



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

POST 1 THROUGH 3 AT ABUTMENT 2 HAVE BEEN
SUPPLEMENTED SOMETIME IN THE PAST. THESE
ARE CONSIDERED TEMP. REPAIRS.

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY JACKSON BRIDGE NUMBER 490055 INSPECTION CYCLE 2 YRS
ROUTE SR1552 ACROSS LONG BRANCH M.P. 0

LOCATION 100 FT.S.JCT.SR1331

SUPERSTRUCTURE TIMBER FLOOR ON TIMBER JOISTS

SUBSTRUCTURE E.BTS:TIM.CAPS/TIM.POST&SILLS;E.BT.2 ENC.IN CONC.@ VAR.CTS.

SPANS 1 @ 18'-6

LONGITUDE 83° 11' 31.4"

LATITUDE 35° 18' 26.5"

PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 01/19/2012

OPERATING RATING

PRESENT POSTING SV 11 TTST 18 SV 11 TTST 18

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT DELINEATORS [4] AND NARROW BRIDGE [2]



LOOKING NORTH

SIGN NOTICE ISSUED FOR	NUMBERED REQUIRED
<u>No</u> WEIGHT LIMIT	<u></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

Run Date: 02/20/2012

IDENTIFICATION				CLASSIFICATION			
(1) STATE NAME -NORTH CAROLINA	BRIDGE	490055		SUFFICIENCY RATING =		13.48	
(8) STRUCTURE NUMBER(FEDERAL)		00000000990055		STATUS =	Structurally Deficient		
(5) INVENTORY ROUTE (ON/UNDER) - ON		31015520					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		2					
(3) COUNTY CODE	99	(4) PLACE CODE	00000	(112)NBIS BRIDGE SYSTEM -		NO	
(6) FEATURE INTERSECTED - LONG BRANCH				(104)HIGHWAY SYSTEM	Is not on NHS	0	
(7) FACILITY CARRIED SR1552				(26) FUNCTIONAL CLASS -	Local	09	
(9) LOCATION 100 FT.S.JCT.SR1331				(100)STRAHNET HIGHWAY -	Not a STRAHNET Route	0	
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE -	No Parallel Structure	N	
(16)LAT 35° 18' 26.0"	(17)LONG	83° 11' 29.4"		(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 Mutlibeam or Girder		CODE	702	(59) SUPERSTRUCTURE		7	
(44) STRUCTURE TYPE APPR :				(60) SUBSTRUCTURE		4	
TYPE -		CODE	000	(61) CHANNEL & CHANNEL PROTECTION		7	
(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 -	Allowable Stress		
(B) TYPE OF MEMBRANE -		CODE		(64) OPERATING RATING -	HS-1	201	
(C) TYPE OF DECK PROTECTION -		CODE		(65) INVENTORY RATING METHOD -	Allowable Stress		
				(66) INVENTORY RATING -	HS-1	201	
				(70) BRIDGE POSTING -	Posting Required	0	
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED		P	
				DESCRIPTION -	Posted for Load		
AGE AND SERVICE				APPRAISAL			
(27) YEAR BUILT			1954	(67) STRUCTURAL EVALUATION		4	
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY		3	
(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				(72) APPROACH ROADWAY ALIGNMENT		7	
(29) AVERAGE DAILY TRAFFIC			150	(36) TRAFFIC SAFETY FEATURES		0000	
(30) YEAR OF ADT 1995	(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			17 FT	(75) TYPE OF WORK -		CODE	
(49) STRUCTURE LENGTH			19 FT	(76) LENGTH OF STRUCTURE IMPROVEMENT			
(50)CURB OR SIDEWALK: LEFT .4 FT RIGHT .4 FT			.4 FT	(94) BRIDGE IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB			19 FT	(95) ROADWAY IMPROVEMENT COST			
(52) DECK WIDTH OUT TO OUT			20 FT	(96) TOTAL PROJECT COST			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)			18 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(33) BRIDGE MEDIAN - No Median		CODE	0	(114)FUTURE ADT 300	(115) YEAR FUTURE ADT	2025	
(34) SKEW 45°	(35) STRUCTURE FLARED		0				
(10) INVENTORY ROUTE MIN VERT CLEAR			999.9 FT	INSPECTIONS			
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			19 FT	(90) INSPECTION DATE		01/19/2012	
(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			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

Run Date: 02/20/2012

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
JACKSON	14	2	490055	19	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1552	LONG BRANCH

