



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

TEMP. REPAIR - SUBSTRUCTURE ADDITIONS
SOMETIME IN THE PAST.

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY HAYWOOD BRIDGE NUMBER 430273 INSPECTION CYCLE 2 YRS
ROUTE SR1346 ACROSS CREEK M.P. 0

LOCATION 1 MI.E.JCT.SR1347

SUPERSTRUCTURE TIMBER FLOOR ON TIMBER JOISTS

SUBSTRUCTURE E.BTS:TIM.CAP/TIM.P&S/CONC.FTG.(WIDENED EXISTING STRUCTURE)

SPANS 1 @ 18'-6

LONGITUDE 83° 0' 49.25"

LATITUDE 35° 39' 56.62"

INSPECTION DATE 03/05/2013

PRESENT CONDITION FAIR

PRESENT POSTING SV 26 TTST 99 SV 26 TTST 99

PROPOSED POSTING

OTHER SIGNS PRESENT DELINEATORS [4]



LOOKING EAST

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: 04/11/2013

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	430273	SUFFICIENCY RATING =		31.33
(8) STRUCTURE NUMBER(FEDERAL)	00000000870273	STATUS =		Functionally Obsolete	
(5) INVENTORY ROUTE (ON/UNDER) - ON	31013460				
(2) STATE HIGHWAY DEPARTMENT DISTRICT	2	CLASSIFICATION		CODE	
(3) COUNTY CODE 87 (4) PLACE CODE	0	(112)NBIS BRIDGE SYSTEM -		NO	
(6) FEATURE INTERSECTED - CREEK		(104)HIGHWAY SYSTEM Is not on NHS		0	
(7) FACILITY CARRIED SR1346		(26) FUNCTIONAL CLASS - Local		09	
(9) LOCATION 1 MI.E.JCT.SR1347		(100)STRAHNET HIGHWAY - Not a STRAHNET Route		0	
(11)MILEPOINT	0	(101)PARALLEL STRUCTURE - No Parallel Structure		N	
(16)LAT 35° 39' 56.62" (17)LONG 83° 0' 49.25"		(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					
(43) STRUCTURE TYPE MAIN: Wood or Timber					
TYPE - Stringer Mutlibeam or Girder	CODE	702			
(44) STRUCTURE TYPE APPR :					
TYPE -	CODE	000	CONDITION		CODE
(45) NUMBER OF SPANS IN MAIN UNIT	1	(58) DECK	7		
(46) NUMBER OF APPROACH SPANS		(59) SUPERSTRUCTURE	7		
(107)DECK STRUCTURE TYPE - 8	CODE	(60) SUBSTRUCTURE	5		
(108)WEARING SURFACE / PROTECTIVE SYSTEM :		(61) CHANNEL & CHANNEL PROTECTION	7		
(A) TYPE OF WEARING SURFACE -	CODE	(62) CULVERTS	N		
(B) TYPE OF MEMBRANE -	CODE				
(C) TYPE OF DECK PROTECTION -	CODE	LOAD RATING AND POSTING		CODE	
		(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 - Posting Required	4		
		(41) STRUCTURE OPEN, POSTED ,OR CLOSED	P		
		DESCRIPTION - Posted for Load			
AGE AND SERVICE				APPRAISAL	
(27) YEAR BUILT	1958	(67) STRUCTURAL EVALUATION	3		
(106)YEAR RECONSTRUCTED	1992	(68) DECK GEOMETRY	5		
(42) TYPE OF SERVICE : ON - Highway		(69) UNDERCLEARANCES,VERTI & HORIZ	N		
UNDER - Waterway	CODE 15	(71) WATERWAY ADEQUACY	7		
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE	0	(72) APPROACH ROADWAY ALIGNMENT	8		
(29) AVERAGE DAILY TRAFFIC	220	(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	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		
GEOMETRIC DATA				INSPECTIONS	
(48) LENGTH OF MAXIMUM SPAN	17 FT	(90) INSPECTION DATE	03/05/2013		
(49) STRUCTURE LENGTH	19 FT	(92) CRITICAL FEATURE INSPECTION :	(93) CFI DATE		
(50)CURB OR SIDEWALK: LEFT .3 FT RIGHT .3 FT		A) FRACTURE CRIT DETAIL - NO	A)		
(51) BRIDGE ROADWAY WIDTH CURB TO CURB	25 FT	B) UNDERWATER INSP - NO	B)		
(52) DECK WIDTH OUT TO OUT	25.958 FT	C) OTHER SPECIAL INSP NO	C)		
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)	19 FT	SCOUR			
(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	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			

