



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

TEMP REPAIR

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY ASHE BRIDGE NUMBER 040061 INSPECTION CYCLE 2 YRS
ROUTE SR1352 ACROSS LITTLE HORSE CREEK M.P. 0

LOCATION 25 FT.S.JCT.SR1324

SUPERSTRUCTURE TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE E.BTS:TIMBER CAPS/TIMBER POST & CONCRETE SILLS @ VAR. CTS.

SPANS 1 @ 45'-8

LONGITUDE 81° 31' 10.0"

LATITUDE 36° 30' 34.7"

PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 05/23/2012

OPERATING RATING

PRESENT POSTING SV 18 TTST 22

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT 4 DELIN.



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: 06/21/2012

IDENTIFICATION				CLASSIFICATION			
(1) STATE NAME -NORTH CAROLINA	BRIDGE	040061		SUFFICIENCY RATING =		32.39	
(8) STRUCTURE NUMBER(FEDERAL)		000000000090061		STATUS =	Structurally Deficient		
(5) INVENTORY ROUTE (ON/UNDER) - ON		31013520					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		3					
(3) COUNTY CODE	9	(4) PLACE CODE	0	(112)NBIS BRIDGE SYSTEM -		YES	
(6) FEATURE INTERSECTED -	LITTLE HORSE CREEK			(104)HIGHWAY SYSTEM	Is not on NHS	0	
(7) FACILITY CARRIED	SR1352			(26) FUNCTIONAL CLASS -	Local	09	
(9) LOCATION	25 FT.S.JCT.SR1324			(100)STRAHNET HIGHWAY -	Not a STRAHNET Route	0	
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE -	No Parallel Structure	N	
(16)LAT	36° 30' 26.0"	(17)LONG	81° 31' 15.8"	(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:	Steel			(58) DECK		5	
TYPE -	Stringer Mutlibeam or Girder	CODE	302	(59) SUPERSTRUCTURE		5	
(44) STRUCTURE TYPE APPR :				(60) SUBSTRUCTURE		3	
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	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	0	
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED		P	
				DESCRIPTION -	Posted for Load		
AGE AND SERVICE				APPRAISAL			
(27) YEAR BUILT			1965	(67) STRUCTURAL EVALUATION		2	
(106)YEAR RECONSTRUCTED				(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		(72) APPROACH ROADWAY ALIGNMENT		7	
(29) AVERAGE DAILY TRAFFIC			310	(36) TRAFFIC SAFETY FEATURES		0000	
(30) YEAR OF ADT	2009	(109) TRUCK ADT PCT	6%	(113)SCOUR CRITICAL BRIDGES		U	
(19) BYPASS OR DETOUR LENGTH			1 MI				
GEOMETRIC DATA				PROPOSED IMPROVEMENTS			
(48) LENGTH OF MAXIMUM SPAN			44 FT	(75) TYPE OF WORK -		CODE	
(49) STRUCTURE LENGTH			46 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			25 FT	(95) ROADWAY IMPROVEMENT COST			
(52) DECK WIDTH OUT TO OUT			26 FT	(96) TOTAL PROJECT COST			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)			20 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(33) BRIDGE MEDIAN -	No Median	CODE	0	(114)FUTURE ADT	620	(115) YEAR FUTURE ADT	2025
(34) SKEW	10°	(35) STRUCTURE FLARED	0				
(10) INVENTORY ROUTE MIN VERT CLEAR			999.9 FT	INSPECTIONS			
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			25 FT	(90) INSPECTION DATE		05/23/2012	
(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: 06/21/2012

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
ASHE	11	3	040061	46	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1352	LITTLE HORSE CREEK

LOCATED :	BRIDGE NAME :	CITY :
25 FT.S.JCT.SR1324		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	310 2009	LT 227 RT 227

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1965	BMU			Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
			TAN	80	ON 2 UNDER

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT HC 0 FT 15 FT 1 FT		

SUPERSTRUCTURE : TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE : E.BTS:TIMBER CAPS/TIMBER POST & CONCRETE SILLS @ VAR. CTS.