LOCATED :	BRIDGE NAME :	CITY :
100 FT.S.JCT.SR1331		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	150 1995	LT 227 RT 227

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1954	BMU			Other or Unknown

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

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT HC 0 FT	8 FT	1 FT

SUPERSTRUCTURE :	TIMBER FLOOR ON TIMBER JOISTS
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SUBSTRUCTURE :	E.BTS:TIM.CAPS/TIM.POST&SILLS;E.BT.2 ENC.IN CONC.@ VAR.CTS.
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SPANS :	1 @ 18'-6
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BEAMS OR GIRDERS :	10 LINES 6X12 TIMBER JOISTS @ 2' CENTERS
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FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
4X8 TIM/1.5 AWS		20 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
19 FT	19.8 FT	LT .4 FT RT .4 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	18	DATE	04/25/2006
HS-1	HS-1	Int.jsts	SV 11				

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. 490055 COUNTY JACKSON ROUTE SR1552 OVER LONG BRANCH
 STRUCTURE TYPE TIMBER FLOOR ON TIMBER JOISTS
 ROUTE ORIENTATION S - N 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	45. CHANNEL & CHANNEL PROT.		
1. WEARING SURFACE			F	a. WATERWAY	G	
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58				b. ALIGNMENT	G	
a. CONCRETE				c. SCOUR	G	
b. TIMBER			1	d. SLOPE PROT., RIP-RAP, DIKES, ETC.		
c. STEEL PLANK				50. APPROACH ROADWAY CONDITION		
d. OPEN GRID				51. APPROACH SLABS		
3. RAILING				52. PAINT SYSTEM CODE		
a. CONCRETE				53. UTILITIES		
b. TIMBER			G	54. RESPONSE TO LIVE LOAD		
c. ALUMINUM				55. ESTIMATED REMAINING LIFE		
d. STEEL				8		
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			G			
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)				60. REGULATORY SIGN NOTICE ISSUED		
6. DECK EXP JTS. OR DEVICES. NO. OF EACH				61. PROMPT-ACTION NOTICE ISSUED		
a. STEEL PL OR FINGER				62. PRESENTLY POSTED		
b. MISC PREFAB				63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)		
c. COMPRESSION SEAL				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		
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)						
35. TIM SUB STR.				USE OF INSP. ACCESSIBILITY EQUIPMENT		
a. ABUT. & INT. BENT CAPS & RISERS			G	SNOOPER (CODE S, 4, OR N)		
b. PILES, POST, SILLS, & BRACING			F	HRS		NO
c. BULKHEADS, WING'S, & TIE BACKS			F	LADDER		NO
36. CONC SUB STR.				BUCKET TRUCK		NO
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			G			
37. STEEL SUB STR.				SPECIAL INSPECTION REQUESTED FOR		
a. ABUT. & INT. BENT CAPS & RISERS						
b. PILES, BRACING, AND BULKHEADS						
38. FOUNDATION PILES TYPE MATERIAL				NOTE		
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)						
40. FENDER SYSTEMS				80. INSPECTED BY:		
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		
1	F	WEARING SURFACE; A FEW SCATTERED 1/8" WIDE TRANS. TYPE CRACKS AT FLOOR BOARD SEAMS. NO PROBLEMS DUE TO CONDITION AS YET.	
35b	F	TIMBER POST AND SILLS; ALL ORIGINAL TIMBERS ARE WEATHERED WITH SCATTERED AREAS OF LIGHT 1" DEEP DECAY AND 1/4" WIDE SEASONAL CRACKING. NO PROBLEMS AS YET DUE TO CONDITIONS. POST 1,2 AND 3 AT ABUTMENT 2 HAVE BEEN SUPPLEMENTED SOMETIME IN THE PAST. THESE REPAIRS ARE CONSIDERED TEMP. [SEE DATA WORKSHEET].	
35c	F	TIMBER BULKHEAD AND WINGWALLS; THE DOWNSTREAM WINGWALL AT ABUTMENT 2 IS SLIGHTLY OUT OF PLUMB - LEANING TOWARD STREAM. ALL TIMBERS ARE WEATHERED WITH A COUPLE HAVING LIGHT 1/2" DEEP AREAS OF DECAY.	
45c	G	SCOUR; UPSTREAM WINGWALL AT ABUTMENT 1 HAS HAD SCOUR CONDITION MENTIONED IN A PREVIOUS REPORT REPAIRED WITH PLACEMENT OF RIP RAP. WORKING WELL AT THIS TIME.	
50	G	APPROACH ROADWAY CONDITION; BOTH APPROACHES HAVE BEEN PATCHED SOMETIME IN THE PAST AND ARE IN GOOD CONDITION AT THIS TIME.	
72	R	FIELD SCOUR EVALUATION; PREVIOUS SCOUR CONDITONS HAVE BEEN REPAIRED WITH PLACEMENT OF ROCK AND CONCRETE. WORKING WELL AT THIS TIME.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 490055

