

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

TEMPORARY REPAIRS: SUPPLEMENT POSTS AT
BOTH ABUTMENTS

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY HAYWOOD BRIDGE NUMBER 430305 INSPECTION CYCLE 2 YRS
ROUTE SR1503 ACROSS LINER CREEK M.P. 0

LOCATION 3 MI.N.JCT.SR1508

SUPERSTRUCTURE TIMBER FLOOR ON TIMBER JOISTS

SUBSTRUCTURE E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ 5'-2 CENTERS

SPANS 1 @ 15'-10

LONGITUDE 82° 51' 52.70"

LATITUDE 35° 37' 24.06"

INSPECTION DATE 04/09/2013

PRESENT CONDITION GOOD

PRESENT POSTING Not Posted NOT POSTED

PROPOSED POSTING _____

OTHER SIGNS PRESENT DELINEATORS (X4)



WEST APPROACH

Fracture Critical	<u>No</u>
Temporary Shoring	<u>No</u>
Scour Critical	<u>No</u>
Scour POA	<u>No</u>

SIGN NOTICE
ISSUED FOR

NUMBERED
REQUIRED

<u>No</u>	WEIGHT LIMIT	_____
<u>No</u>	DELINEATORS	_____
<u>No</u>	NARROW BRIDGE	_____
<u>No</u>	ONE LANE BRIDGE	_____
<u>No</u>	LOW CLEARANCE	_____

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

Run Date: 05/17/2013

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	430305		SUFFICIENCY RATING =	7
(8) STRUCTURE NUMBER(FEDERAL)		00000000870305		STATUS =	Structurally Deficient
(5) INVENTORY ROUTE (ON/UNDER) - ON		31015030			
(2) STATE HIGHWAY DEPARTMENT DISTRICT		2			
(3) COUNTY CODE	87	(4) PLACE CODE	0		
(6) FEATURE INTERSECTED - LINER CREEK					
(7) FACILITY CARRIED SR1503					
(9) LOCATION 3 MI.N.JCT.SR1508					
(11)MILEPOINT		0			
(16)LAT 35° 37' 24.06"	(17)LONG	82° 51' 52.70"			
(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 Mutlibeam or Girder		CODE	702		
(44) STRUCTURE TYPE APPR :					
TYPE -		CODE	000		
(45) NUMBER OF SPANS IN MAIN UNIT			1		
(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			1957		
(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			540		
(30) YEAR OF ADT 2010	(109) TRUCK ADT PCT		6%		
(19) BYPASS OR DETOUR LENGTH			99 MI		
GEOMETRIC DATA					
(48) LENGTH OF MAXIMUM SPAN			15 FT		
(49) STRUCTURE LENGTH			16 FT		
(50)CURB OR SIDEWALK: LEFT .3 FT RIGHT .3 FT					
(51) BRIDGE ROADWAY WIDTH CURB TO CURB			19.25 FT		
(52) DECK WIDTH OUT TO OUT			20.25 FT		
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)			18 FT		
(33) BRIDGE MEDIAN - No Median		CODE	0		
(34) SKEW 5°	(35) STRUCTURE FLARED		0		
(10) INVENTORY ROUTE MIN VERT CLEAR			999.9 FT		
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			19.25 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 -					NO
(104)HIGHWAY SYSTEM Is not on NHS					0
(26) FUNCTIONAL CLASS - Local					09
(100)STRAHNET HIGHWAY - Not a STRAHNET Route					0
(101)PARALLEL STRUCTURE - No Parallel Structure					N
(102)DIRECTION OF TRAFFIC - 2-way Traffic					2
(103)TEMPORARY STRUCTURE - 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					7
(59) SUPERSTRUCTURE					7
(60) SUBSTRUCTURE					4
(61) CHANNEL & CHANNEL PROTECTION					7
(62) CULVERTS					N
LOAD RATING AND POSTING					
(31) DESIGN LOAD Unknown					0
(63) OPERATING RATING METHOD - Allowable Stress					2
(64) OPERATING RATING - HS-1					1
(65) INVENTORY RATING METHOD - Allowable Stress					2
(66) INVENTORY RATING - HS-1					1
(70) BRIDGE POSTING - No Posting Required					5
(41) STRUCTURE OPEN, POSTED ,OR CLOSED DESCRIPTION - Open Temporary Shoring					D
APPRAISAL					
(67) STRUCTURAL EVALUATION					3
(68) DECK GEOMETRY					2
(69) UNDERCLEARANCES,VERTI & HORIZ					N
(71) WATERWAY ADEQUACY					7
(72) APPROACH ROADWAY ALIGNMENT					6
(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 1080	(115) YEAR FUTURE ADT				2025
INSPECTIONS					
(90) INSPECTION DATE					04/09/2013
(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: 05/17/2013