SPANS : 1 @ 45'-8

BEAMS OR GIRDERS : 10 LINES 18 I-BEAMS @ 2'-7 CENTERS

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
4X8 TIM/3 AWS		26 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
25 FT	25.7 FT	LT .3 FT RT .3 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	DATE
HS-1	HS-1	IntBeam	SV 18	22	10/16/2008

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. 040061 COUNTY ASHE ROUTE SR1352 OVER LITTLE HORSE CREEK
 STRUCTURE TYPE TIMBER FLOOR ON I-BEAMS
 ROUTE ORIENTATION S - N SPANS 1 @ 45'-8

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	F	51. APPROACH SLABS			
	c. STEEL PLANK			52. PAINT SYSTEM			CODE A F
	d. OPEN GRID			53. UTILITIES			
3. RAILING	a. CONCRETE			54. RESPONSE TO LIVE LOAD			G
	b. TIMBER		F	55. ESTIMATED REMAINING LIFE			10
	c. ALUMINUM						
	d. STEEL						
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			G				
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)				60. REGULATORY SIGN NOTICE ISSUED			NO
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)			5
	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	5	
10. LONGITUDINAL BEAMS OR GIRDERS			F	b. SUPERSTRUCTURE	ITEM 59	5	
11. LONGITUDINAL JOIST OR STRINGERS				c. SUBSTRUCTURE	ITEM 60	5	
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S			G	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)			G	a. WATERWAY ADAQUACY		7	
16. DRAINAGE SYSTEM (ON STRUCTURE)			G	b. APPR. RDWY. ALIGNMENT		7	
17. MOVABLE SPAN MACHINERY							
				72. FIELD SCOUR EVALUATION			L
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		F	SNOOPER (CODE S, 4, OR N)		HRS	NO
	c. BULKHEADS, WING'S, & TIE BACKS		F	LADDER			YES
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		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:	Don Wellborn		
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 DWELBORN			
Assisted By JSF			
Item No.	Grade		
2b	F	SOFT ON ENDS WITH SPOT DECAY. CRACKING, DISCOLORED AND SOFT ON BOTTOMS WITH SCATTERED DECAY. NAILERS SOFT WITH SCATTERED DECAY.	
3b	F	CRACKING AND SOFT WITH SCATTERED DECAY. SEVERAL POSTS SPLIT & DECAYED. BOTH RAIL LOOSE ESPECIALLY LEFT RAIL.	
10	F	SCATTERED RUST. SCATTERED SCALING RUST ALONG FLANGES ESPECIALLY ON EXTERIOR BEAMS.	
35b	F	CRACKING AND SPLITTING UP TO 3 IN. DEEP CAUSING SOME HOLLOW SOUNDING AREAS. DISCOLORED AND SOFT AT BOTTOMS. 3" DEEP DECAY IN BOTTOM PILE 7 ABUTMENT 2.	
35c	F	CRACKING, DISCOLORED AND SOFT WITH SPOT DECAY.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 040061

County ASHE

Date: 05/23/2012

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3316	Maint to Timber Handrail	LF	30	SPLIT & DECAY IN RAIL. BOTH RAIL LOOSE	
3324	Maint / Repair / Replace Timber Deck Components	SF	1170	DECAYING DECK & NAILERS	
5603	Partial Cleaning and Painting of Structural Steel	SF	100	RUSTING STEEL	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



