



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

PRI. MAINT. ISSUED.
TEMP. REPAIR - POST 1 AT BOTH ABUTMENTS HAVE
BEEN SUPPLEMENTED SOMETIME IN THE PAST.

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY HAYWOOD BRIDGE NUMBER 430372 INSPECTION CYCLE 2 YRS
ROUTE SR1346 ACROSS STEPHENS CREEK M.P. 0

LOCATION 0.3 MI.S.JCT.SR1347

SUPERSTRUCTURE TIMBER FLOOR ON TIMBER JOISTS

SUBSTRUCTURE E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ 8' CENTERS

SPANS 1 @ 20'-6

LONGITUDE 83° 1' 34.16"

LATITUDE 35° 39' 41.44"

INSPECTION DATE 03/05/2013

PRESENT CONDITION FAIR

PRESENT POSTING Not Posted **NOT POSTED** PROPOSED POSTING _____

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



LOOKING NORTH

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: 04/12/2013

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	430372		SUFFICIENCY RATING =	7
(8) STRUCTURE NUMBER(FEDERAL)		00000000870372		STATUS =	Structurally Deficient
(5) INVENTORY ROUTE (ON/UNDER) - ON		31013460			
(2) STATE HIGHWAY DEPARTMENT DISTRICT		2			
(3) COUNTY CODE	87	(4) PLACE CODE	0		
(6) FEATURE INTERSECTED -	STEPHENS CREEK				
(7) FACILITY CARRIED	SR1346				
(9) LOCATION	0.3 MI.S.JCT.SR1347				
(11)MILEPOINT		0			
(16)LAT	35° 39' 41.44"	(17)LONG	83° 1' 34.16"		
(98)BORDER BRIDGE STATE CODE		PCT SHARE			
(99)BORDER BRIDGE STRUCTURE NO					
STRUCTURE TYPE AND MATERIAL				CLASSIFICATION	
(43) STRUCTURE TYPE MAIN:	Wood or Timber			(112)NBIS BRIDGE SYSTEM -	NO
TYPE -	Stringer Mutlibeam or Girder	CODE	702	(104)HIGHWAY SYSTEM	Is not on NHS 0
(44) STRUCTURE TYPE APPR :				(26) FUNCTIONAL CLASS -	Local 09
TYPE -		CODE	000	(100)STRAHNET HIGHWAY -	Not a STRAHNET Route 0
(45) NUMBER OF SPANS IN MAIN UNIT			1	(101)PARALLEL STRUCTURE -	No Parallel Structure N
(46) NUMBER OF APPROACH SPANS				(102)DIRECTION OF TRAFFIC -	2-way Traffic 2
(107)DECK STRUCTURE TYPE -	8	CODE		(103)TEMPORARY STRUCTURE -	Temporary Structure/Conditions T
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(110)DESIGNATED NATIONAL NETWORK -	Not on the National Network 0
(A) TYPE OF WEARING SURFACE -		CODE		(20) TOLL	On Free Road 3
(B) TYPE OF MEMBRANE -		CODE		(31) MAINTAIN -	State Highway Agency 01
(C) TYPE OF DECK PROTECTION -		CODE		(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	D
				DESCRIPTION -	Open Temporary Shoring
				APPRAISAL	
				(67) STRUCTURAL EVALUATION	3
				(68) DECK GEOMETRY	2
				(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	440
				(115) YEAR FUTURE ADT	2025
				INSPECTIONS	
				(90) INSPECTION DATE	03/05/2013
				(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	
AGE AND SERVICE					
(27) YEAR BUILT			1963		
(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			220		
(30) YEAR OF ADT	2000	(109) TRUCK ADT PCT	6%		
(19) BYPASS OR DETOUR LENGTH			99 MI		
GEOMETRIC DATA					
(48) LENGTH OF MAXIMUM SPAN			19 FT		
(49) STRUCTURE LENGTH			21 FT		
(50)CURB OR SIDEWALK: LEFT	.4 FT	RIGHT	.4 FT		
(51) BRIDGE ROADWAY WIDTH CURB TO CURB			18 FT		
(52) DECK WIDTH OUT TO OUT			19 FT		
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)			18 FT		
(33) BRIDGE MEDIAN -	No Median	CODE	0		
(34) SKEW	45°	(35) STRUCTURE FLARED	0		
(10) INVENTORY ROUTE MIN VERT CLEAR			999.9 FT		
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			18 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		

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 04/12/2013

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
HAYWOOD	14	2	430372	21	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1346	STEPHENS CREEK

