



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

TEMP. REPAIR - SUPPLEMENTED ABUTMENT POST.

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY JACKSON BRIDGE NUMBER 490103 INSPECTION CYCLE 2 YRS
ROUTE SR1740 ACROSS MOSES CREEK M.P. 0

LOCATION 1.4 MI.N.JCT.SR1739

SUPERSTRUCTURE TIMBER FLOOR ON TIMBER JOISTS

SUBSTRUCTURE E.BTS: TIMBER CAPS/TIM.POST&SILLS/E.BT.1ENC.CONC.@ VAR.CTS.

SPANS 1 @ 20'- 6

LONGITUDE 83° 6' 39.3"

LATITUDE 35° 19' 38.7"

PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 10/10/2011

OPERATING RATING

PRESENT POSTING SV 23 TTST 37 **SIGNS MISSING**

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT DELINEATORS [4] AND ONE LANE BRIDGE [2]



LOOKING NORTH

SIGN NOTICE ISSUED FOR		NUMBERED REQUIRED
<u>Yes</u>	WEIGHT LIMIT	<u>2</u>
<u>No</u>	DELINEATORS	<u></u>
<u>No</u>	NARROW BRIDGE	<u></u>
<u>No</u>	ONE LANE BRIDGE	<u></u>
<u>No</u>	LOW CLEARANCE	<u></u>

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

Update Date: 10/18/2011

IDENTIFICATION				CLASSIFICATION			
(1) STATE NAME -NORTH CAROLINA	BRIDGE	490103		SUFFICIENCY RATING =		9.4	
(8) STRUCTURE NUMBER(FEDERAL)		000000000990103		STATUS =	Structurally Deficient		
(5) INVENTORY ROUTE (ON/UNDER) - ON		31017400					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		2					
(3) COUNTY CODE 99	(4) PLACE CODE	00000		(112)NBIS BRIDGE SYSTEM -		NO	
(6) FEATURE INTERSECTED - MOSES CREEK				(104)HIGHWAY SYSTEM	Is not on NHS	0	
(7) FACILITY CARRIED SR1740				(26) FUNCTIONAL CLASS -	Local	09	
(9) LOCATION 1.4 MI.N.JCT.SR1739				(100)STRAHNET HIGHWAY -	Not a STRAHNET Route	0	
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE -	No Parallel Structure	N	
(16)LAT 35° 19' 42.9"	(17)LONG 83° 6' 42.5"			(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	
				(31) MAINTAIN -	State Highway Agency	01	
				(22) OWNER -	State Highway Agency	01	
				(37) HISTORICAL SIGNIFICANCE -	Not Eligible	5	
STRUCTURE TYPE AND MATERIAL				CONDITION			
(43) STRUCTURE TYPE MAIN: Wood or Timber				(58) DECK		7	
TYPE - Stringer Multibeam or Girder	CODE	702		(59) SUPERSTRUCTURE		7	
(44) STRUCTURE TYPE APPR :				(60) SUBSTRUCTURE		4	
TYPE -	CODE	000		(61) CHANNEL & CHANNEL PROTECTION		8	
(45) NUMBER OF SPANS IN MAIN UNIT		1		(62) CULVERTS		N	
(46) NUMBER OF APPROACH SPANS							
(107)DECK STRUCTURE TYPE - 8	CODE			LOAD RATING AND POSTING			
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(31) DESIGN LOAD	Other or Unknown	0	
(A) TYPE OF WEARING SURFACE -	CODE			(63) OPERATING RATING METHOD -	Load Factor		
(B) TYPE OF MEMBRANE -	CODE			(64) OPERATING RATING -	HS-1	101	
(C) TYPE OF DECK PROTECTION -	CODE			(65) INVENTORY RATING METHOD -	Load Factor		
				(66) INVENTORY RATING -	HS-1	101	
				(70) BRIDGE POSTING -	Posting Required	3	
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED		P	
				DESCRIPTION -	Posted for Load		
AGE AND SERVICE				APPRAISAL			
(27) YEAR BUILT		1963		(67) STRUCTURAL EVALUATION		2	
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY		2	
(42) TYPE OF SERVICE : ON - Highway				(69) UNDERCLEARANCES,VERTI & HORIZ		N	
UNDER - Waterway	CODE	15		(71) WATERWAY ADEQUACY		8	
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE				(72) APPROACH ROADWAY ALIGNMENT		8	
(29) AVERAGE DAILY TRAFFIC		140		(36) TRAFFIC SAFETY FEATURES		0000	
(30) YEAR OF ADT 2000	(109) TRUCK ADT PCT	6%		(113)SCOUR CRITICAL BRIDGES		U	
(19) BYPASS OR DETOUR LENGTH		99 MI					
GEOMETRIC DATA				PROPOSED IMPROVEMENTS			
(48) LENGTH OF MAXIMUM SPAN		19 FT		(75) TYPE OF WORK -		CODE	
(49) STRUCTURE LENGTH		21 FT		(76) LENGTH OF STRUCTURE IMPROVEMENT			
(50)CURB OR SIDEWALK: LEFT .3 FT RIGHT .3 FT				(94) BRIDGE IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		17.2 FT		(95) ROADWAY IMPROVEMENT COST			
(52) DECK WIDTH OUT TO OUT		18.2 FT		(96) TOTAL PROJECT COST			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		10 FT		(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(33) BRIDGE MEDIAN - No Median	CODE	0 FT		(114)FUTURE ADT 280	(115) YEAR FUTURE ADT	2025	
(34) SKEW 30°	(35) STRUCTURE FLARED	0					
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9 FT		INSPECTIONS			
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		17.2 FT		(90) INSPECTION DATE		10/10/2011	
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9 FT		(92) CRITICAL FEATURE INSPECTION :		(93) CFI DATE	
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad		000.0 FT		A) FRACTURE CRIT DETAIL -	NO	A)	
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad		000 FT		B) UNDERWATER INSP -	NO	B)	
(56) MIN LAT UNDERCLEAR LT REF -		000 FT		C) OTHER SPECIAL INSP	NO	C)	
				SCOUR			
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					