County JACKSON

Date: 01/19/2012

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

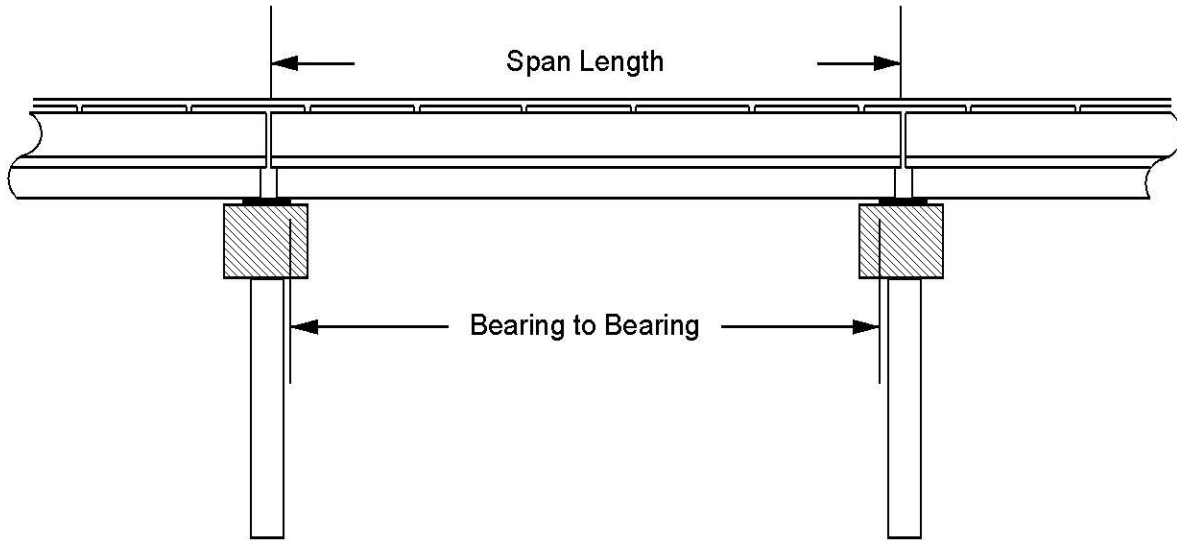
Spans

County: JACKSON

Structure No: 490055

Date: 01/19/2012

Inspected By: WBF



Span No	Span Length	Bearing to Bearing	Comments
1	18.5	17.1667	NON NBIS STRUCTURE

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 490055 County: JACKSON Date: 01/19/2012 By: WBF