BEAM 1



BEAM 7 - 8



ABUTMENT 1 PILE 4, 5 & ABUTMENT 2 PILE 1, 2, 3, 5 TEMP REPAIR



DECK BETWEEN BEAM 1 - 2 NEAR NORTH END



PILE 7 ABUTMENT 2

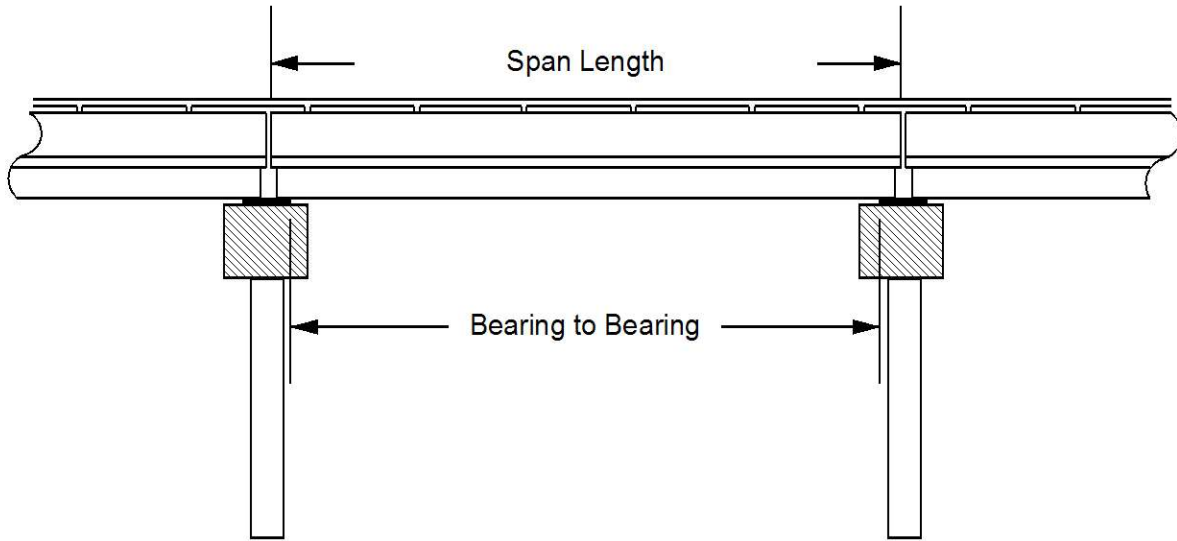


LEFT RAIL 3RD POST

Structure Data Worksheet

Spans

County: ASHE Structure No: 040061 Date: 05/23/2012 Inspected By: DCW



Span No	Span Length	Bearing to Bearing	Comments
1	45 ft. 8 in.	44 ft. 0 in.	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 040061 County: ASHE Date: 05/23/2012 By: DCW

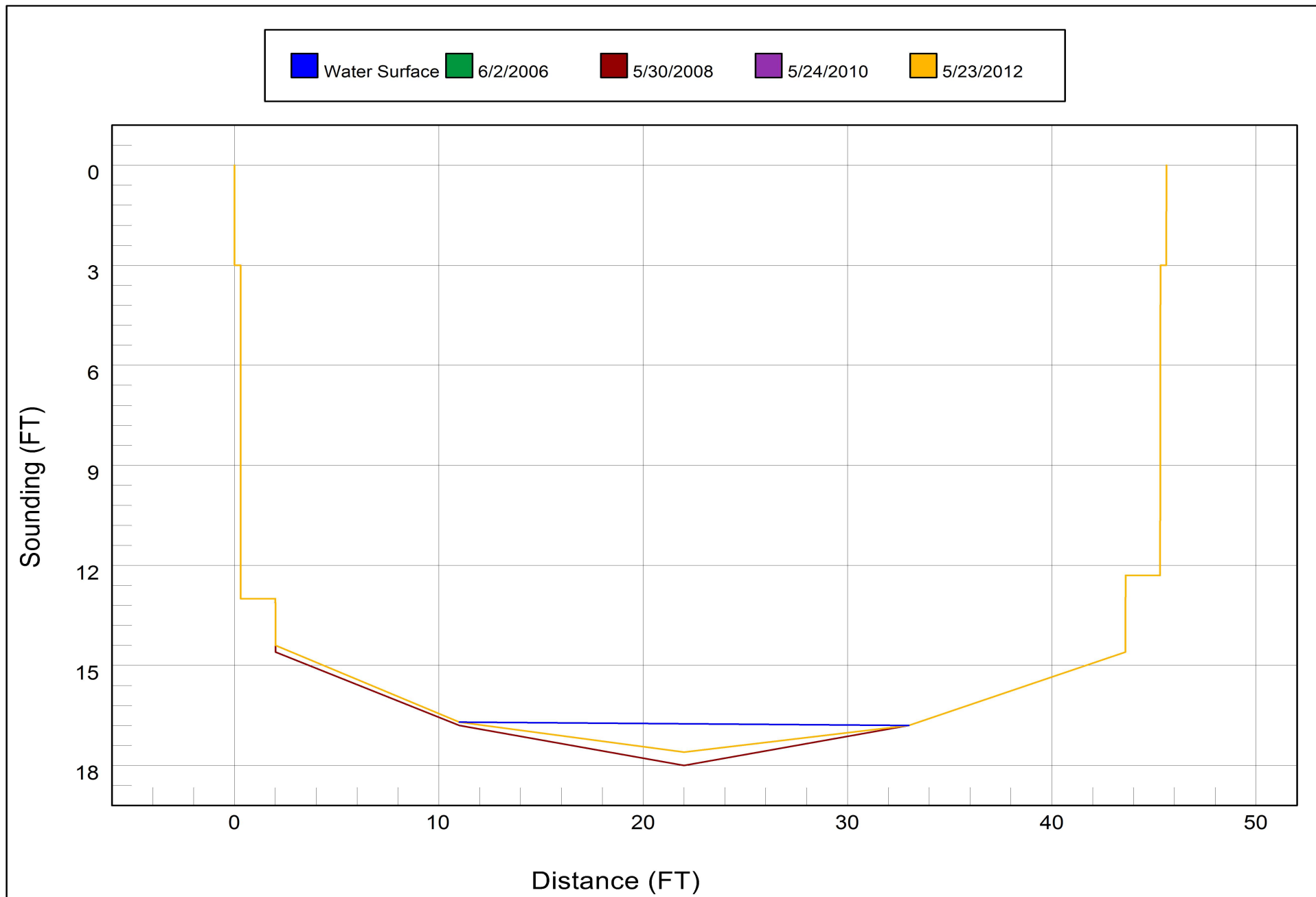
Record sounding from top of rail. Other location if needed: _____