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
HAYWOOD	14	2	430305	16	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1503	LINER CREEK

LOCATED :	BRIDGE NAME :	CITY :
3 MI.N.JCT.SR1508		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	540 2010	LT 227 RT 227

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1957	BMU	1301		Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :		
	BMU	5.9451	TAN	95	ON 2	UNDER	0

NAVIGATION :			HT. CRN. TO BED :		WATER DEPTH :		
VC 0 FT	HC 0 FT		6 FT		1		FT

SUPERSTRUCTURE :	TIMBER FLOOR ON TIMBER JOISTS
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SUBSTRUCTURE :	E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ 5'-2 CENTERS
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SPANS :	1 @ 15'-10
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BEAMS OR GIRDERS :	21 LINES 6X12 TIMBER JOIST @ 11" CENTERS
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FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
4X8 TIM/1.5 AWS		20.25 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
19.25 FT	19.917 FT	LT .3 FT RT .3 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :		DATE
HS-1	HS-1	Int.jsts	SV	TTST	02/11/2008

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

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection
 BRIDGE NO. 430305 COUNTY HAYWOOD ROUTE SR1503 OVER LINER CREEK
 STRUCTURE TYPE TIMBER FLOOR ON TIMBER JOISTS
 ROUTE ORIENTATION W - E SPANS 1 @ 15'-10

EVALUATION CODES: CRITICAL (C, 0 - 3); POOR (P, 4); FAIR (F, 5, 6); GOOD (G, 7 - 9)

INSPECTION ITEM				ITEM 61				
DECK ITEMS			GRADES					
1. WEARING SURFACE			G	45. CHANNEL & CHANNEL PROT.	a. WATERWAY	G		
					b. ALIGNMENT	G		
					c. SCOUR	G		
					d. SLOPE PROT., RIP-RAP, DIKES, ETC.			
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58	a. CONCRETE			50. APPROACH ROADWAY CONDITION			G	
	b. TIMBER	1	G	51. APPROACH SLABS				
	c. STEEL PLANK			52. PAINT SYSTEM			CODE	
	d. OPEN GRID			53. UTILITIES				
3. RAILING	a. CONCRETE			54. RESPONSE TO LIVE LOAD			G	
	b. TIMBER		G	55. ESTIMATED REMAINING LIFE			30	
	c. ALUMINUM							
	d. STEEL							
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			G	60. REGULATORY SIGN NOTICE ISSUED			NO	
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)				61. PROMPT-ACTION NOTICE ISSUED			NO	
6. DECK EXP JTS. OR DEVICES. NO. OF EACH	a. STEEL PL OR FINGER			62. PRESENTLY POSTED			NO	
	b. MISC PREFAB			63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)			3	
	c. COMPRESSION SEAL			64. TOTAL SNOOPER INSP. TIME (HRS)				
	d. STANDARD JOINTS			65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)				
	e. OPEN JOINTS							
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)			G	70. SI&A GENERAL CONDITION RATINGS				
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59				a. DECK	ITEM 58	7		
10. LONGITUDINAL BEAMS OR GIRDERS				b. SUPERSTRUCTURE	ITEM 59	7		
11. LONGITUDINAL JOIST OR STRINGERS			G	c. SUBSTRUCTURE	ITEM 60	7		
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S				d. CHANNEL & CHANNEL PROT.	ITEM 61	7		
13. END DIAP'S, CURTAIN WALLS, & CONN'S				71. SI&A FIELD APPRAISAL RATINGS				
14. FLOOR BEAMS AND CONNECTIONS				a. WATERWAY ADAQUACY		7		
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)				b. APPR. RDWY. ALIGNMENT		6		
16. DRAINAGE SYSTEM (ON STRUCTURE)			G	72. FIELD SCOUR EVALUATION			L	
17. MOVABLE SPAN MACHINERY								
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)				USE OF INSP. ACCESSIBILITY EQUIPMENT				
35. TIM SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS		G	SNOOPER (CODE S, 4, OR N)			HRS	NO
	b. PILES, POST, SILLS, & BRACING		G	LADDER				NO
	c. BULKHEADS, WING'S, & TIE BACKS		G	BUCKET TRUCK				NO
36. CONC SUB STR.	a. ABUT. & INT. BENT CAPS			BOAT				NO
	b. ABUT. & BENT COL'S BREASTWALLS			OTHER				NO
	c. ABUT. & INT. BENT PILES							
	d. BACKWALLS, WING'S, RETAIN. WALLS							
	e. ABUT. & BENT FOOTINGS & SILLS							
37. STEEL SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS			SPECIAL INSPECTION REQUESTED FOR				
	b. PILES, BRACING, AND BULKHEADS							
38. FOUNDATION PILES TYPE MATERIAL				NOTE				
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)								
40. FENDER SYSTEMS				80. INSPECTED BY:	4			
41. DRIFT			G	81. REVIEWED BY:				