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

COUNTY : JACKSON	DIVISION : 14	DISTRICT : 2	STRUCTURE NUMBER : 490103	LENGTH : 21	FEET
ROUTE CARRIED : SR1740		FEATURE INTERSECTED : MOSES CREEK			
LOCATED : 1.4 MI.N.JCT.SR1739		BRIDGE NAME :		CITY :	
FUNC. CLASS : 09	SYST.ON : NFA	SYST.UNDER : NFA	ADT & YR : 140 2000	RAIL TYPE : LT 227 RT 227	
BUILT : 1963	BY : BMU	PROJ :	FED.AID PROJ :	DESIGN LOAD : Other or Unknown	
REHAB :	BY : BMU	PROJ :	ALIGNMENT : TAN	SKEW : 120	LANES : ON 2 UNDER
NAVIGATION : VC 0 FT	HC 0 FT	HT. CRN. TO BED : 6 FT	WATER DEPTH : 1 FT		
SUPERSTRUCTURE : TIMBER FLOOR ON TIMBER JOISTS					
SUBSTRUCTURE : E.BTS: TIMBER CAPS/TIM.POST&SILLS/E.BT.1ENC.CONC.@ VAR.CTS.					
SPANS : 1 @ 20'- 6					
BEAMS OR GIRDERS : 14 LINES 6X14 TIMBER JOISTS @ 1'-3 CENTERS					
FLOOR :		ENCROACHMENT :		DECK (OUT TO OUT) : 18.2 FT	
CLEAR ROADWAY : 17.2 FT		BETWEEN RAILS : 17.8 FT		SIDEWALK OR CURB : LT .3 FT RT .3 FT	
VERT.CL.OVER : 999.9 FT					
INV.RTG. : HS-1	OPE.RTG. : HS-1	CONTR.MEMBER : Ext Bm	POSTED : SV 23	TTST 37	DATE 10/14/2008
SYSTEM : Secondary S.R. Route			GREEN LINE ROUTE : N		
UNDER ROUTES AND CLEARANCES					

