2816	☐ Requested
☒ Beam	1	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	2	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	3	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	4	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	5	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	6	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	7	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	8	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	9	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	10	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	11	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	12	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	13	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	14	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	15	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	16	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	17	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	18	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	19	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	20	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	21	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☒ Beam	22	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested
☐ Beam	23	111	Timber Open Girder/Beam	18	18	0	0	0	0	3304	☐ Requested

Structure Number: 410015
Span Number 3

Inspection Date: 08/19/2015

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	420	420	0	0	0	0	3324	☐ Requested
☒ Bridge Rail	1	330	Metal Bridge Railing	18	18	0	0	0	0	3322	☐ Requested
☒ Bridge Rail	2	330	Metal Bridge Railing	18	18	0	0	0	0	3322	☐ Requested
☒ Wearing Surfaces		510	Wearing Surface	0	-40	40	0	0	40	2816	☐ Requested
☒ Beam	1	111	Timber Open Girder/Beam	19	19	0	0	0	0	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	19	0	0	0	0	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	19	0	0	0	0	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	19	0	0	0	0	3304	☐ Requested
☒ Beam	10	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	11	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	12	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	13	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	14	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	15	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	16	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	17	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	18	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	19	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	20	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	21	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	22	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested
☒ Beam	23	111	Timber Open Girder/Beam	19	19	0	0	0	0	3304	☐ Requested

Superstructure Element Defect Descriptions

Structure Number: 410015

Inspection Date: 08/19/2015

Span Number 1

Span	1	Wearing Surfaces			Component Name:		Asphalt Wearing Surface						
Element:	510	Name	Wearing Surface	Qty:	0	Lvl 2:	60	Lvl 3	0	Lvl 4	0	Maint. Qty	60
Defect Description:													

60 Square Feet of Crack (Wearing Surface): Width 0.012-0.05 in. or spacing of 1.0-3.0 ft.

Span Number 2

Span	2	Wearing Surfaces			Component Name:		Asphalt Wearing Surface						
Element:	510	Name	Wearing Surface	Qty:	0	Lvl 2:	50	Lvl 3	0	Lvl 4	0	Maint. Qty	50
Defect Description:													

50 Square Feet of Crack (Wearing Surface): Width 0.012-0.05 in. or spacing of 1.0-3.0 ft.

Span Number 3

Span	3	Wearing Surfaces			Component Name:		Asphalt Wearing Surface						
Element:	510	Name	Wearing Surface	Qty:	0	Lvl 2:	40	Lvl 3	0	Lvl 4	0	Maint. Qty	40
Defect Description:													

40 Square Feet of Crack (Wearing Surface): Width 0.012-0.05 in. or spacing of 1.0-3.0 ft.

Substructure Detailed Element Quantities

Structure Number: 410015

Inspection Date: 08/19/2015

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
☒ Abutments	1	218	Other Abutments	30	30	0	0	0	0	3350	☐ Requested
☒ Caps	1	235	Timber Pier Cap	24	24	0	0	0	0	3344	☐ Requested
☐ Piles and Columns	1	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☐ Piles and Columns	2	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☐ Piles and Columns	3	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☐ Piles and Columns	4	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☐ Piles and Columns	5	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested

Bent 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	235	Timber Pier Cap	24	23	0	1	0	1	3344	☒ Requested
☒ Piles and Columns	1	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	2	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	3	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	4	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	5	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested

Bent 2

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	235	Timber Pier Cap	24	24	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	1	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	2	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	3	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	4	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	5	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested

Structure Number: 410015

Inspection Date: 08/19/2015

End Bent 2

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Abutments	1	218	Other Abutments	30	30	0	0	0	0	3350	☐ Requested
☒ Caps	1	235	Timber Pier Cap	24	24	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	1	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	2	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	3	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	4	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	5	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested

Substructure Element Defect Descriptions

Structure Number: 410015

Inspection Date: 08/19/2015

End Bent 1

End Bent 1	Row 1	Abutments	1									
Element: 218	Name	Other Abutments	Qty:	30	Lvl 2:	0	Lvl 3	0	Lvl 4	0	Maint. Qty	0
Defect Description:												
TIMBER.												

Bent 1	Row 1	Caps	1									
Element: 235	Name	Timber Pier Cap	Qty:	24	Lvl 2:	0	Lvl 3	1	Lvl 4	0	Maint. Qty	1
Defect Description:												

1 Foot of Decay/Section Loss: AREA IS 11" DEEP, 12" TALL, AND 3" WIDE ON LEFT SIDE. Affects 10% or more of the member but does not warrant structural review.

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

End Bent 2	Row 1	Abutments	1									
Element: 218	Name	Other Abutments	Qty:	30	Lvl 2:	0	Lvl 3	0	Lvl 4	0	Maint. Qty	0
Defect Description:												
TIMBER.												

BRIDGE INSPECTION RECORD AND SUMMARY FOR SHORED STRUCTURES OR STRUCTURES WITH TEMPORARY REPAIRS MADE TO KEEP A BRIDGE OPEN

BRIDGE:

15

COUNTY:

Halifax

DATE:

8-23-11

THE FOLLOWING S. I. & A ITEMS ARE TO BE CODED TO REFLECT THE FACT
THAT THE STRUCTURE IS SHORED OR HAS HAD TEMPORARY REPAIRS MADE
TO KEEP THE BRIDGE OPEN :

S I & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION

CODEBY

T

DRP 8/25/11

S I & A ITEM 59 - SUPERSTRUCTURE

S I & A ITEM 60 - SUBSTRUCTURE

4

DRP 8/25/11

S I & A ITEM 64 OPERATING RATING

HS

1

BY:

DRP 8/25/11

S I & A ITEM 66 - INVENTORY RATING

HS

1

BY:

DRP 8/25/11

COMMENTS

Pile 3 @ Bent 2 encased in concrete
NOT TEMP - TMS 01/04/16

National Bridge and NC Inspection Items

Structure Number: 410015

Inspection Date: 08/19/2015

National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	6
Item 59: Superstructure	0 - 9 , N	6
Item 60: Substructure	0 - 9 , N	5
Item 61: Channel and Channel Protection	0 - 9 , N	5
Item 62: Culvert	0 - 9 , N	
Item 71: Waterway Adequacy	0 - 9 , N	7
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
Wingwall	G, F, P, or C	F	0	3350
Scour	G, F, P, or C	G		
Field Scour Evaluation		O		
Drift	G, F, P, or C	F	2	3366
Fender System	G, F, P, or C			
Response to Live Load	G, F, P, or C	G		
Estimated Remaining Life	0 - 100 Years	10		

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

Inspection Information

Item	Grade Scale	Grade
Regulatory Sign Noticed Issued	YES/NO	N
Priority Maintenance Request Submitted	YES/NO	Y
Inspection Time	Hours	3
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: 410015

Inspection Date: 08/19/2015

Item	Priority Maintenance Issued	Grade	Y	Maint Code	Qty.	0
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Details PRIORITY MAINTENANCE ISSUED FOR LEFT END OF BENT 1 CAP.

Item	Presently Posted	Grade	Y	Maint Code	Qty.	0
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Details PRESENTLY POSTED SV 24 TONS, TTST 39 TONS.

Item	Drift	Grade	F	Maint Code	3366	Qty.	2
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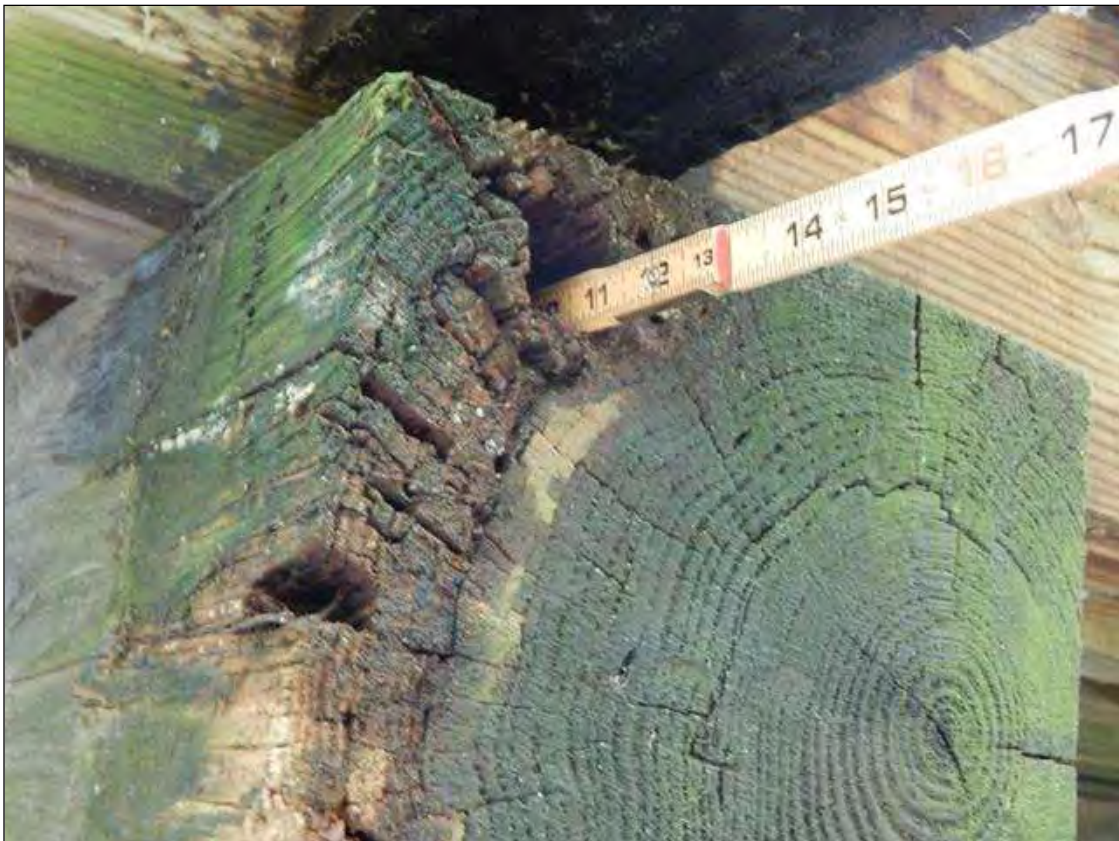
Details DEBRIS IN STREAM UNDER STRUCTURE.

Item	Field Scour Evaluation	Grade	O	Maint Code	Qty.	0
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Details STRUCTURE IS NOT SCOUR CRITICAL, BUT IS RATED "Z". NCDOT HYDRAULICS UNIT REQUIRES NOTIFICATION IF MUDLINE SCOURS TO A DEPTH 4' GREATER THAN THE BASELINE ESTABLISHED BY THE 2008-2009 STREAMBED PROFILE.



BEAVERDAM BLOCKING STREAM ON WEST SIDE, 50' FROM STRUCTURE.



Bent 1 Cap : 1 Feet of Decay/Section Loss: AREA IS 11" DEEP, 12" TALL, AND 3" WIDE. Affects 10% or more of the member but does not warrant structural review.