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	0	TOP OF RAIL			
0	3	TOP OF FF			
0.3	3	TOP OF FF			
0.3	5.2	TOP OF CAP			
0.3	13	TOP OF CONCRETE			
2	13	TOP OF CONCRETE			
2.01	14.4	FACE OF CONCRETE	2.01	15.5	FACE OF CONCRETE
11	16.7	WS WE			
22	17.6	BED			
33	16.8	WS WE			
43.6	14.6	FACE OF CONCRETE	43.6	15.5	FACE OF CONCRETE
43.61	12.3	TOP OF CONCRETE			
45.3	12.3	TOP OF CONCRETE			
45.31	5.2	TOP OF CAP			
45.32	3	TOP OF FF			
45.6	3	TOP OF FF			
45.61	0	TOP OF RAIL			

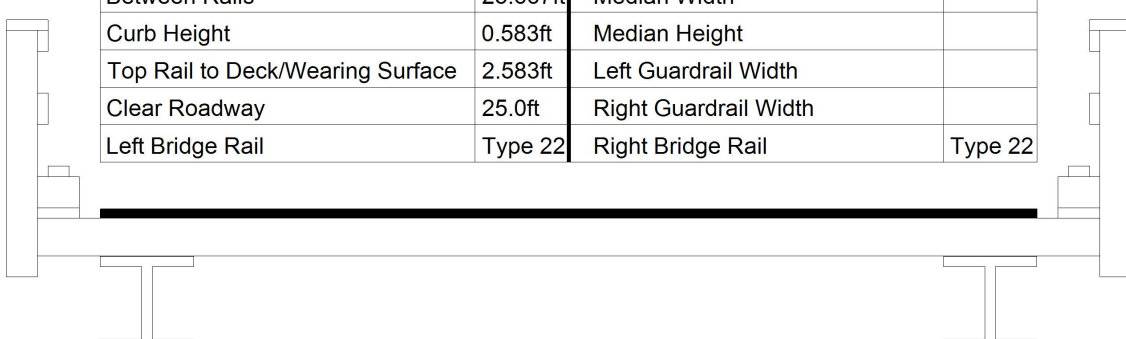
STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



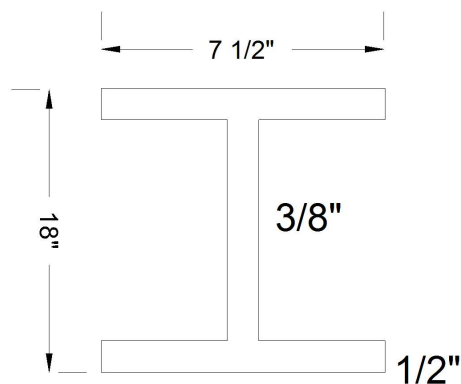
Bridge Inspection Field Sketch

Deck Width/Out to Out	26.0ft	Wearing Surface	0.250ft
Between Rails	25.667ft	Median Width	
Curb Height	0.583ft	Median Height	
Top Rail to Deck/Wearing Surface	2.583ft	Left Guardrail Width	
Clear Roadway	25.0ft	Right Guardrail Width	
Left Bridge Rail	Type 22	Right Bridge Rail	Type 22



Measurements for Span #	1		
Deck Thickness	0.312	Left Overhang	1.333
Top of Rail to Bottom of Beam	5.083	Right Overhang	1.333

Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	2.583ft	
2	Steel I Beam	2.583ft	
3	Steel I Beam	2.583ft	
4	Steel I Beam	2.583ft	
5	Steel I Beam	2.583ft	
6	Steel I Beam	2.583ft	
7	Steel I Beam	2.583ft	
8	Steel I Beam	2.583ft	
9	Steel I Beam	2.583ft	
10	Steel I Beam		



2 5/8" X 10" DIAPH. @ 1/3 PTS.