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection
 BRIDGE NO. 490103 COUNTY JACKSON ROUTE SR1740 OVER MOSES CREEK
 STRUCTURE TYPE TIMBER FLOOR ON TIMBER JOISTS
 ROUTE ORIENTATION S - N SPANS 1 @ 20'- 6

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			16
	c. ALUMINUM						
	d. STEEL						
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			G				
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)				60. REGULATORY SIGN NOTICE ISSUED			YES
6. DECK EXP JTS. OR DEVICES. NO. OF EACH	a. STEEL PL OR FINGER			61. PROMPT-ACTION NOTICE ISSUED			NO
	b. MISC PREFAB			62. PRESENTLY POSTED			YES
	c. COMPRESSION SEAL			63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)			4
	d. STANDARD JOINTS			64. TOTAL SNOOPER INSP. TIME (HRS)			
	e. OPEN JOINTS			65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)			
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	5	
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S				d. CHANNEL & CHANNEL PROT.	ITEM 61	7	
13. END DIAP'S, CURTAIN WALLS, & CONN'S							
14. FLOOR BEAMS AND CONNECTIONS				71. SI&A FIELD APPRAISAL RATINGS			
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)				a. WATERWAY ADAQUACY		7	
16. DRAINAGE SYSTEM (ON STRUCTURE)			G	b. APPR. RDWY. ALIGNMENT		7	
17. MOVABLE SPAN MACHINERY							
				72. FIELD SCOUR EVALUATION			R
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)							
35. TIM SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS		G	USE OF INSP. ACCESSIBILITY EQUIPMENT			
	b. PILES, POST, SILLS, & BRACING		G	SNOOPER (CODE S, 4, OR N)	HRS	NO	
	c. BULKHEADS, WING'S, & TIE BACKS		F	LADDER		NO	
36. CONC SUB STR.	a. ABUT. & INT. BENT CAPS			BUCKET TRUCK			NO
	b. ABUT. & BENT COL'S BREASTWALLS			BOAT			NO
	c. ABUT. & INT. BENT PILES			OTHER			NO
	d. BACKWALLS, WING'S, RETAIN. WALLS						
	e. ABUT. & BENT FOOTINGS & SILLS		G				
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:	W. B. J. 2/28		
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 BARRY FOXX			
Assisted By DAVID SANDERS			
Item No.	Grade		
35b	G	TIMBER POST; ALL ORIGINAL TIMBERS ARE WEATHERED WITH MOST ALSO HAVING HEAVY SEASONAL CRACKING FROM 1/4" TO 1/2" WIDE. SEVERAL ORIGINAL POST HAVE AREAS OF DECAY UP TO 1" DEEP TO ONE OR MORE FACES. ALL POST HAVE BEEN SUPPLEMENTED SOMETIME IN THE PAST. THESE ARE CONSIDERED TEMP. REPAIRS. SEE DATA WORKSHEET FOR ADDITIONAL INFORMATION.	
35c	F	TIMBER BULKHEAD; SEVERAL NEWER TIMBERS HAVE BEEN PLACED SOMETIME IN THE PAST. THESE TIMBERS ARE IN GOOD CONDITION AT THIS TIME. THE ORIGINAL TIMBERS ARE WEATHERED WITH SCATTERED AREAS OF 1/2" TO 1" DEEP DECAY. NO PROBLEMS AS YET DUE TO CONDITION.	
45b	G	ALIGNMENT; THE MAIN FLOW IS INTO AND ALONG ABUTMENT 1.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 490103

County JACKSON

Date: 10/10/2011

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	NO RECOMMENDATIONS AT THIS TIME.	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