LOOKING NORTH



CLOSEUP OF WEIGHT LIMIT SIGN



APPROACH ROADWAY



WEARING SURFACE



WEARING SURFACE



LOOKING WEST UPSTREAM



LOOKING EAST DOWNSTREAM



WEST SIDE



EAST SIDE



LOOKING SOUTH WEIGHT LIMIT SV 24 TTST 39 TONS



END BENT 1



BENT 1



BENT 2 WITH PILE 3 ENCASED



BOTTOM OF DECK



BOTTOM OF DECK



END BENT 2

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

Run Date: 01/05/2016

IDENTIFICATION							
(1) STATE NAME -NORTH CAROLINA	BRIDGE	410015		SUFFICIENCY RATING =	54.98		
(8) STRUCTURE NUMBER(FEDERAL)		00000000830015		STATUS =	Not Deficient		
(5) INVENTORY ROUTE (ON/UNDER) - ON		31010010					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1					
(3) COUNTY CODE	83	(4) PLACE CODE	0				
(6) FEATURE INTERSECTED -	BEAVERDAM SWAMP						
(7) FACILITY CARRIED	SR1001						
(9) LOCATION	0.8 MI N JCT SR1206						
(11) MILEPOINT		0					
(16) LAT	36° 12' 52.34"	(17) LONG	77° 40' 24.48"				
(98) BORDER BRIDGE STATE CODE		PCT SHARE					
(99) BORDER BRIDGE STRUCTURE NO							
STRUCTURE TYPE AND MATERIAL							
(43) STRUCTURE TYPE MAIN:	Wood or Timber						
TYPE -	Stringer Multibeam or Girder	CODE	702				
(44) STRUCTURE TYPE APPR :							
TYPE -		CODE	000				
(45) NUMBER OF SPANS IN MAIN UNIT		3					
(46) NUMBER OF APPROACH SPANS							
(107) DECK STRUCTURE TYPE -	8	CODE					
(108) WEARING SURFACE / PROTECTIVE SYSTEM :							
(A) TYPE OF WEARING SURFACE -		CODE					
(B) TYPE OF MEMBRANE -		CODE					
(C) TYPE OF DECK PROTECTION -		CODE					
AGE AND SERVICE							
(27) YEAR BUILT		1952					
(106) YEAR RECONSTRUCTED							
(42) TYPE OF SERVICE : ON -	Highway						
UNDER -	Waterway	CODE	15				
(28) LANES: ON STRUCTURE	2	UNDER STRUCTURE	0				
(29) AVERAGE DAILY TRAFFIC		450					
(30) YEAR OF ADT	2013	(109) TRUCK ADT PCT	6%				
(19) BYPASS OR DETOUR LENGTH		9 MI					
GEOMETRIC DATA							
(48) LENGTH OF MAXIMUM SPAN		16 FT					
(49) STRUCTURE LENGTH		52 FT					
(50) CURB OR SIDEWALK: LEFT	.2085 FT	RIGHT	.2085 FT				
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		23.083 FT					
(52) DECK WIDTH OUT TO OUT		24.083 FT					
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		18 FT					
(33) BRIDGE MEDIAN -	No Median	CODE	0				
(34) SKEW	0°	(35) STRUCTURE FLARED	0				
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9 FT					
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		23.083 FT					
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9 FT					
(54) MIN VERT UNDERCLEAR REF	Not a Highway or Railroad	0 FT					
(55) MIN LAT UNDERCLEAR RT REF	Not a Highway or Railroad	000 FT					
(56) MIN LAT UNDERCLEAR LT REF -		000 FT					
NAVIGATION DATA							
(38) NAVIGATION CONTROL -	No Navigational Control	CODE	0				
(111) PIER PROTECTION -		CODE					
(39) NAVIGATION VERTICAL CLEARANCE		0					
(116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR		FT					
(40) NAVIGATION HORIZONTAL CLEARANCE		0 FT					
CLASSIFICATION							
(112) NBIS BRIDGE SYSTEM -				YES			
(104) HIGHWAY SYSTEM	Is not on NHS			0			
(26) FUNCTIONAL CLASS -	Minor Collector			08			
(100) STRAHNET HIGHWAY -	Not a STRAHNET Route			0			
(101) PARALLEL STRUCTURE -	No Parallel Structure			N			
(102) DIRECTION OF TRAFFIC -	2-way Traffic			2			
(103) TEMPORARY STRUCTURE -	Temporary Structure/Conditions			T			
(110) DESIGNATED NATIONAL NETWORK -	Not on the National Network			0			
(20) TOLL	On Free Road			3			
(31) MAINTAIN -	State Highway Agency			01			
(22) OWNER -	State Highway Agency			01			
(37) HISTORICAL SIGNIFICANCE -	Not Eligible			5			
CONDITION							
(58) DECK				6			
(59) SUPERSTRUCTURE				6			
(60) SUBSTRUCTURE				5			
(61) CHANNEL & CHANNEL PROTECTION				5			
(62) CULVERTS				N			
LOAD RATING AND POSTING							
(31) DESIGN LOAD	Unknown			0			
(63) OPERATING RATING METHOD -	Allowable Stress			2			
(64) OPERATING RATING -	HS-17			30			
(65) INVENTORY RATING METHOD -	Allowable Stress			2			
(66) INVENTORY RATING -	HS-12			21			
(70) BRIDGE POSTING -	Posting Required			0			
(41) STRUCTURE OPEN, POSTED ,OR CLOSED				P			
DESCRIPTION -	Posted for Load						
APPRAISAL							
(67) STRUCTURAL EVALUATION				5			
(68) DECK GEOMETRY				4			
(69) UNDERCLEARANCES, VERTI & HORIZ				N			
(71) WATERWAY ADEQUACY				7			
(72) APPROACH ROADWAY ALIGNMENT				8			
(36) TRAFFIC SAFETY FEATURES				0000			
(113) SCOUR CRITICAL BRIDGES				U			
PROPOSED IMPROVEMENTS							
(75) TYPE OF WORK -				CODE			
(76) LENGTH OF STRUCTURE IMPROVEMENT							
(94) BRIDGE IMPROVEMENT COST							
(95) ROADWAY IMPROVEMENT COST							
(96) TOTAL PROJECT COST							
(97) YEAR OF IMPROVEMENT COST ESTIMATE							
(114) FUTURE ADT	900	(115) YEAR FUTURE ADT	2025				
INSPECTIONS							
(90) INSPECTION DATE				08/19/2015			
(92) CRITICAL FEATURE INSPECTION :				(93) CFI DATE			
A) FRACTURE CRIT DETAIL -	NO			A)			
B) UNDERWATER INSP -	NO			B)			
C) OTHER SPECIAL INSP	NO			C)			
SCOUR							