LOCATED :	BRIDGE NAME :	CITY :
0.3 MI.S.JCT.SR1347		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	220 2000	LT 227 RT 227

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1963	BMU			Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :		
	BMU	5.9451	TAN	45	ON 2	UNDER	0

NAVIGATION :			HT. CRN. TO BED :		WATER DEPTH :		
VC 0 FT	HC 0 FT		7 FT		1		FT

SUPERSTRUCTURE :	TIMBER FLOOR ON TIMBER JOISTS
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SUBSTRUCTURE :	E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ 8' CENTERS
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SPANS :	1 @ 20'-6
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BEAMS OR GIRDERS :	18 LINES 6X14 TIMBER JOISTS @ 1' CENTERS
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FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
4X8 TIM/4 AWS		19 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
18 FT	18.75 FT	LT .4 FT RT .4 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :		DATE
HS-1	HS-1	int jost	SV	TTST	09/24/2001

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. 430372 COUNTY HAYWOOD ROUTE SR1346 OVER STEPHENS 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			10
	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			YES
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)			4
	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	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				71. SI&A FIELD APPRAISAL RATINGS			
14. FLOOR BEAMS AND CONNECTIONS				a. WATERWAY ADAQUACY		7	
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)				b. APPR. RDWY. ALIGNMENT		8	
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
	b. PILES, POST, SILLS, & BRACING		F	LADDER			NO
	c. BULKHEADS, WING'S, & TIE BACKS		F	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:	John B. J. [Signature]		
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	F	TIMBER ABUTMENT POST; SUPPLEMENT POST HAVE BEEN PLACED ALONGSIDE POST 1 AT BOTH ABUTMENTS SOMETIME IN THE PAST. THIS REPAIR IS CONSIDERED TEMP. SUPPLEMENT POST ARE IN GOOD CONDITION. POST 2 AT ABUTMENT 2 HAS AN AREA OF 3" DEEP X 3" WIDE X 5" HIGH DECAY TO ITS DOWNSTREAM FACE. [SEE PHOTO]. POST 3 AT ABUTMENT 2 HAS AN AREA OF 3" DEEP X 7" WIDE X 1'-6" HIGH DECAY TO ITS UPSTREAM FACE. [SEE PHOTO]. PRI. MAINT. ISSUED DUE TO THIS CONDITION. ALL OTHER ORIGINAL POST HAVE AREAS OF UP TO 3/4" DEEP DECAY TO THEIR LOWERMOST 1' +/-. NO PROBLEMS AS YET.	
35c	F	TIMBER BULKHEAD; SCATTERED AREAS OF UP TO 1" DEEP DECAY TO BULKHEAD TIMBERS. NO PROBLEMS DUE TO DECAY AS YET.	
61	YES	PROMPT ACTION ISSUED; PRI. MAINT. ISSUED DUE A 3" DEEP X 7" WIDE X 1'-6" HIGH AREA OF DECAY TO POST 3 AT ABUTMENT 2.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 430372

County HAYWOOD

Date: 03/05/2013

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	4	POST 3 AT ABUTMENT 2 HAS AN AREA OF 3" DEEP X 7" WIDE X 1'-6" HIGH DECAY TO ITS UPSTREAM FACE. [SEE PHOTO]. NO SIGN OF ANY PROBLEMS DUE TO CONDITION AS YET.	
3344	Repair / Replace Timber Substructure Components	LF	4	AREA OF 3" DEEP DECAY TO POST 2 AT ABUTMENT 2.	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 430372 County HAYWOOD

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	4 LF
Location:		
Abutment Substructure	Bent/Span No. 1	POST 3 AT ABUTMENT 2
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification	
Submitted Date:	Submitted By:	Assisted By:
03/05/2013	BARRY FOXX	DAVID SANDERS
Details		
POST 3 AT ABUTMENT 2 HAS AN AREA OF 3" DEEP X 7" WIDE X 1'-6" HIGH DECAY TO ITS UPSTREAM FACE. [SEE PHOTO]. NO SIGN OF ANY PROBLEMS DUE TO CONDITION AS YET.		



AREA OF 3" DEEP X 7" WIDE X 1'-6" HIGH DECAY TO UPSTREAM FACE OF POST 3 AT ABUTMENT 2.



DECAY TO POST 2 ABUTMENT 2.