Structure Data Worksheet

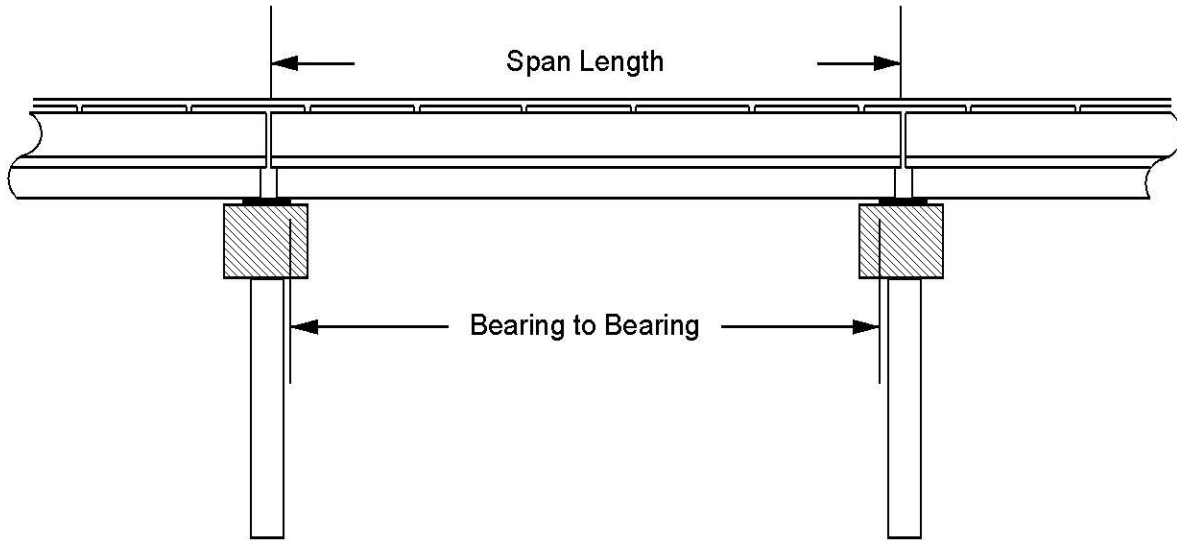
Spans

County: JACKSON

Structure No: 490103

Date: 10/10/2011

Inspected By: WBF



Span No	Span Length	Bearing to Bearing	Comments
1	20.5	19.1667	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 490103 County: JACKSON Date: 10/10/2011 By: WBF

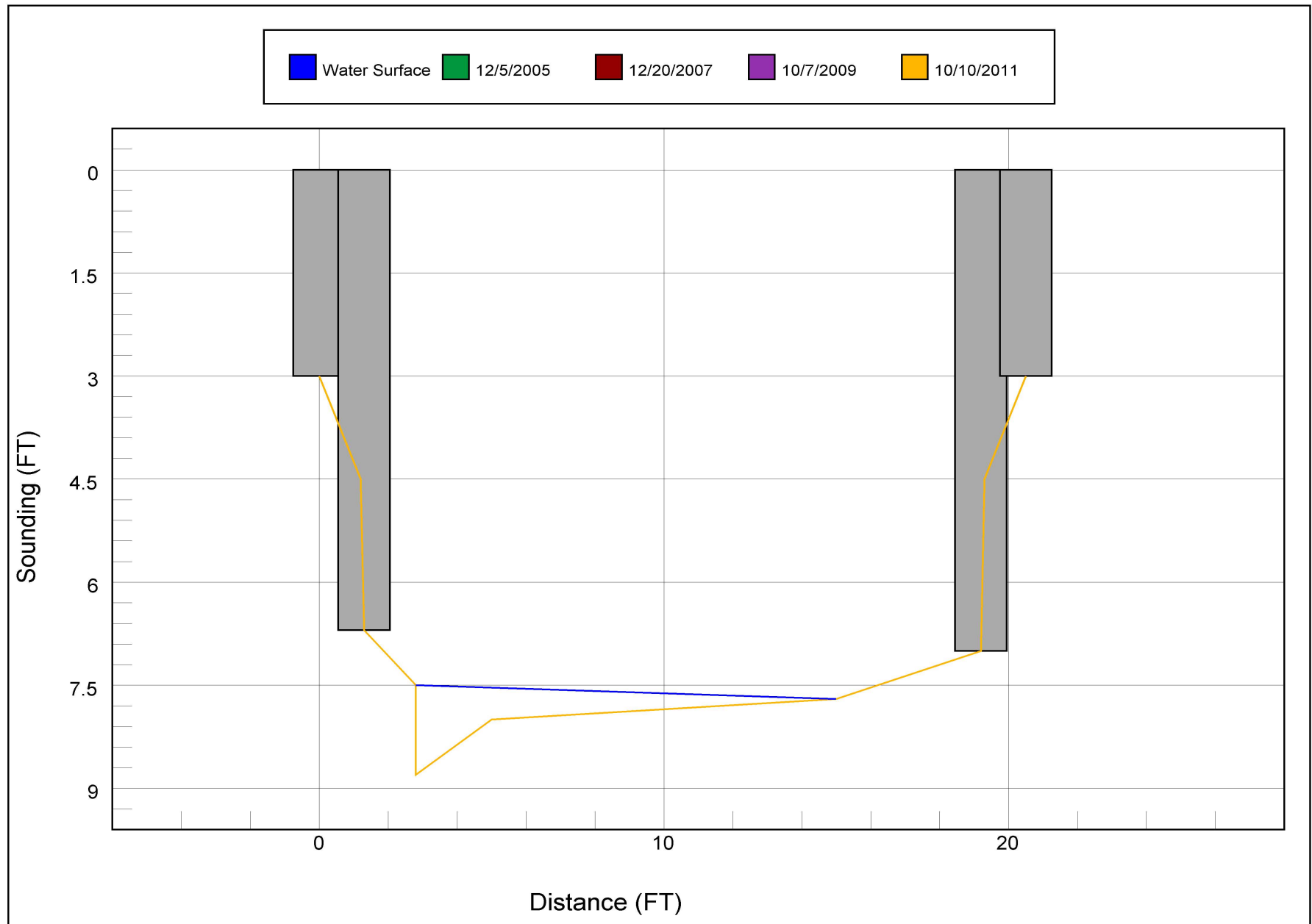
Record sounding from top of rail. Other location if needed: _____