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 01/05/2016

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
HALIFAX	4	1	410015	52	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1001	BEAVERDAM SWAMP

LOCATED :	BRIDGE NAME :	CITY :
0.8 MI N JCT SR1206		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
08	NFA	NFA	450 2013	LT 233 RT 233

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1952	BMU			Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :		
	BMU	5.3051	TAN	90	ON 2	UNDER	0

NAVIGATION :			HT. CRN. TO BED :		WATER DEPTH :		
VC 0 FT	HC 0 FT		9 FT		4		FT

SUPERSTRUCTURE : TIMBER DECK/TIMBER JOIST

SUBSTRUCTURE : E.BTS&INT.BTS:TIMBER CAPS/TIMBER PILES

SPANS : 1@17.5'; 1@17'; 1@17.5'

BEAMS OR GIRDERS : SPAN 1&3:23LINES;SPAN2:22LINES 6X12 TIMBER JOIST

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
4X8TIM/4.5" AWS		24.083 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
23.083 FT	23.5 FT	LT .2085 FT RT .2085 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :			DATE	
HS-12	HS-17	Joist Sp2	SV 19	TTST 27		01/05/2016	

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

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 410015

County HALIFAX

Date:

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
 3344	Repair / Replace Timber Substructure Components	LF	1	STRUCTURE HAS A POSTED WEIGHT LIMIT OF SV 24 TONS TTST 39 TONS. LEFT END OF BENT 1 CAP DECAYED, AREA IS 11" DEEP, 12" TALL, AND 3" WIDE.	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 410015

County HALIFAX

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

MMS Code	MMS Description	Quantity
3344	Repair / Replace Timber Substructure Components	1 LF
Location:		
Pier Cap	Bent/Span No. 1	CAP
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification Received	
Submitted Date:	Submitted By:	Assisted By:
08/19/2015	Z.S. DUNLOW	G.L. HARRINGTON
Details		
STRUCTURE HAS A POSTED WEIGHT LIMIT OF SV 24 TONS TTST 39 TONS. LEFT END OF BENT 1 CAP DECAYED, AREA IS 11" DEEP, 12" TALL, AND 3" WIDE.		

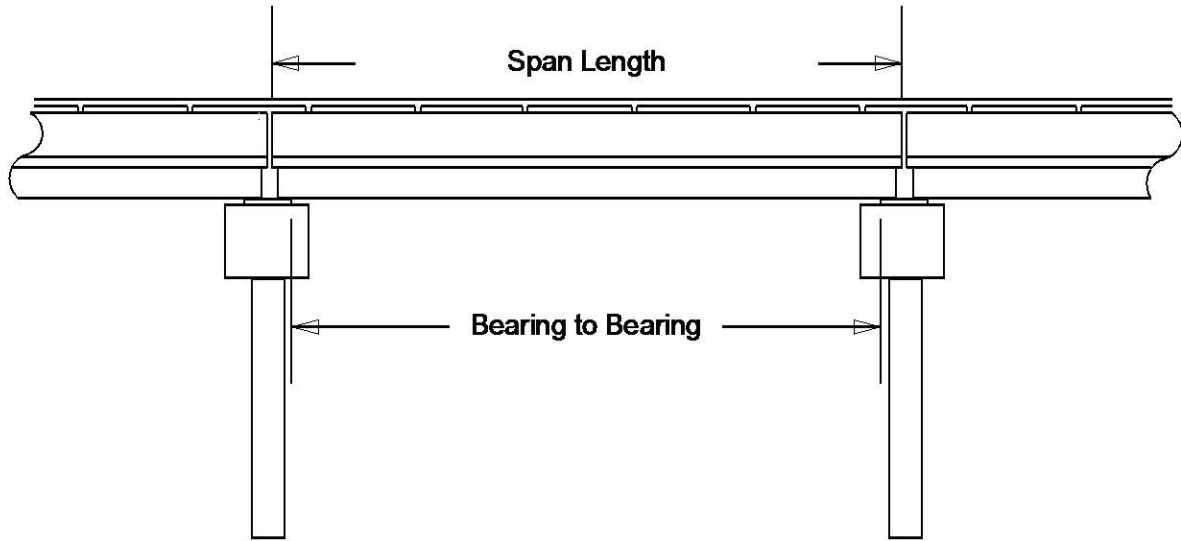


LEFT END OF BENT 1 CAP DECAYED, AREA IS 11" DEEP, 12" TALL, AND 3" WIDE.

Structure Data Worksheet

Spans

County: HALIFAX Structure No: 410015 Date: Inspected By: ZSD



Span No	Span Length	Bearing to Bearing	Comments
1	17.5FT.	16'	NBIS - 50'
2	17 FT.	16'	
3	17.5 FT.	16'	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 410015 County: HALIFAX Date: By: ZSD