Bridge I&A Form 1(82)H State of North Carolina Dept. of Transportation Division of Highways		FIELD INSPECTION REPORT <u>Bridge Inspeccion & Analysis</u>	
Team Leader DELVIN ADAMS			
Assisted By JCH			
Item No.	Grade		
35b	G	POSTS 1 THROUGH 4 HAS BEEN SUPPLEMENTED AT BOTH ABUTMENTS. SEE SKETCHES.	
35c	G	TOP BULKHEAD BOARD OF ABUTMENT 2 IS EXPOSED FOR 1' IN THE CENTERLINE OF ROADWAY.	
50	G	BOTH APPROACHES HAVE BEEN RECENTLY PATCHED AND ARE IN GOOD CONDITION.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 430305

County HAYWOOD

Date: 04/09/2013

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
0	No Maintenance Required	NA	0	NONE REQUIRED	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



PATCHING TO THE EAST APPROACH



PATCHING IN THE WEST APPROACH.



TOP BULKHEAD BOARD AT ABUTMENT 2 IS EXPOSED FOR 1' IN THE CENTERLINE OF ROADWAY.

Structure Data Worksheet

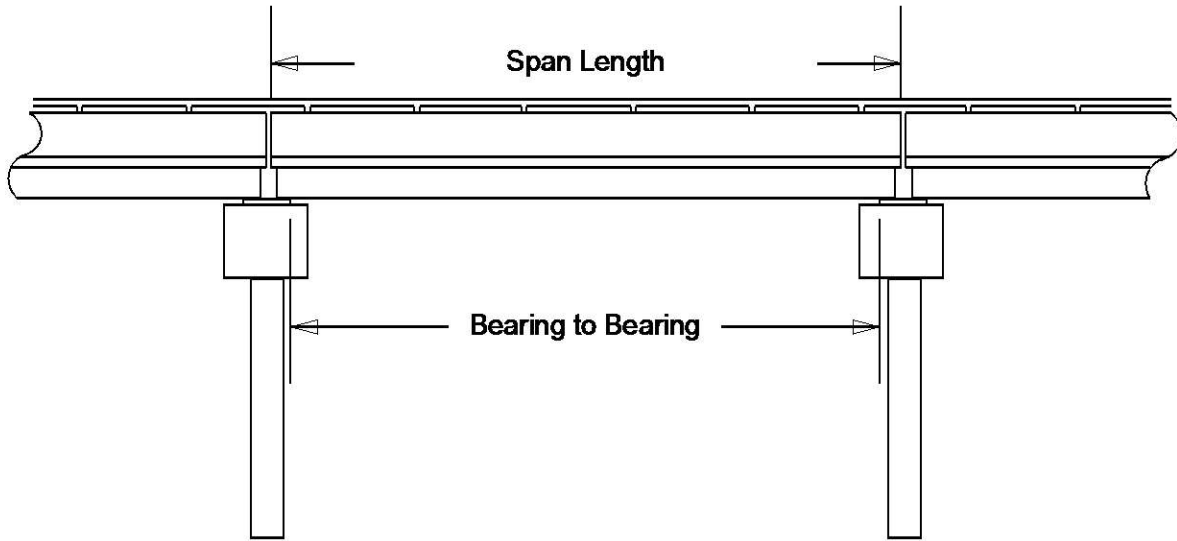
Spans

County: **HAYWOOD**

Structure No: **430305**

Date: **04/09/2013**

Inspected By: **DJA**



Span No	Span Length	Bearing to Bearing	Comments
1	16'- 1"	14'- 7"	NBIS < 20'