Title

TS

Description

SUPER **VERIFIED 5/23/12 DWELBORN**

Bridge No: 040061

Drawn By: DCW

Date: 05/30/2008

File Name: S0126000841

Bridge Inspection Field Sketch



SR 1352

Roadway	20ft Wide	2 Paved Lanes	Looking North
Left Shoulder	3ft Wide		3ft Unpaved
Right Shoulder	3ft Wide		3ft Unpaved
Left Guardrail			
Right Guardrail			

VERIFIED 5/23/12 J. FAULKNER

Title

APRW

Description

APPROACH ROADWAY

Bridge No: 040061

Drawn By: G.R.R.

Date: 05/30/2008

File Name: S0130000847

Bridge Inspection Field Sketch



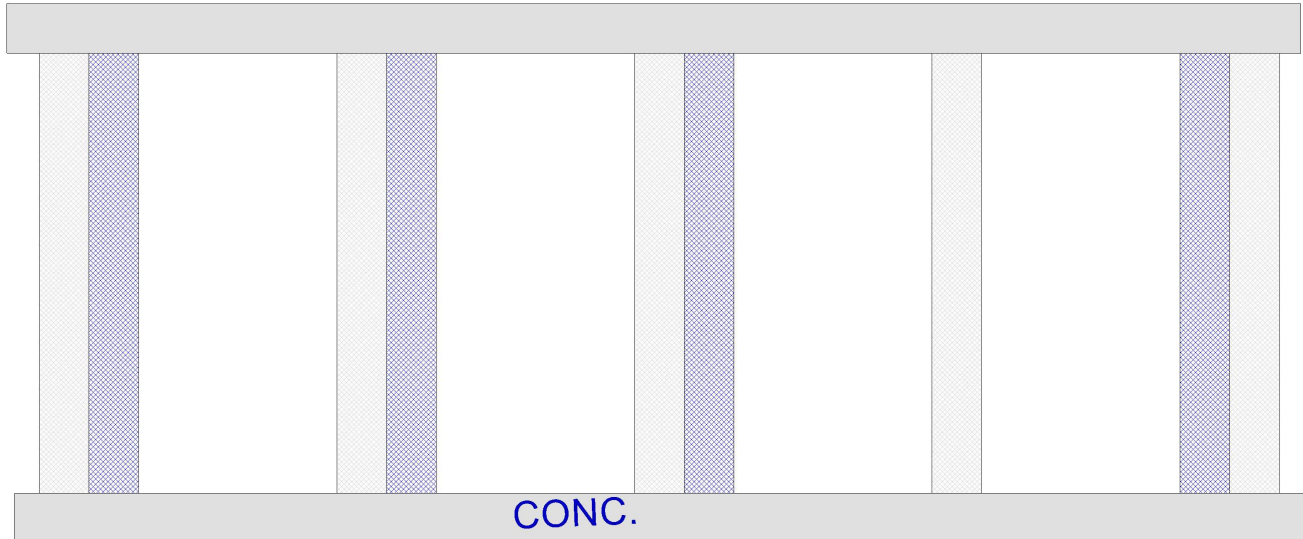
Abutment #	1		
Cap - Beam Type (Wood or Steel)			
Cap Size	26.167ft Long	1ft Wide	1ft High
Left Overhang	1ft	Lt Cap/Beam Overhang	1.250ft
Right Overhang	1ft	Rt Cap/Beam Overhang	1ft
Sill - Spread			
Sill Size			

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Post and Sills	6' 0"		12"		Vertical
2	Wood or Timber	Post and Sills	6' 0"		12"		Vertical
3	Wood or Timber	Post and Sills	5' 0"		12"		Vertical
4	Wood or Timber	Post and Sills	12"		12"	12"	Vertical
5	Wood or Timber	Post and Sills	5' 0'		12"		Vertical
6	Wood or Timber	Post and Sills	12"		12"	12"	Vertical
7	Wood or Timber	Post and Sills			12"		Vertical

VERIFIED 5/23/12 J. FAULKNER

Title	Description		
SUB 1	SUB AB 1		
Bridge No: 040061	Drawn By: G.R.R.	Date: 05/30/2008	File Name: S0130000848