Structure Data Worksheet

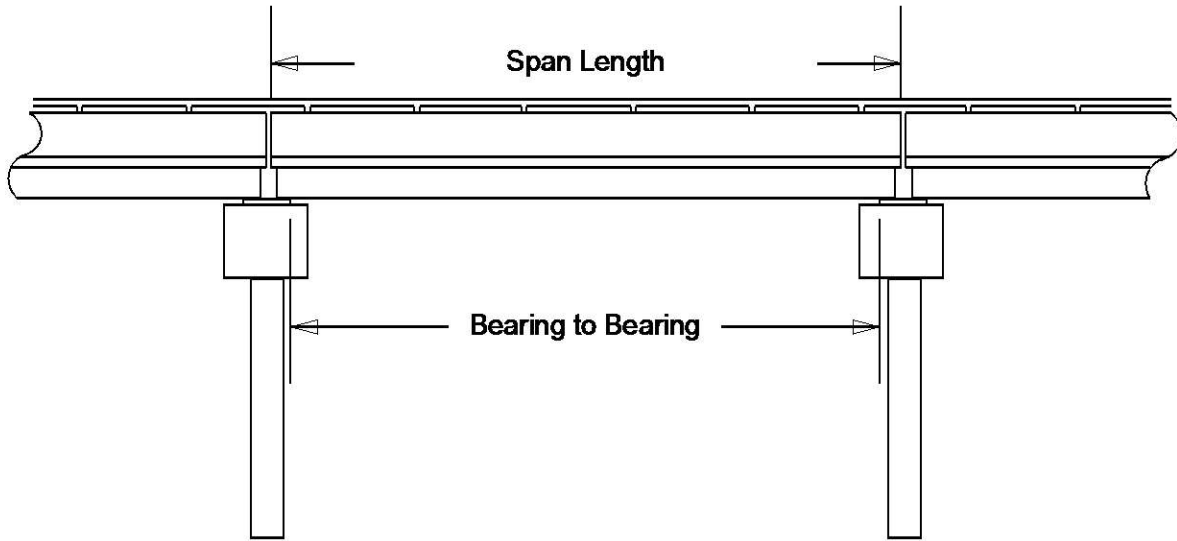
Spans

County: HAYWOOD

Structure No: 430372

Date: 03/05/2013

Inspected By: WBF



Span No	Span Length	Bearing to Bearing	Comments
1	20.5	19.1666	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 430372 County: HAYWOOD Date: 03/05/2013 By: WBF

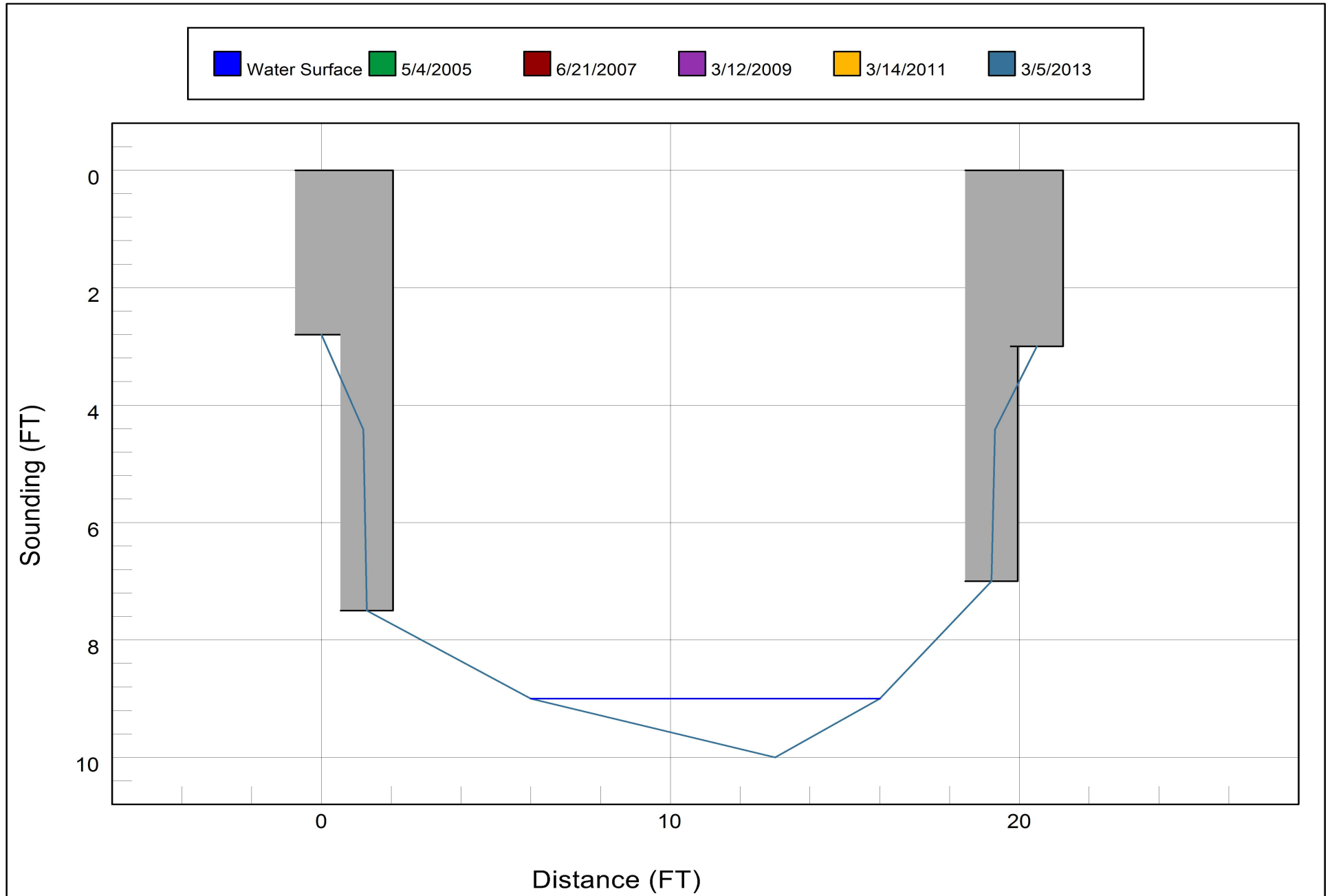
Record sounding from top of rail. Other location if needed: _____