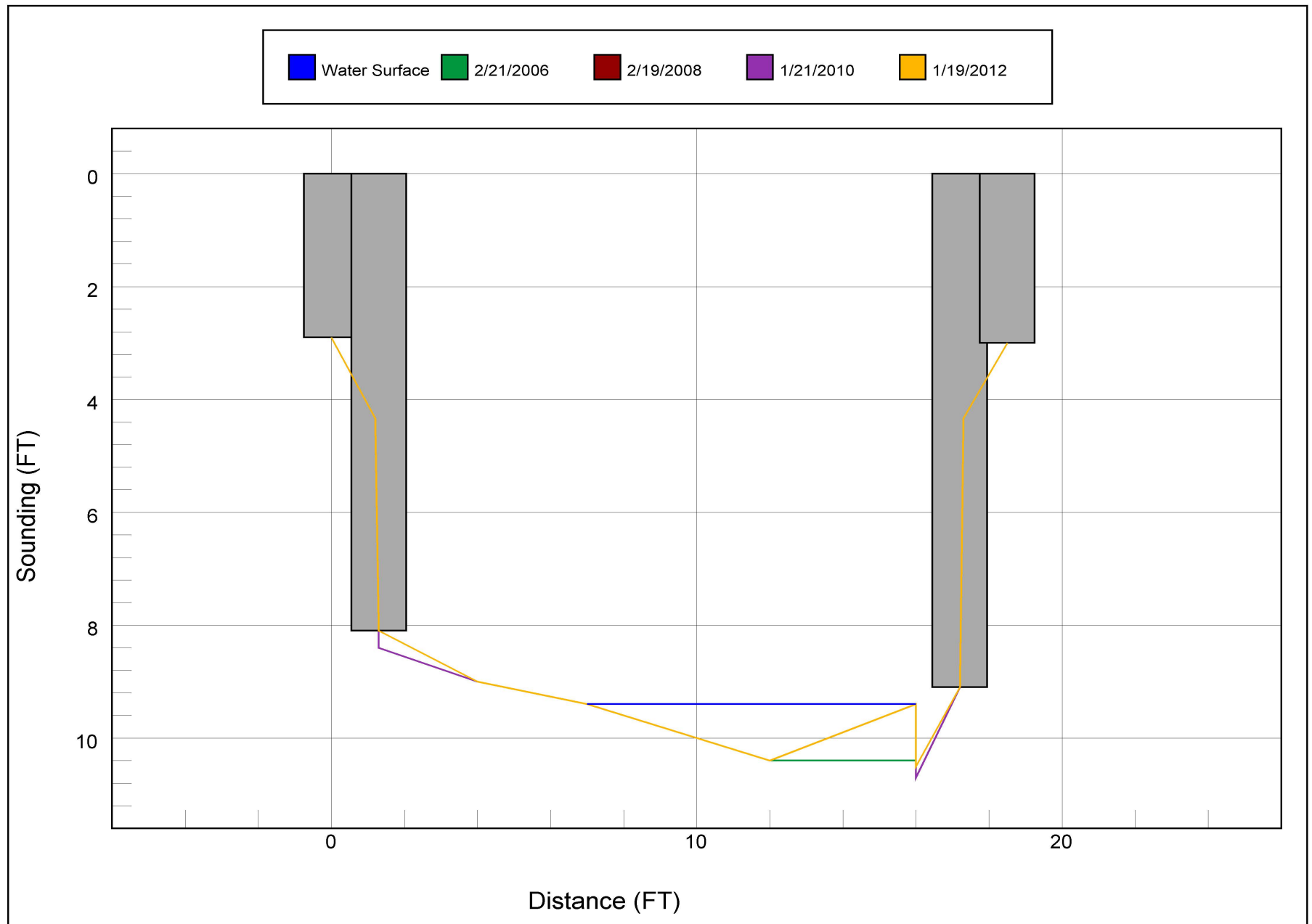
Record sounding from top of rail. Other location if needed: _____

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	2.9	FILL FACE ABUTMENT 1	0	3.4	FILL FACE ABUTMENT 1
1.2	4.333	Top of Cap			
1.3	8.1	STREAM FACE ABUTMENT 1	1.3	9.4	STREAM FACE ABUTMENT 1
4	9				
7	9.4	Water Surface/Water Edge (WSWE)			
12	10.4				
16	9.4	Water Surface/Water Edge (WSWE)			
16	10.5	FACE OF ENCASEMENT			
17.2	9.1	STREAM FACE ABUTMENT 2 TO TOP OF ENCASEMENT	17.2	9	STREAM FACE ABUTMENT 2
17.3	4.333	Top of Cap			
18.5	3	FILL FACE ABUTMENT 2	18.5	3.1	FILL FACE ABUTMENT 2