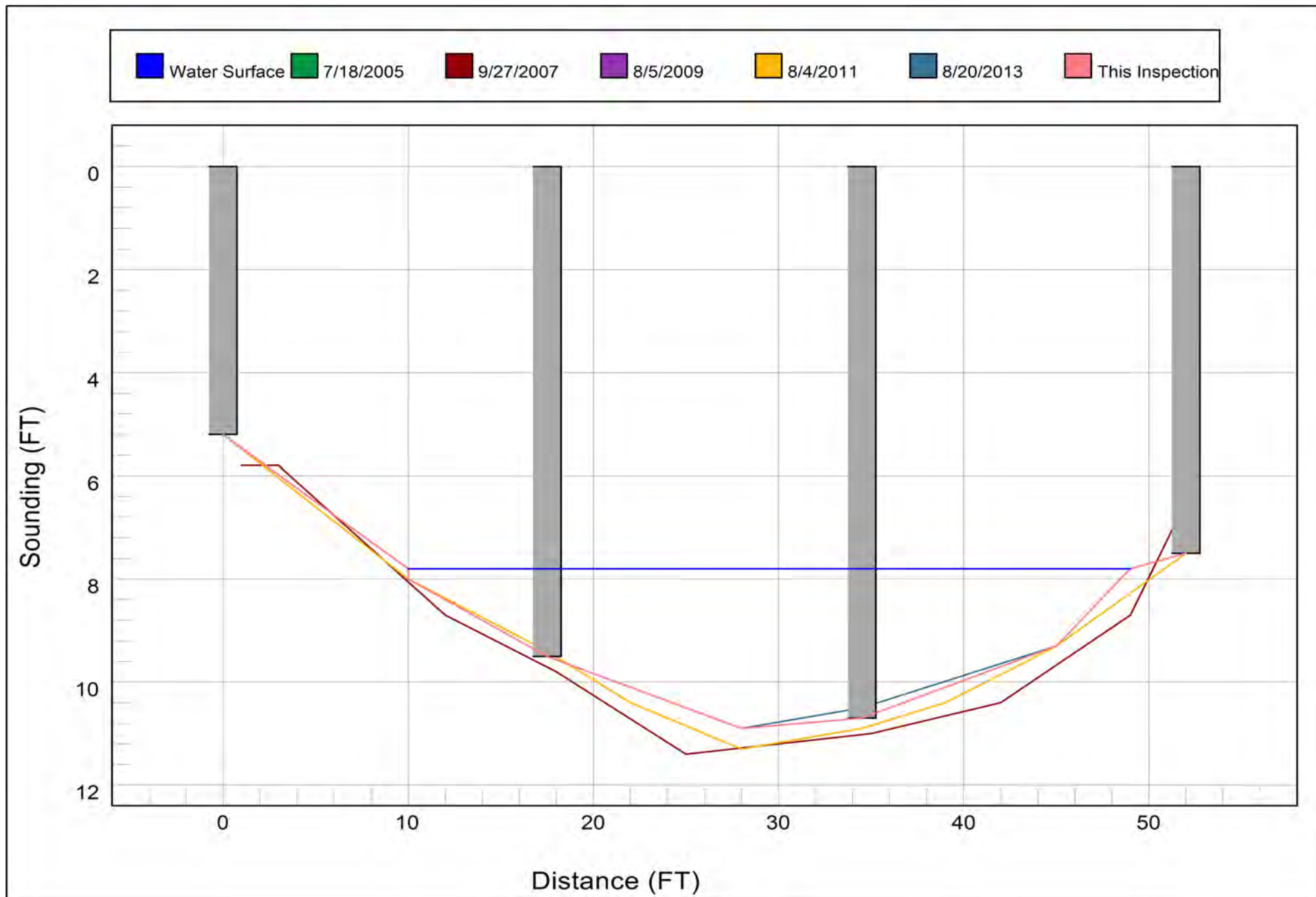
Record sounding from top of rail. Other location if needed:

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	5.2	END BENT 1	0	6.7	END BENT 1
10	7.8	WSWE			
10	8	GROUND			
17.5	9.5	BENT 1	17.5	9.5	BENT 1
28	10.9	GROUND			
34.5	10.7	BENT 2	34.5	10.7	BENT 2
45	9.3	5			
49	7.8	WSWE			
52	7.5	END BENT 2	52	11.5	END BENT 2

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch



Roadway	18ft Wide	2 Paved Lanes	Looking North
Left Shoulder	6ft Wide		6ft Unpaved
Right Shoulder	6ft Wide		6ft Unpaved
Left Guardrail			
Right Guardrail			

8/19/15. ZSD

Title

APPROACH ROADWAY

Description

APPROACH ROADWAY

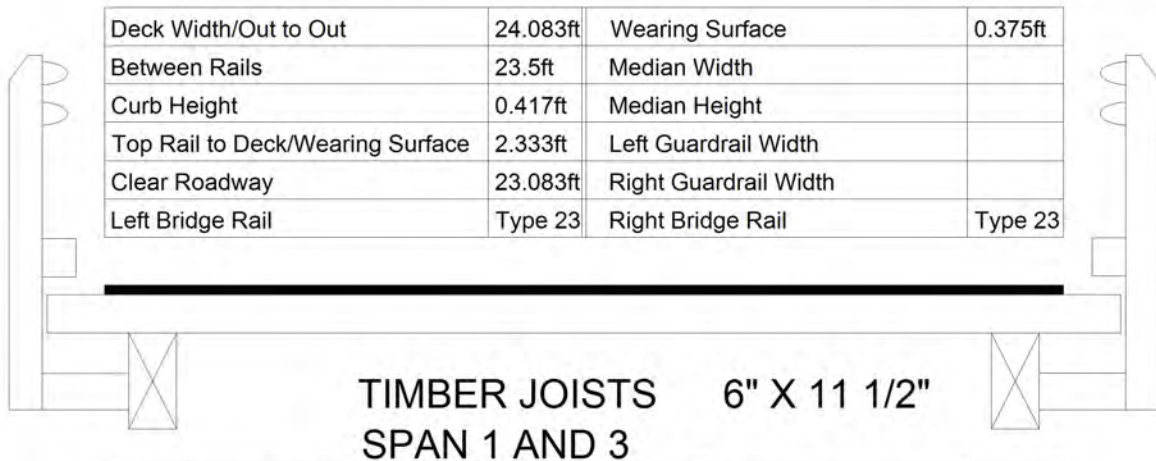
Bridge No: 410015

Drawn By: GLH

Date: 8/20/2013

File Name: S0026001078

Bridge Inspection Field Sketch



Measurements for Span #	1	Span #3 is Similar	
Deck Thickness	0.312	Left Overhang	0.833
Top of Rail to Bottom of Beam	4	Right Overhang	0.833