Distance from Highwater Mark to top of rail: 4.417 Location of Highwater Mark: TOP OF CAPS

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.8	FILL FACE ABUTMENT 1	0	2.8	FILL FACE ABUTMENT 1
1.2	4.417	Top of Cap			
1.3	7.5	STREAM FACE ABUTMENT 1	1.3	7.7	STREAM FACE ABUTMENT 1
6	9	Water Surface/Water Edge (WSWE)			
13	10	STREAM BED			
16	9	Water Surface/Water Edge (WSWE)			
19.2	7	STREAM FACE ABUTMENT 2	19.2	8.7	STREAM FACE ABUTMENT 2
19.3	4.417	Top of Cap			
20.5	3	FILL FACE ABUTMENT 2	20.5	2.9	FILL FACE ABUTMENT 2

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch

VERIFIED BY DAVID SANDERS 3/5/2013



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

12' UNPAVED ON SOUTH END.

Title

APPROACH ROADWAY

Description

APPROACH ROADWAY

Bridge No: 430372

Drawn By: DAVID SANDERS

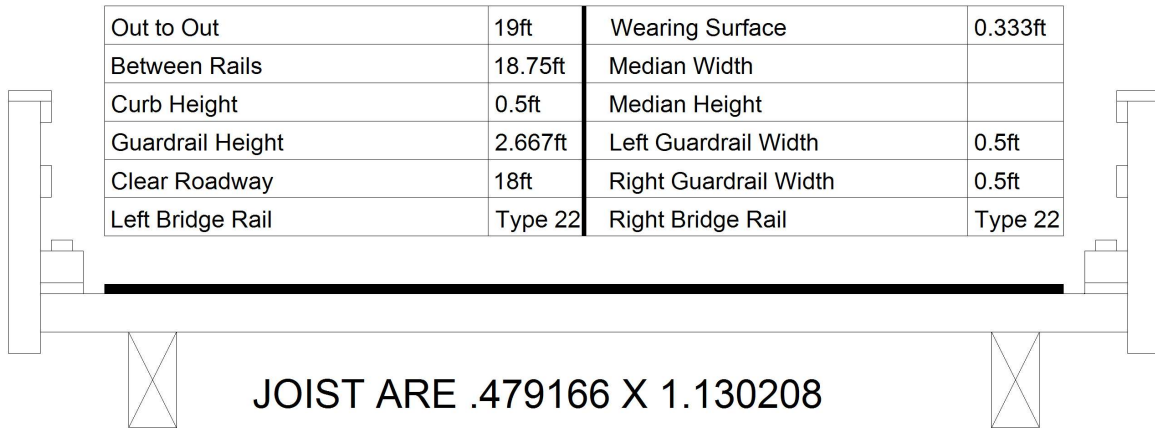
Date: 3/5/2013

File Name: S0118000029

Bridge Inspection Field Sketch

VERIFIED BY DAVID SANDERS 3/5/2013

Out to Out	19ft	Wearing Surface	0.333ft
Between Rails	18.75ft	Median Width	
Curb Height	0.5ft	Median Height	
Guardrail Height	2.667ft	Left Guardrail Width	0.5ft
Clear Roadway	18ft	Right Guardrail Width	0.5ft
Left Bridge Rail	Type 22	Right Bridge Rail	Type 22