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 04/11/2013

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
HAYWOOD	14	2	430273	19	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1346	CREEK

LOCATED :	BRIDGE NAME :	CITY :
1 MI.E.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 :
1958	BMU			Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :		
1992	BMU	6.942310	TAN	45	ON 2	UNDER	0

NAVIGATION :			HT. CRN. TO BED :		WATER DEPTH :		
VC 0 FT	HC 0 FT		9 FT		1		FT

SUPERSTRUCTURE :	TIMBER FLOOR ON TIMBER JOISTS
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SUBSTRUCTURE :	E.BTS:TIM.CAP/TIM.P&S/CONC.FTG.(WIDENED EXISTING STRUCTURE)
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SPANS :	1 @ 18'-6
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BEAMS OR GIRDERS :	25 LINES 6X12 TIMBER JOISTS @ 1'.0625 CENTERS
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FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
4X8 TIM/1.5 AWS		25.958 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
25 FT	25.667 FT	LT .3 FT RT .3 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	LGW	DATE	
HS-1	HS-1	IntJoist	SV 26			06/17/2009	

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. 430273 COUNTY HAYWOOD ROUTE SR1346 OVER CREEK
 STRUCTURE TYPE TIMBER FLOOR ON TIMBER JOISTS
 ROUTE ORIENTATION W - E SPANS 1 @ 18'-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			12
	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			YES
	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		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		F				
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. 20		
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		
35a	G	NOTE ABUTMENT 2 OLD SECTION UPSTREAM END IS LEANING OUT OF PLUMB 1 1/2" PER 4' TOWARD STREAM. NO CHANGE FROM PREVIOUS INSPS.	
35b	F	SEE PREVIOIUS ITEM FOR ADDITIONAL INFORMATION.	
36e	F	CONCRETE FOOTINGS; SCATTERED AREAS OF UP TO 3" DEEP DETER. TO UPSTREAM MOST 4' OF FOOTING AT ABUTMENT 2. [SEE REP. PHOTO]. NO PROBLEMS DUE TO CONDITION AS YET.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 430273

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
3348	Maintain Concrete Substructure Components	LF	2	SCATTERED DETER. UP TO 3" DEEP TO UPSTREAM MOST 4' OF FOOTING AT ABUTMENT 2.	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