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch

VERIFIED BY DAVID SANDERS 1/19/2012



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

Title

APPROACH ROADWAY

Description

APPROACH ROADWAY

Bridge No: 490055

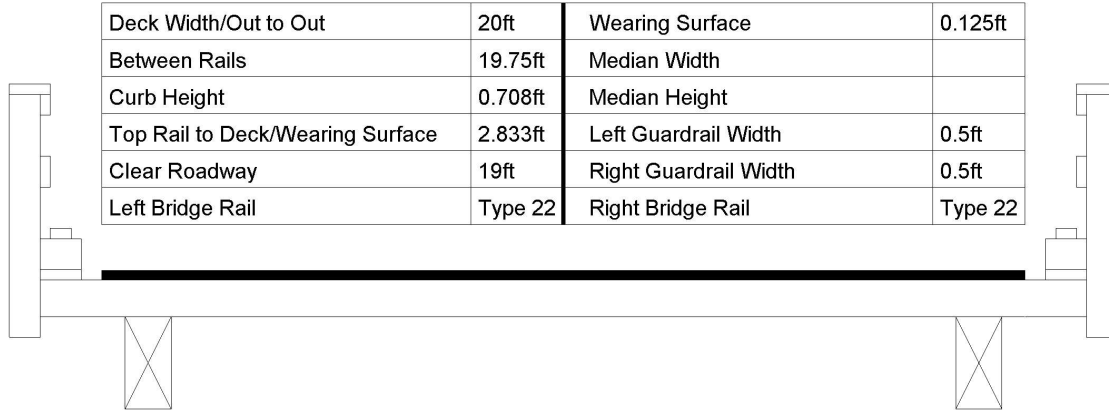
Drawn By: DAVID SANDERS

Date: 1/19/2012

File Name: S0118000983

Bridge Inspection Field Sketch

VERIFIED BY DAVID SANDERS 1/19/2012



Measurements for Span #	1		
Deck Thickness	0.312	Left Overhang	1
Top of Rail to Bottom of Beam	4.333	Right Overhang	1

Beam No	Beam Type	Spacing	Comments
1	Timber (Rectangular)	2.0ft	JOIST ARE .5 WIDE X .9688 HIGH.
2	Timber (Rectangular)	2.0ft	
3	Timber (Rectangular)	2.0ft	
4	Timber (Rectangular)	2.0ft	
5	Timber (Rectangular)	2.0ft	
6	Timber (Rectangular)	2.0ft	
7	Timber (Rectangular)	2.0ft	
8	Timber (Rectangular)	2.0ft	
9	Timber (Rectangular)	2.0ft	
10	Timber (Rectangular)		

Title

SUPER

Description

SUPER

Bridge No: 490055

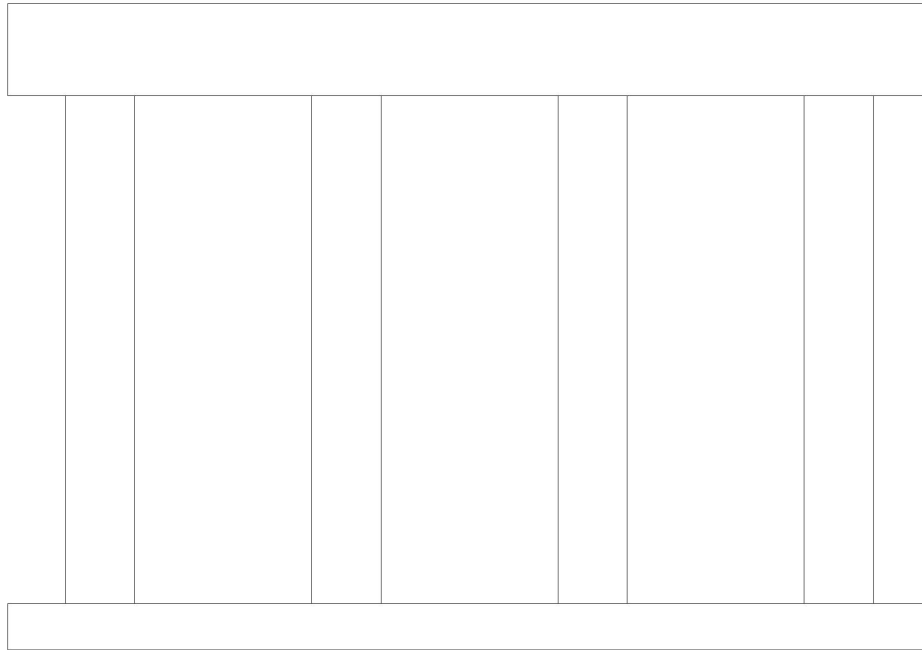
Drawn By: DAVID SANDERS

Date: 1/19/2012

File Name: S0118000984

Bridge Inspection Field Sketch

VERIFIED BY DAVID SANDERS 1/19/2012



Abutment #	1		
Cap - Beam Type (Wood or Steel)			
Cap Size	24.083ft Long	0.958ft Wide	1ft High
Left Overhang	2.333ft	Lt Cap/Beam Overhang	1.6667ft
Right Overhang	2ft	Rt Cap/Beam Overhang	.75ft
Sill - Sill			
Sill Size			

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Post and Sills	6.0833	3.5833	.8333 THROUGH		Vertical
2	Wood or Timber	Post and Sills	7.25	3.5833	.8333 THROUGH		Vertical
3	Wood or Timber	Post and Sills	6.4167	3.5833	.8333 THROUGH		Vertical
4	Wood or Timber	Post and Sills		3.5833	.8333 THROUGH		Vertical