Beam No	Beam Type	Spacing	Comments
1	Timber (Rectangular)	1.042ft	
2	Timber (Rectangular)	1.042ft	
3	Timber (Rectangular)	1.042ft	
4	Timber (Rectangular)	1.042ft	
5	Timber (Rectangular)	1ft	
6	Timber (Rectangular)	1.042ft	
7	Timber (Rectangular)	1ft	
8	Timber (Rectangular)	1.042ft	
9	Timber (Rectangular)	1ft	
10	Timber (Rectangular)	1.042ft	
11	Timber (Rectangular)	1.042ft	
12	Timber (Rectangular)	1ft	
13	Timber (Rectangular)	1ft	
14	Timber (Rectangular)	1ft	
15	Timber (Rectangular)	1ft	
16	Timber (Rectangular)	1.042ft	
17	Timber (Rectangular)	1ft	
18	Timber (Rectangular)	1ft	
19	Timber (Rectangular)	1.042ft	
20	Timber (Rectangular)	1.042ft	
21	Timber (Rectangular)	1ft	
22	Timber (Rectangular)	.958ft	
23	Timber (Rectangular)		

8/19/15. ZSD

Title

TYPICAL SECTION

Description

TYPICAL SECTION

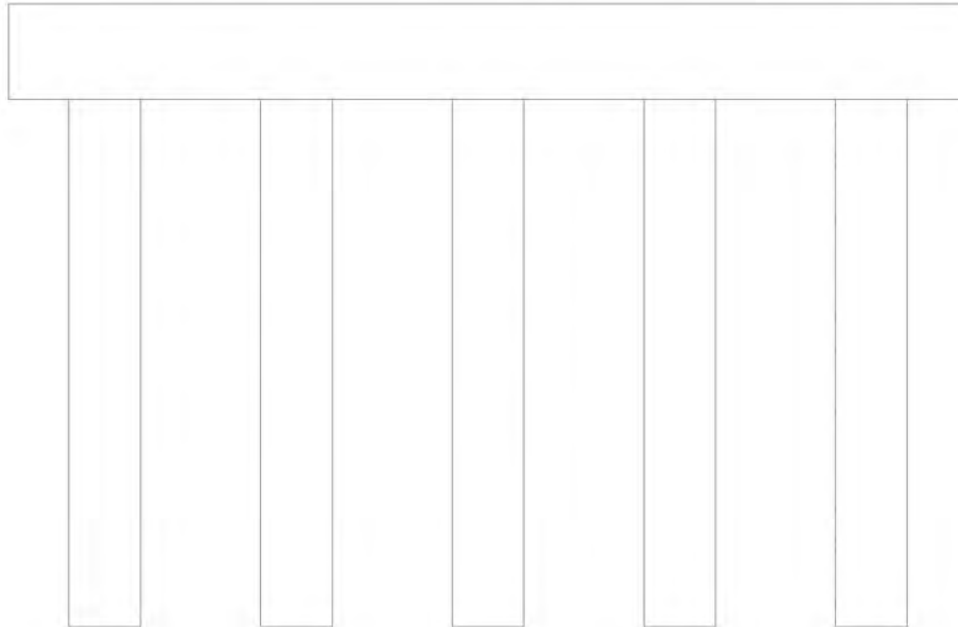
Bridge No: 410015

Drawn By: GLH

Date: 8/20/2013

File Name: S0026001079

Bridge Inspection Field Sketch



Abutment #	1	Abutment 1,2, Bent 1 similar	
Cap - Beam Type (Wood or Steel)			
Cap Size	24ft Long	1ft Wide	1ft High
Left Overhang	1ft	Lt Cap/Beam Overhang	.417ft
Right Overhang	1ft	Rt Cap/Beam Overhang	.583ft

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	6		12 IN. DIA.		VERT.
2	Wood or Timber	Pile Bent	5		12 IN. DIA.		VERT.
3	Wood or Timber	Pile Bent	5		12 IN. DIA.		VERT.
4	Wood or Timber	Pile Bent	6		12 IN. DIA.		VERT.
5	Wood or Timber	Pile Bent			12 IN. DIA.		VERT.