Bridge Inspection Field Sketch



Cap Information			Material Timber							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
26.083 ft.	1.000 ft.	1.000 ft.	1.000 ft.	1.000 ft.	.917 ft.	1.167 ft.				
Subcap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information			Material							
Length	Width	Height								
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Timber	1 ft.	1 ft.			Vertical	No	No	No	No
2	Timber	5 ft.	1 ft.	1 ft.		Vertical	No	Yes	No	No
3	Timber	1 ft.	1 ft.			Vertical	No	No	No	No
4	Timber	5 ft.	1 ft.	1 ft.		Vertical	No	Yes	No	No
5	Timber	1 ft.	1 ft.			Vertical	No	No	No	No
6	Timber	5 ft.	1 ft.	1 ft.		Vertical	No	Yes	No	No
7	Timber	5 ft.	1 ft.			Vertical	No	No	No	No
8	Timber	1 ft.	1 ft.	1 ft.		Vertical	No	Yes	No	No
9	Timber		1 ft.			Vertical	No	No	No	No

VERIFIED 5/23/12 J. FAULKNER

Bent/Abutment #: 2	Similar Bents:
---------------------------	-----------------------

Title	Description
SUB 2	SUB AB 2
Bridge No: 040061	Drawn By: G.R.R.
Date: 05/30/2008	File Name: S0130000849



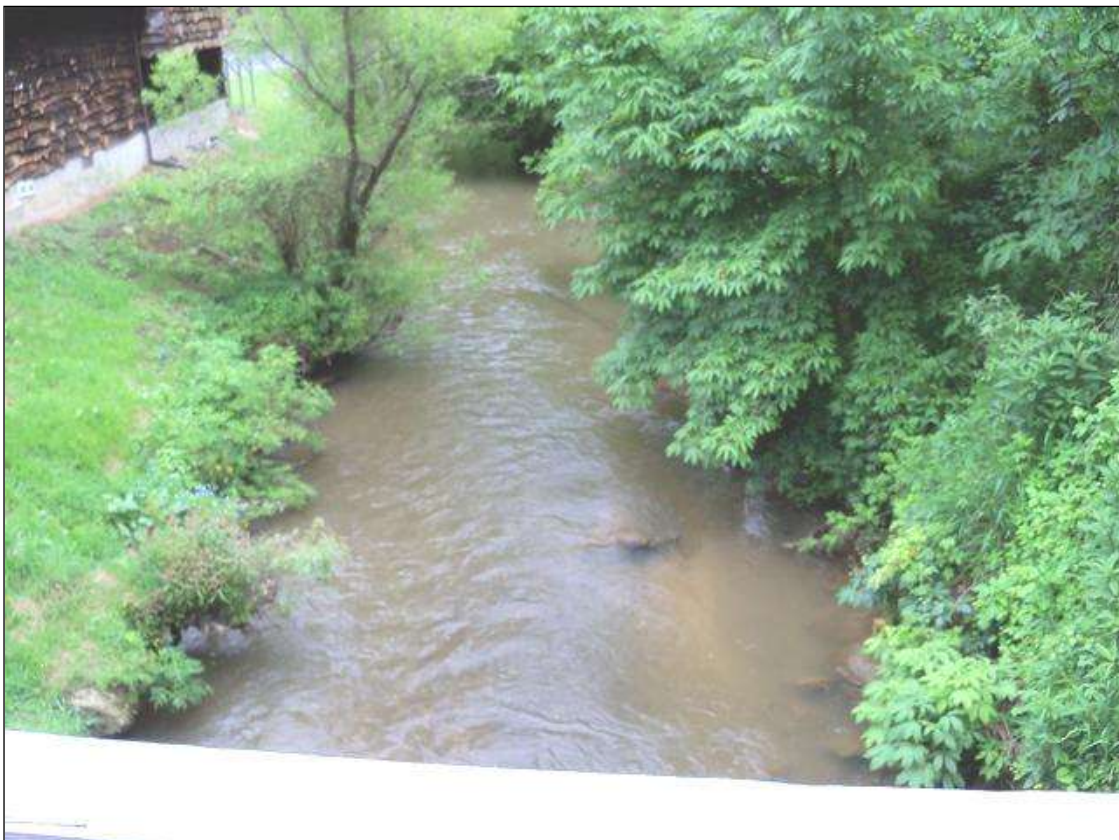
LOOKING NORTH



LOOKING DOWNSTREAM



LOOKING UPSTREAM



LOOKING DOWNSTREAM



LOOKING SOUTH



LOOKING UPSTREAM



BOTTOM VIEW LOOKING SOUTH