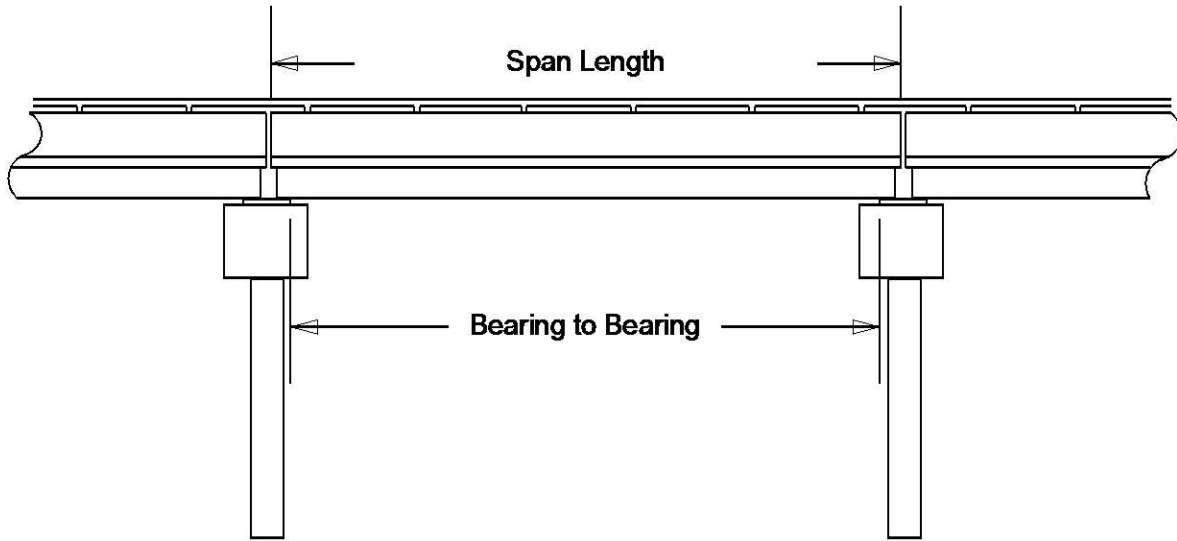


AREA OF DETER, TO FOOTING ABUTMENT 2 ON UPSTREAM SIDE.

Structure Data Worksheet

Spans

County: HAYWOOD Structure No: 430273 Date: 03/05/2013 Inspected By: WBF



Span No	Span Length	Bearing to Bearing	Comments
1	18.5	17.16666	NON - NBIS STRUCTURE 14

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 430273 County: HAYWOOD Date: 03/05/2013 By: WBF

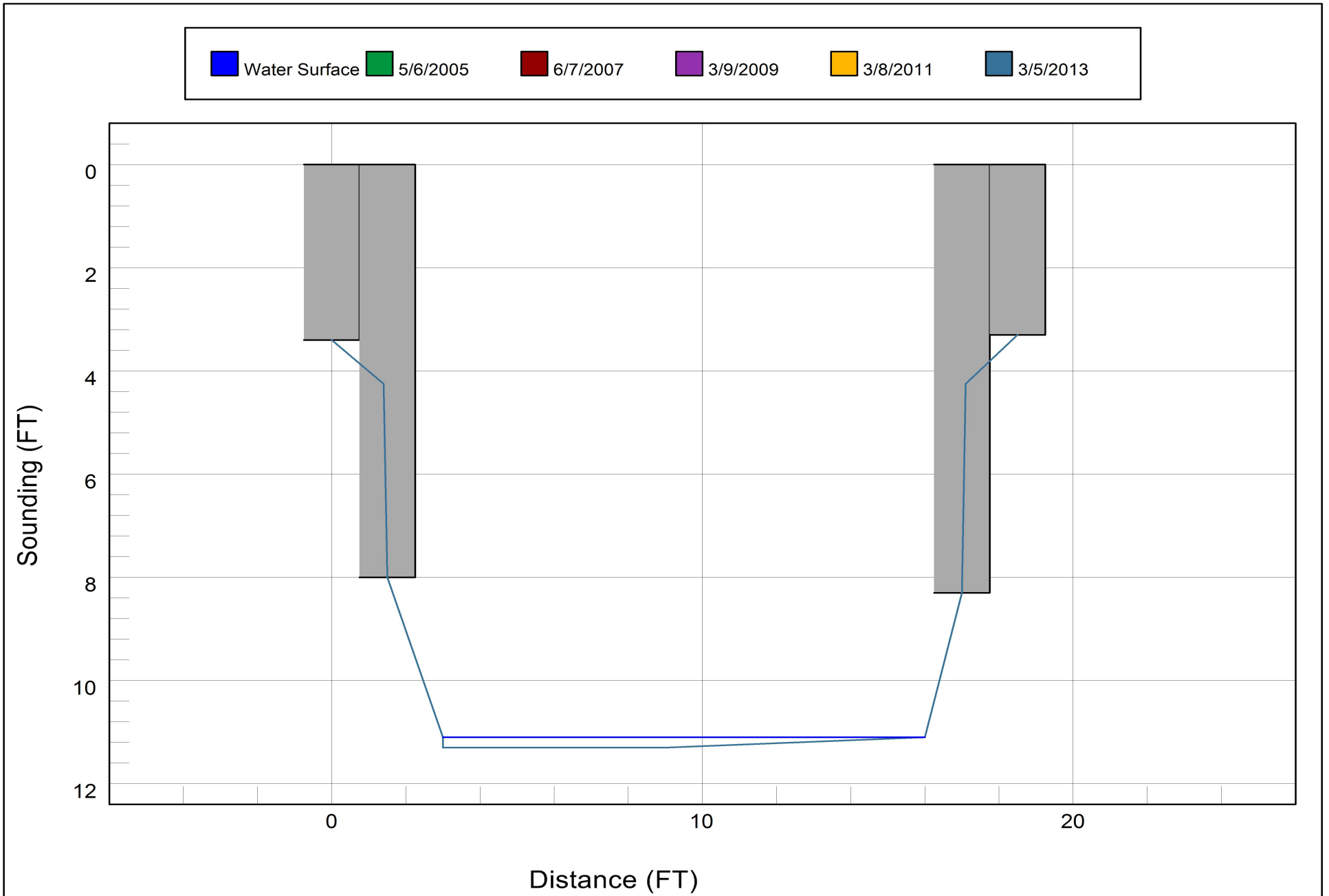
Record sounding from top of rail. Other location if needed: _____