Distance from Highwater Mark to top of rail: _____ Location of Highwater Mark: NOT DETECTED

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	3	FILL FACE ABUTMENT 1	0	2.9	FILL FACE ABUTMENT 1
1.2	4.5	Top of Cap			
1.3	6.7	STREAM FACE ABUTMENT 1 TO TOP OF ENCASEMENT	1.3	8.7	STREAM FACE ABUTMENT 1
2.8	7.5	Water Surface/Water Edge (WSWE)			
2.8	8.8	FACE OF ENCASMENT			
5	8				
15	7.7	Water Surface/Water Edge (WSWE)			
19.2	7	STREAM FACE ABUTMENT 2	19.2	7.3	STREAM FACE ABUTMENT 2
19.3	4.5	Top of Cap			
20.5	3	FILL FACE ABUTMENT 2	20.5	3	FILL FACE ABUTMENT 2

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch

VERIFIED BY DAVID SANDERS 11/11/2011



Roadway	10ft Wide	1 Unpaved Lanes	Looking North
Left Shoulder	1ft Wide		1ft Unpaved
Right Shoulder	1ft Wide		1ft Unpaved
Left Guardrail			
Right Guardrail			

Title APPROACH ROADWAY		Description APPROACH ROADWAY	
Bridge No: 490103	Drawn By: DAVID SANDERS	Date: 10/10/2011	File Name: S0118000698

Bridge Inspection Field Sketch

VERIFIED BY DAVID SANDERS 10/10/2011

Deck Width/Out to Out	18.229ft	Wearing Surface	0.167ft
Between Rails	17.833ft	Median Width	
Curb Height	0.708ft	Median Height	
Top Rail to Deck/Wearing Surface	2.833ft	Left Guardrail Width	0.5ft
Clear Roadway	17.208ft	Right Guardrail Width	0.5ft
Left Bridge Rail	Type 22	Right Bridge Rail	Type 22