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 430305 County: HAYWOOD Date: 04/09/2013 By: DJA

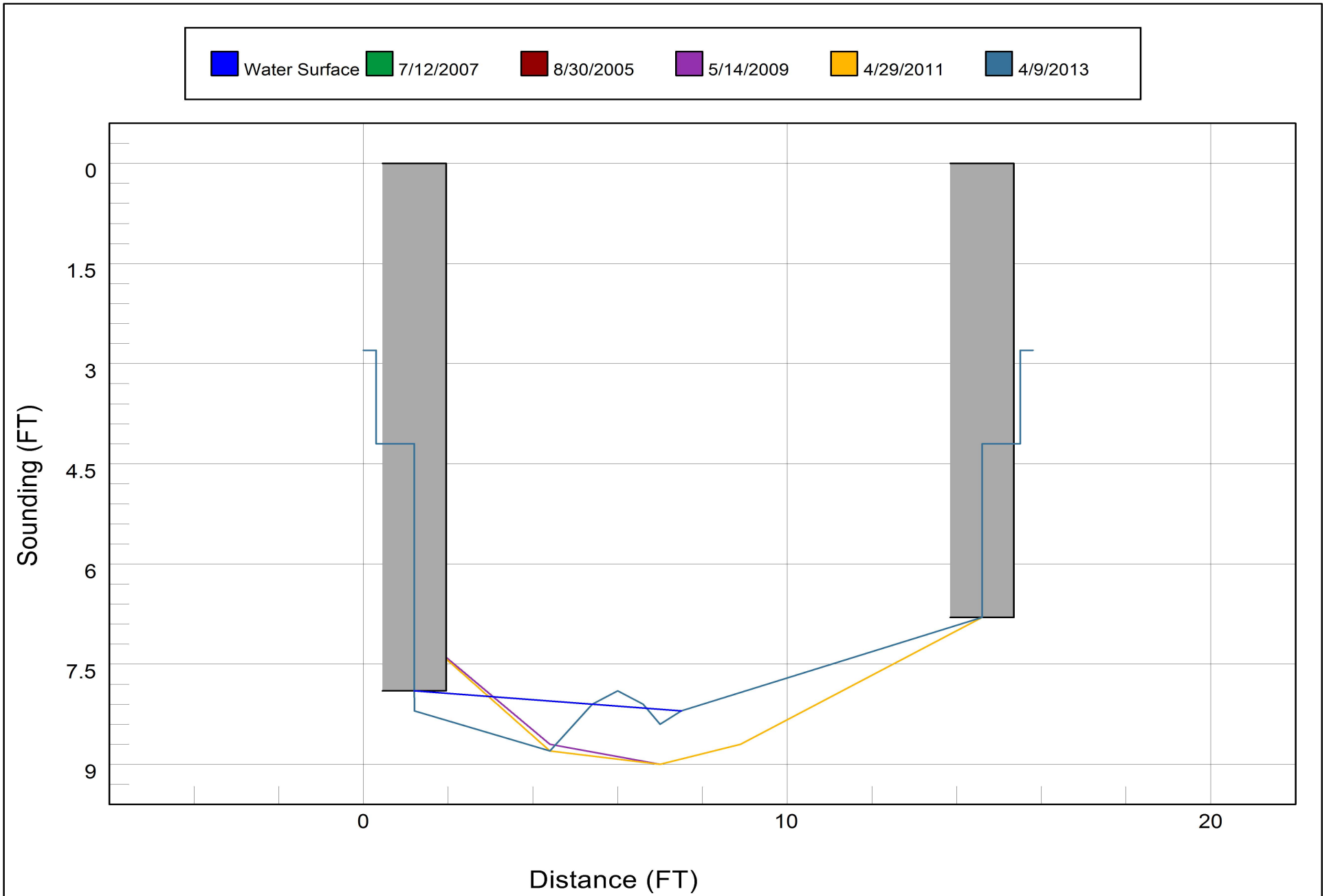
Record sounding from top of rail. Other location if needed: _____