8/19/15. ZSD

Title

END BENTS

Description

END BENTS

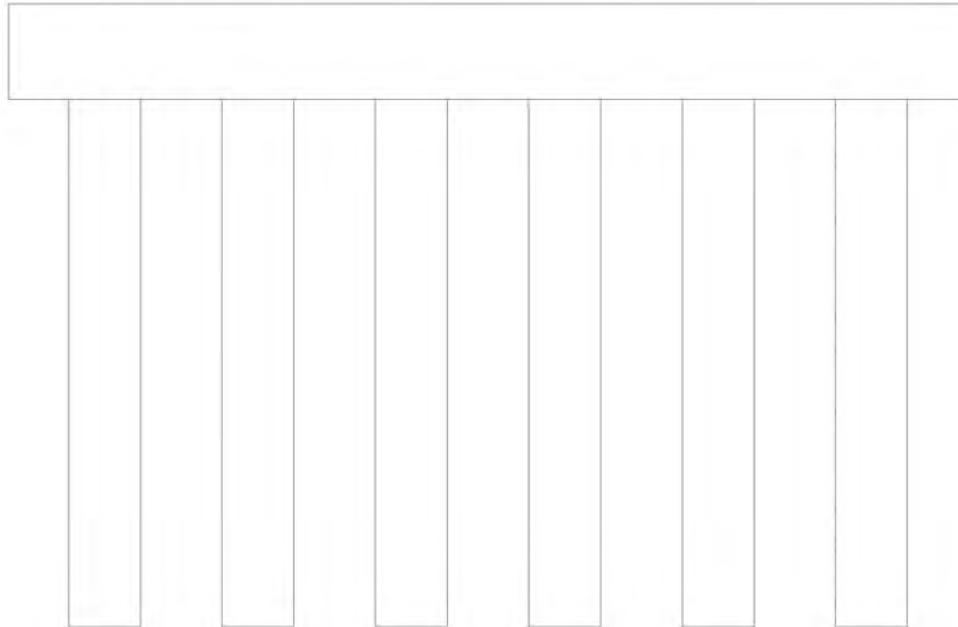
Bridge No: 410015

Drawn By: GLH

Date: 8/20/2013

File Name: S0026001080

Bridge Inspection Field Sketch



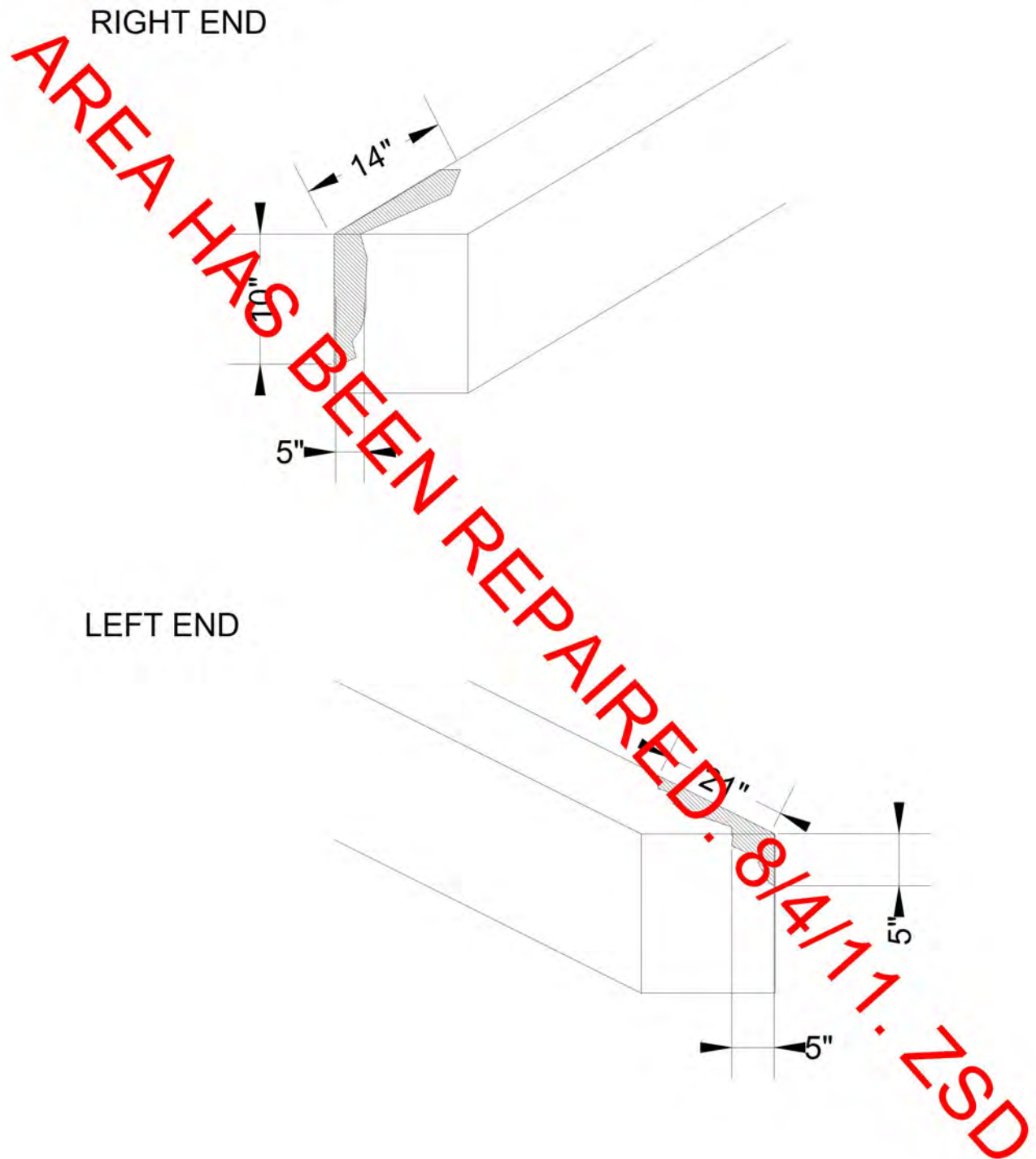
Bent #	2		
Cap - Beam Type (Wood or Steel)			
Cap Size	25ft Long	1ft Wide	1ft High
Left Overhang	1ft	Lt Cap/Beam Overhang	.417ft
Right Overhang	1ft	Rt Cap/Beam Overhang	.583ft

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	6		12 IN. DIA.		VERT.
2	Wood or Timber	Pile Bent	4.167		12 IN. DIA.		VERT.
3	Wood or Timber	Pile Bent	1.083		12 IN. DIA.		VERT.
4	Wood or Timber	Pile Bent	4.75		12 IN. DIA.		VERT.
5	Wood or Timber	Pile Bent	6		12 IN. DIA.		VERT.
6	Wood or Timber	Pile Bent			12 IN. DIA.		VERT.

8/19/15. ZSD

Title BENT 2		Description BENT 2	
Bridge No: 410015	Drawn By: GLH	Date: 8/20/2013	File Name: S0026001081

Bridge Inspection Field Sketch



Title

PRIORITY MAINTENANCE SKETCH 1

Description

DECAYED AREAS IN ENDS OF END B
ENT 1 CAP.