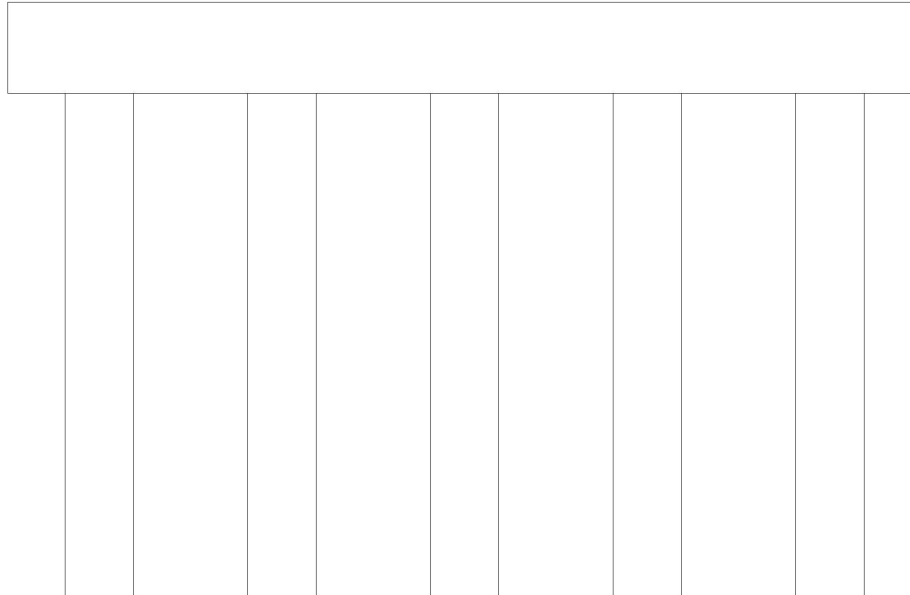
Measurements for Span #	1		
Deck Thickness	0.312	Left Overhang	0.896
Top of Rail to Bottom of Beam	4.5	Right Overhang	1

Beam No	Beam Type	Spacing	Comments
1	Timber (Rectangular)	1.25ft	JOIST ARE .4792 WIDE X 1.1458 HIGH.
2	Timber (Rectangular)	1.25ft	
3	Timber (Rectangular)	1.25ft	
4	Timber (Rectangular)	1.25ft	
5	Timber (Rectangular)	1.25ft	
6	Timber (Rectangular)	1.25ft	
7	Timber (Rectangular)	1.25ft	
8	Timber (Rectangular)	1.25ft	
9	Timber (Rectangular)	1.25ft	
10	Timber (Rectangular)	1.25ft	
11	Timber (Rectangular)	1.25ft	
12	Timber (Rectangular)	1.25ft	
13	Timber (Rectangular)	1.25ft	
14	Timber (Rectangular)		

Title SUPER		Description SUPER	
Bridge No: 490103	Drawn By: DAVID SANDERS	Date: 10/10/2011	File Name: S0118000699

Bridge Inspection Field Sketch

VERIFIED BY DAVID SANDERS 10/10/2011



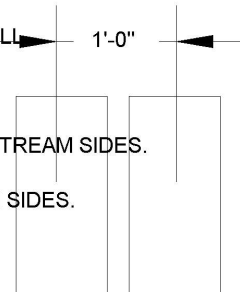
Abutment #	1	Abutment 2 similar	
Cap - Beam Type (Wood or Steel)			
Cap Size	22.25ft Long	1ft Wide	1.021ft High
Left Overhang	1.25ft	Lt Cap/Beam Overhang	1.25ft
Right Overhang	1ft	Rt Cap/Beam Overhang	1.4167ft

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Post and Sills	5.0		1.1667	THROUGH	Vertical
2	Wood or Timber	Post and Sills	5.0		1.1667	THROUGH	Vertical
3	Wood or Timber	Post and Sills	5.0		1.1667	THROUGH	Vertical
4	Wood or Timber	Post and Sills	5.0		1.1667	THROUGH	Vertical
5	Wood or Timber	Post and Sills			1.1667	THROUGH	Vertical

A 9 3/4" X 9 3/4" TIMBER SUPPLEMENT POST HAS BEEN PLACED ALONGSIDE ALL ORIGINAL POST AT BOTH ABUTMENTS AS FOLLOWS;

ABUTMENT 1 - POST 1 THROUGH 3 - DOWNSTREAM SIDE. POST 4 AND 5 - UPSTREAM SIDES.