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	2.8				
0.3	2.8				
0.3	4.2				
1.2	4.2		1.2	8.1	SF ABUT 1
1.2	7.9	SF ABUTMENT 1/WS WE			
1.201	8.2	STREAMBED			
4.4	8.8	STREAMBED			
5.4	8.1	EDGE OF SANDBAR			
6	7.9	SANDBAR			
6.6	8.1	EDGE OF SANDBAR			
7	8.4	STREAMBED			
7.5	8.2	WS WE			
14.6	6.8	SF ABUTMENT 2	14.6	7	SF ABUT 2
14.601	4.2				
15.5	4.2				
15.501	2.8				
15.8	2.8				

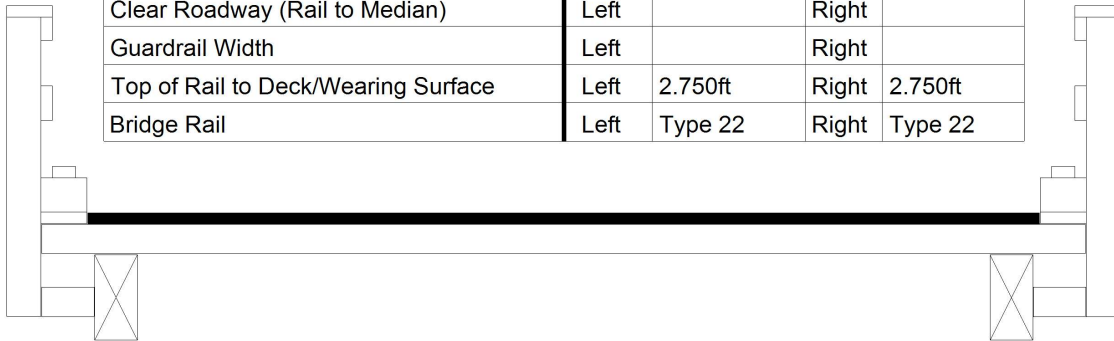
STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



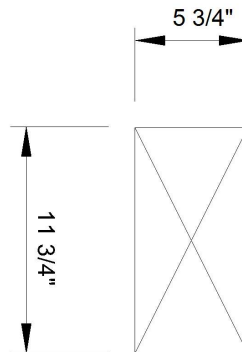
Bridge Inspection Field Sketch

Deck Width/Out to Out	20.250ft	Between Rails			19.917ft
Clear Roadway	19.250ft	Wearing Surface			0.125ft
Median Width		Median Height			
Curb Height		Left	0.667ft	Right	0.667ft
Sidewalk Width		Left		Right	
Clear Roadway (Rail to Median)		Left		Right	
Guardrail Width		Left		Right	
Top of Rail to Deck/Wearing Surface		Left	2.750ft	Right	2.750ft
Bridge Rail		Left	Type 22	Right	Type 22



Measurements for Span #	1		
Deck Thickness	0.312	Left Overhang	1.042
Top of Rail to Bottom of Beam	4.167	Right Overhang	1.042