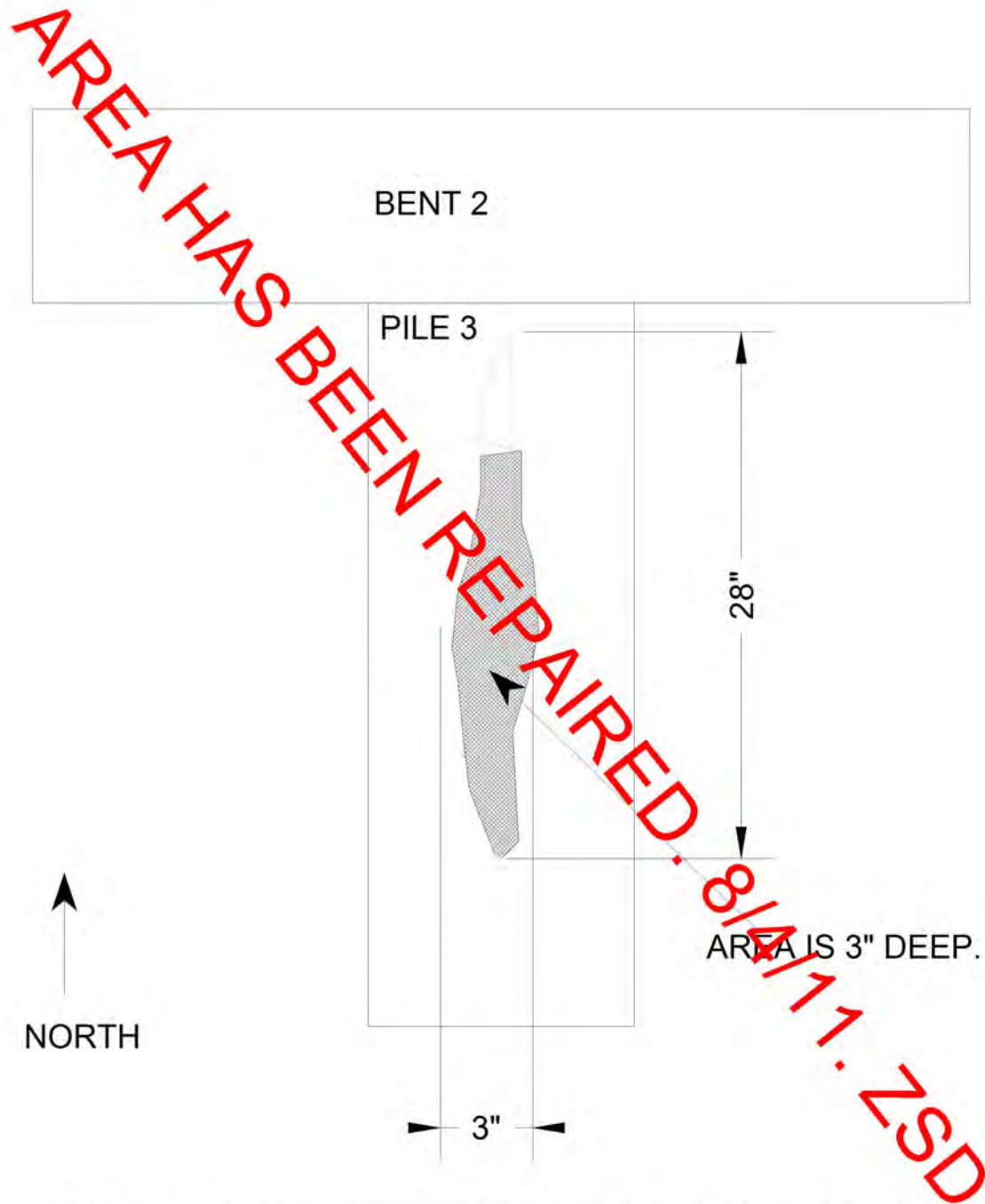
Bridge No: 410015

Drawn By: ZSD

Date: 8/5/2009

File Name: S0030026249

Bridge Inspection Field Sketch



OUTER SHELL IS STILL INTACT OVER UPER PART OF DECAYED AREA.

Title

PRIORITY MAINT. SKETCH 2

Description

DETAIL FOR PILE 3 AT BENT 2

Bridge No: 410015

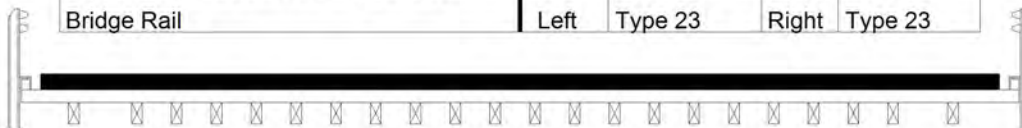
Drawn By: ZSD

Date: 8/5/2009

File Name: S0030026250

Bridge Inspection Field Sketch

Deck Width/Out to Out	24.083ft	Between Rails	23.5ft
Clear Roadway	23.083ft	Wearing Surface	0.375ft
Median Width		Median Height	
Curb Height		Left	0.417ft
Sidewalk Width		Right	0.417ft
Clear Roadway (Rail to Median)		Left	
Guardrail Width		Right	
Top of Rail to Deck/Wearing Surface		Left	2.333ft
Bridge Rail		Right	2.333ft
		Left	Type 23
		Right	Type 23



Measurements for Span #	2		
Deck Thickness	0.312	Left Overhang	0.833
Top of Rail to Bottom of Beam	4	Right Overhang	0.833

Beam Number	Beam Type	Spacing	Comments
1	Timber (Rectangular)	1.583ft	
2	Timber (Rectangular)	1ft	
3	Timber (Rectangular)	1ft	
4	Timber (Rectangular)	1ft	
5	Timber (Rectangular)	1ft	
6	Timber (Rectangular)	1ft	
7	Timber (Rectangular)	1ft	
8	Timber (Rectangular)	1ft	
9	Timber (Rectangular)	1ft	
10	Timber (Rectangular)	1ft	
11	Timber (Rectangular)	1ft	
12	Timber (Rectangular)	1ft	
13	Timber (Rectangular)	1ft	
14	Timber (Rectangular)	1ft	
15	Timber (Rectangular)	1ft	
16	Timber (Rectangular)	1ft	
17	Timber (Rectangular)	1ft	
18	Timber (Rectangular)	1ft	
19	Timber (Rectangular)	1ft	
20	Timber (Rectangular)	1ft	
21	Timber (Rectangular)	1.5ft	
22	Timber (Rectangular)	ft	

Title

SPAN 2 TYPICAL SECTION

Description

SPAN 2 TYPICAL SECTION

Bridge No: 410015

Drawn By: ZSD

Date: 8/19/2015

File Name: S0030026686