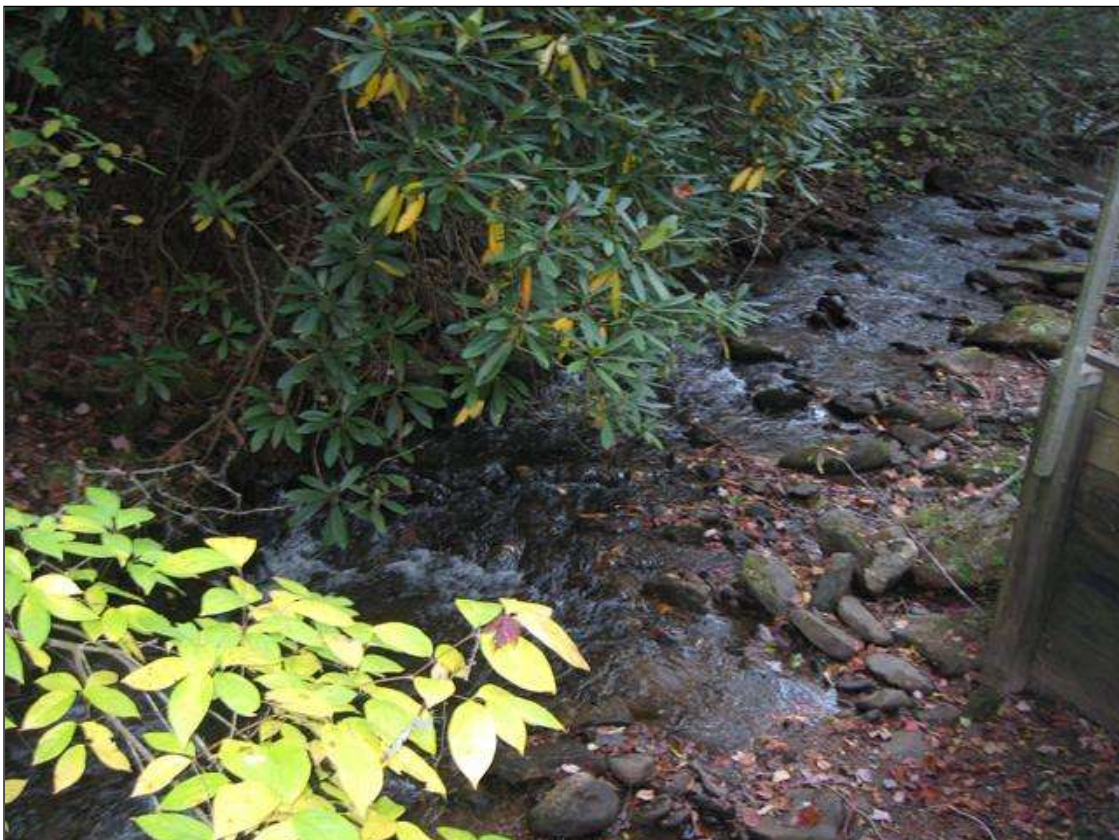
ABUTMENT 2 - POST 1 - DOWNSTREAM SIDE. POST 2 THROUGH 5 - UPSTREAM SIDES.



Title		Description	
SUBSTR		SUBSTR	
Bridge No:	490103	Drawn By:	DAVID SANDERS
Date:	10/10/2011	File Name:	S0118000700



LOOKING NORTH



LOOKING UPSTREAM FROM TOP OF BRIDGE.



LOOKING DOWNSTREAM FROM TOP OF BRIDGE.



LOOKING SOUTH



DOWNSTREAM



ABUTMENT 1 - TEMP. REPAIR TO POSTS 1, 2, 3, 4, AND 5.



ABUTMENT 2 TEMP. REPAIR TO POSTS 1, 2, 3, 4, AND 5.



REP. OF UNDERSIDE



UPSTREAM



SCOUR REPAIR ABUTMENT 1.