JOIST ARE .479166 X 1.130208

Measurements for Span #	1		
Deck Thickness	0.312	Left Overhang	1
Top of Rail to Bottom of Beam	4.417	Right Overhang	1

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

SKEW 45 DEG.

Title

SUPER

Description

SUPER

Bridge No: 430372

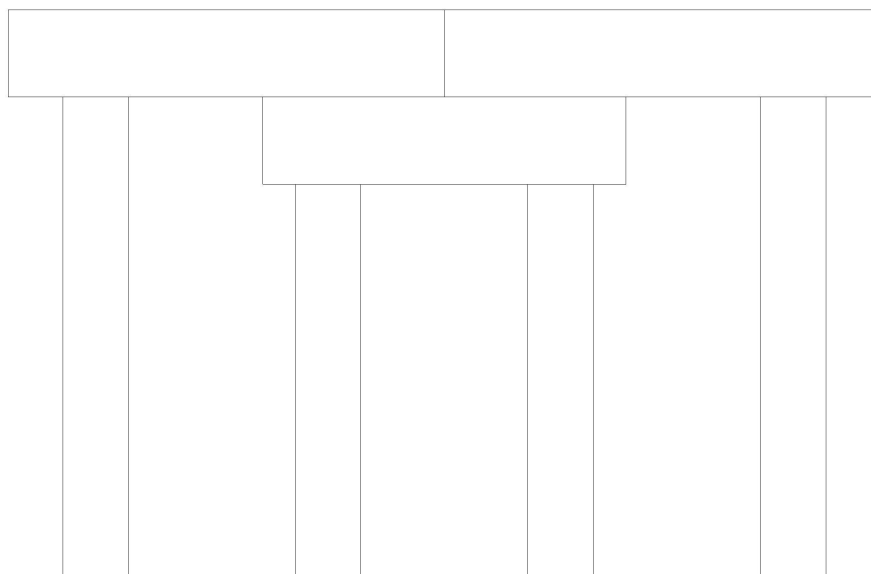
Drawn By: DAVID SANDERS

Date: 3/5/2013

File Name: S0118000030

VERIFIED BY DAVID SANDERS 3/5/2013

Bridge Inspection Field Sketch



Abutment #	1	Abutment 2 similar	
Cap - Beam Type (Wood or Steel)			
Cap Size	27.833ft Long	0.979ft Wide	0.979ft High
Left Overhang	2.167ft	Lt Cap/Beam Overhang	.583ft
Right Overhang	1.667ft	Rt Cap/Beam Overhang	.583ft
Timber Sub Cap			
Size	10.833ft Long	1ft Wide	0.833ft High
Left pile to splice	4.417ft		
Left Overhang	1ft		
Right Overhang	1ft		

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Post and Sills	8'		.8333 X .8333		Vertical
2	Wood or Timber	Post and Sills	8'		.8333 X .8333		Vertical
3	Wood or Timber	Post and Sills	8'		.8333 X .8333		Vertical
4	Wood or Timber	Post and Sills			.8333 X .8333		Vertical

POST 1 HAS BEEN SUPPLEMENTED ON DOWNSTREAM SIDE AT BOTH ABUTS.
 TIMBER AT ABUT.1 IS .97916 X .979166 WITH A 1' CTR. FROM ORIG. POST
 TIMBER AT ABUT.2 IS .875 X 1' WITH A .9166 CTR. FROM ORIG. POST

Title	Description		
SUBSTRUCTURE	SUBSTRUCTURE		
Bridge No: 430372	Drawn By: DAVID SANDERS	Date: 3/5/2013	File Name: S0118000031



LOOKING NORTH



LOOKING UPSTREAM FROM TOP OF BRIDGE.



LOOKING DOWNSTREAM FROM TOP OF BRIDGE.



LOOKING SOUTH



ABUTMENT 1 - TEMP. REPAIR TO POST 1.



UNDERISDE



ABUTMENT 2 - TEMP. REPAIR TO POST 1.



UPSTREAM



DOWNSTREAM