Title

ABUTMENT 1

Description

ABUTMENT 1

Bridge No: 490055

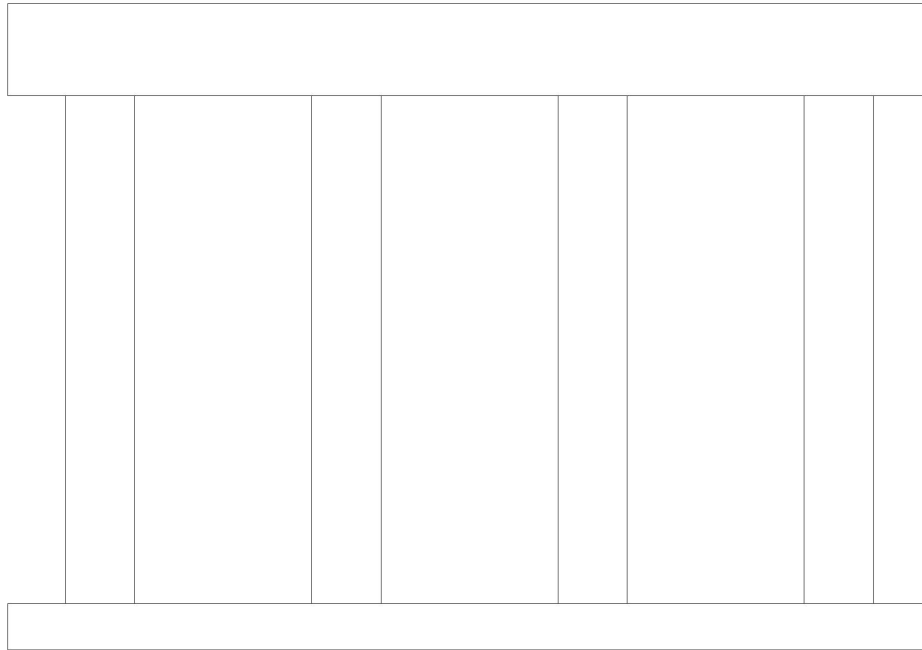
Drawn By: DAVID SANDERS

Date: 1/19/2012

File Name: S0118000985

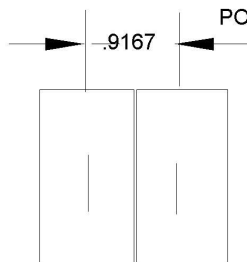
Bridge Inspection Field Sketch

VERIFIED BY DAVID SANDERS 1/19/2012



Abutment #	2		
Cap - Beam Type (Wood or Steel)			
Cap Size	22.833ft Long	0.958ft Wide	1ft High
Left Overhang	1.5ft	Lt Cap/Beam Overhang	1.0ft
Right Overhang	1.5ft	Rt Cap/Beam Overhang	1.0ft
Sill - Sill			
Sill Size			

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Post and Sills	6.333	3.5833	.8333 THROUGH		Vertical
2	Wood or Timber	Post and Sills	7.1667	3.5833	.8333 THROUGH		Vertical
3	Wood or Timber	Post and Sills	6.333	3.5833	.8333 THROUGH		Vertical
4	Wood or Timber	Post and Sills		3.5833	.8333 THROUGH		Vertical



POST 1,2 AND 3 HAVE HAD SUPPLEMENT POST PLACED ON THEIR DOWNSTREAM SIDES.

SUPP. POST 1 IS 1.0 THROUGH.

SUPP. POST 2 IS A .8333 X .8333.

SUPP. POST 3 IS A 1.0 X 1.0.

THESE REPAIRS ARE CONSIDERED TEMP.

Title

ABUTMENT 2

Description

ABUTMENT 2

Bridge No: 490055

Drawn By: DAVID SANDERS

Date: 1/19/2012

File Name: S0118000986



LOOKING SOUTH - BRIDGE IS POSTED SV 11 TTST 18 TONS.



LOOKING UPSTREAM FROM TOP OF BRIDGE.



LOOKING DOWNSTREAM FROM TOP OF BRIDGE.



LOOKING NORTH



DOWNSTREAM



UPSTREAM



ABUTMENT 2 - TEMP. REPAIR TO POST 1, 2, AND 3.



REP. OF UNDERSIDE



ABUTMENT 1



RIPRAP ALONG ABUTMENT 1 WINGWALL ON UPSTREAM SIDE.