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

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	3.4	FILL FACE ABUTMENT 1	0	2.8	FILL FACE ABUTMENT 1
1.4	4.25	Top of Cap			
1.5	8	STREAM FACE ABUTMENT 1 TO TOP OF FOOTING	1.5	8.1	STREAM FACE ABUTMENT 1 TO TOP OF FOOTING
3	11.1	Water Surface/Water Edge (WSWE)			
3	11.3	FACE OF FOOTING			
9	11.3				
16	11.1	WS AND WE FACE OF FOOTING	16	9.4	FACE OF FOOTING
17	8.3	STREAM FACE ABUTMENT 2 TO TOP OF FOOTING	17	8.4	STREAM FACE ABUTMENT 2 TO TOP OF FOOTING
17.1	4.25	Top of Cap			
18.5	3.3	FILL FACE ABUTMENT 2	18.5	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	19ft Wide	2 Paved Lanes	Looking East
Left Shoulder	2ft Wide		2ft Unpaved
Right Shoulder	2ft Wide		2ft Unpaved
Left Guardrail			
Right Guardrail			

Title

APPROACH ROADWAY

Description

APPROACH ROADWAY

Bridge No: 430273

Drawn By:

DAVID SANDERS

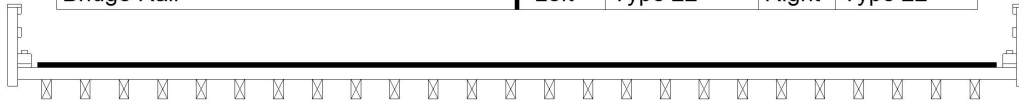
Date: 3/5/2013

File Name: S0118000032

Bridge Inspection Field Sketch

VERIFIED BY DAVID SANDERS 3/5/2013

Deck Width/Out to Out	25.958ft	Between Rails			25.667ft
Clear Roadway	25ft	Wearing Surface			0.125ft
Median Width		Median Height			
Curb Height		Left	0.708ft	Right	0.708ft
Sidewalk Width		Left		Right	
Clear Roadway (Rail to Median)		Left		Right	
Guardrail Width		Left	0.5ft	Right	0.5ft
Top of Rail to Deck/Wearing Surface		Left	2.833ft	Right	2.833ft
Bridge Rail		Left	Type 22	Right	Type 22



Measurements for Span #	1		
Deck Thickness	0.312	Left Overhang	0.75
Top of Rail to Bottom of Beam	4.25	Right Overhang	0.833