Beam Number	Beam Type	Spacing
1 thru 21	Timber (Rectangular)	0.908ft



JOIST DIMENSIONS

VERIFIED 4-9-2013 BY DELVIN ADAMS

Title

Typical Section

Description

Data Worksheet

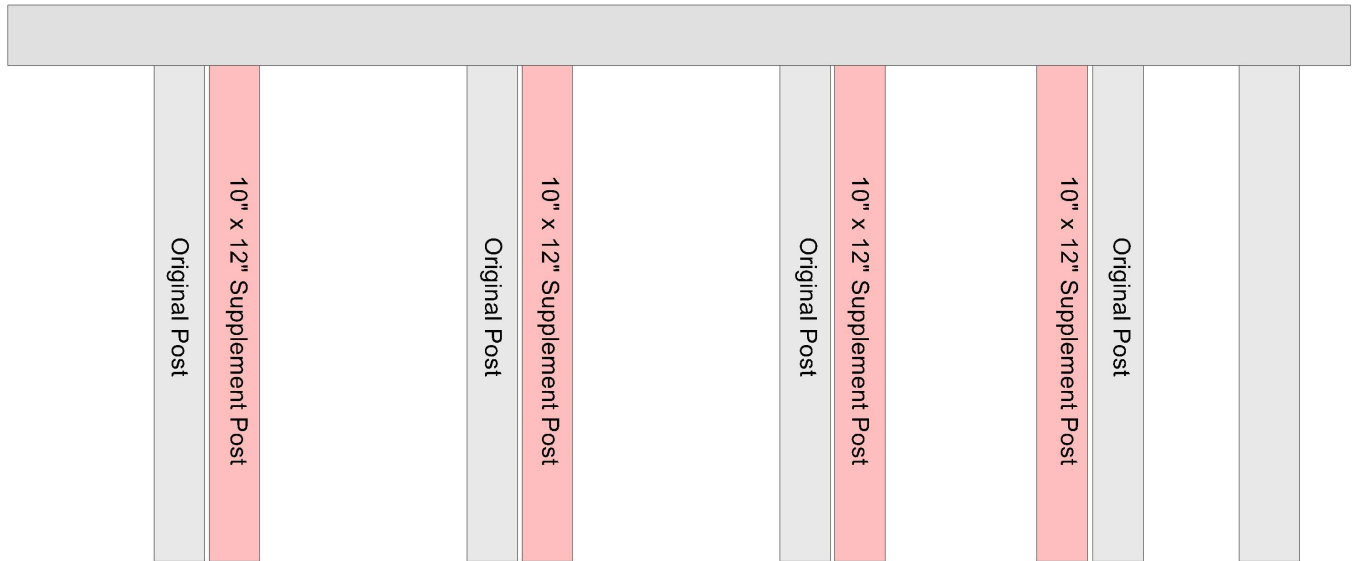
Bridge No: 430305

Drawn By: Roy W. Shook

Date: 07/17/2007

File Name: S0106000291

Bridge Inspection Field Sketch



ABUTMENT 1 POST HEIGHT 29 1/2", ABUT. 2 SILL NOT VISIBLE.

Cap Information			Material Timber			
Length 22.167 ft. (22.417 ft. Abutment 2)	Width .833 ft.	Height 1.000 ft.	Left Overhang 2.833 ft.	Right Overhang 1.417 ft.	Left Beam to End of Cap. 2.051 ft. (2.255 ft. Abut. 2)	Right Beam to End of Cap. 1.880 ft. (1.926 ft. Abut. 2)

Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Timber	5.167 ft.	0.833 ft.	0.833 ft.	2.375 ft.	Vertical	No	No	No	No
2	Timber	5.167 ft.	0.833 ft.	0.833 ft.	2.375 ft.	Vertical	No	No	No	No
3	Timber	5.167 ft.	0.833 ft.	0.833 ft.	2.375 ft.	Vertical	No	No	No	No
4	Timber	5.167 ft.	0.833 ft.	0.833 ft.	2.375 ft.	Vertical	No	No	No	No
5	Timber	2.500 ft.	1.0 ft.	0.833 ft.		Vertical	No	No	No	No

Bent/Abutment #: 1	Similar Bents: 2
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VERIFIED 4-9-2013 BY DELVIN ADAMS

Title			Description		
Substructure			Data Worksheet		
Bridge No:	430305	Drawn By:	Roy W. Shook	Date:	07/17/2007
			File Name:	S0106000292	

Bridge Inspection Field Sketch



Roadway	18ft Wide	2 Paved Lanes	Looking East
Left Shoulder	1ft Wide		1ft Unpaved
Right Shoulder	1ft Wide		1ft Unpaved
Left Guardrail			
Right Guardrail			

VERIFIED 4-9-2013 BY DELVIN ADAMS

Title

Approach Roadway

Description

Data Worksheet

Bridge No: 430305

Drawn By: Roy W. Shook

Date: 07/17/2007

File Name: S0106000290



EAST APPROACH



LOOKING UPSTREAM



LOOKING DOWNSTREAM



WEST APPROACH



UPSTREAM PROFILE



ABUTMENT 1



ABUTMENT 2



DOWNSTREAM PROFILE