Beam Number	Beam Type	Spacing	Beam Number	Beam Type	Spacing
1	Timber (Rectangular)	1.005208ft	23	Timber (Rectangular)	1.005208ft
2	Timber (Rectangular)	1.005208ft	24	Timber (Rectangular)	1.005208ft
3	Timber (Rectangular)	1.005208ft	25	Timber (Rectangular)	ft
4	Timber (Rectangular)	1.005208ft			
5	Timber (Rectangular)	1.005208ft			
6	Timber (Rectangular)	1.005208ft			
7	Timber (Rectangular)	1.005208ft			
8	Timber (Rectangular)	1.005208ft			
9	Timber (Rectangular)	1.005208ft			
10	Timber (Rectangular)	1.005208ft			
11	Timber (Rectangular)	1.005208ft			
12	Timber (Rectangular)	1.005208ft			
13	Timber (Rectangular)	1.005208ft			
14	Timber (Rectangular)	1.005208ft			
15	Timber (Rectangular)	1.005208ft			
16	Timber (Rectangular)	1.005208ft			
17	Timber (Rectangular)	1.005208ft			
18	Timber (Rectangular)	1.005208ft			
19	Timber (Rectangular)	1.005208ft			
20	Timber (Rectangular)	1.005208ft			
21	Timber (Rectangular)	1.005208ft			
22	Timber (Rectangular)	1.005208ft			

Title

SUPER

Description

SUPER

Bridge No: 430273

Drawn By: DAVID SANDERS

Date: 3/5/2013

File Name: S0118000033

Bridge Inspection Field Sketch

VERIFIED BY DAVID SANDERS 3/5/2013

POST 4 AT A.1 HAS BEEN SUPPLEMENTED WITH A .833 X .970
PLACED ON ITS DOWNSTREAM SIDE. CENTERS IS .9166.

.75 X 1' SUBCAP SITS ATOP POST 3 AND 4.

Abutment #	1	Abutment 2 similar	
Cap - Beam Type (Wood or Steel)			
Cap Size	35.25ft Long	0.833ft Wide	0.979ft High
Left Overhang	3.417ft	Lt Cap/Beam Overhang	4.66666ft
Right Overhang	1ft	Rt Cap/Beam Overhang	1.0ft
Timber Sub Cap			
Size	4ft Long	0.833ft Wide	0.979ft High
Left pile to splice	2ft		
Left Overhang	2ft		
Right Overhang	2ft		
Sill - Sill			
Sill Size	30ft Long	0.833ft Wide	0.979ft High

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Post and Sills	6.0	2.0	0.833	0.833	Vertical
2	Wood or Timber	Post and Sills	4.3333	2.0	0.833	0.833	Vertical
3	Wood or Timber	Post and Sills	1.0	1.0	0.833	0.833	Vertical
4	Wood or Timber	Post and Sills	6.0	1.0	0.833	0.833	Vertical
5	Wood or Timber	Post and Sills	6.0	2.0	0.833	0.833	Vertical
6	Wood or Timber	Post and Sills	6.0	1.0	0.833	0.833	Vertical
7	Wood or Timber	Post and Sills	6.0	2.0	0.833	0.833	Vertical
8	Wood or Timber	Post and Sills		2.0	0.833	0.833	Vertical

Title

SUBSTRUCTURE

Description

SUBSTRUCTURE

Bridge No: 430273

Drawn By: DAVID SANDERS

Date: 3/5/2013

File Name: S0118000035



LOOKING WEST- BRIDGE IS POSTED SV 26 /LGW.



LOOKING UPSTREAM FROM TOP OF BRIDGE.



LOOKING DOWNSTREAM FROM TOP OF BRIDGE.



LOOKING EAST



UPSTREAM



UNDERSIDE



REP. OF ABUTMENTS 1 AND 2. PHOTO WAS TAKEN OF ABUTMENT 2.



DOWNSTREAM