



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

TEMPORARY REPAIRS

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY DAVIDSON BRIDGE NUMBER 280086 INSPECTION CYCLE 2 YRS
ROUTE SR1158 ACROSS FIRST POTTS CREEK M.P. 0

LOCATION 0.8 MI. N. JCT. NC150

SUPERSTRUCTURE PRECAST PRESTRESSED CONCRETE CHANNELS

SUBSTRUCTURE END BENTS:PPC CAP,TIMBER POSTS & CONCRETE SILLS,TIM.BULKHEAD

SPANS 1@30'10

LONGITUDE 80° 23' 39.19"

LATITUDE 35° 45' 51.95"

INSPECTION DATE 04/03/2013

PRESENT CONDITION FAIR

PRESENT POSTING SV 34 TTST 41 SV 34 TTST 41

PROPOSED POSTING

OTHER SIGNS PRESENT (4) DELINEATORS



LOOKING NORTH

Fracture Critical	<u>No</u>
Temporary Shoring	<u>No</u>
Scour Critical	<u>No</u>
Scour POA	<u>Yes</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	

BRIDGE INSPECTION RECORD AND SUMMARY FOR SHORED STRUCTURES OR STRUCTURES WITH TEMPORARY REPAIRS MADE TO KEEP A BRIDGE OPEN

BRIDGE: **280086** County **Davidson** DATE: **4/29/2013**

THE FOLLOWING S. I. & A ITEMS ARE TO BE CODED TO REFLECT THE FACT THAT THE STRUCTURE IS SHORED OR HAS HAD TEMPORARY REPAIRS MADE TO KEEP THE BRIDGE OPEN :

	<u>CODE</u>	<u>BY</u>
S I & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION	T	TSE

S I & A ITEM 59 - SUPERSTRUCTURE

S I & A ITEM 60 - SUBSTRUCTURE

5 **TSE**

4/29/13

S I & A ITEM 64 OPERATING RATING

HS

01

BY:

S I & A ITEM 66 - INVENTORY RATING

HS

01

BY:

COMMENTS

Pile 4 @ Abut. 1 and Pile 2 @ Abut. 2 have been supplemented.

Temporary Repairs

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

Run Date: 04/30/2013

IDENTIFICATION				CLASSIFICATION			
(1) STATE NAME -NORTH CAROLINA	BRIDGE	280086		SUFFICIENCY RATING =		26.63	
(8) STRUCTURE NUMBER(FEDERAL)		00000000570086		STATUS =	Functionally Obsolete		
(5) INVENTORY ROUTE (ON/UNDER) - ON		31011580					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1					
(3) COUNTY CODE 57	(4) PLACE CODE	0		(112)NBIS BRIDGE SYSTEM -		YES	
(6) FEATURE INTERSECTED - FIRST POTTS CREEK				(104)HIGHWAY SYSTEM	Is not on NHS	0	
(7) FACILITY CARRIED SR1158				(26) FUNCTIONAL CLASS -	Local	09	
(9) LOCATION 0.8 MI. N. JCT. NC150				(100)STRAHNET HIGHWAY -	Not a STRAHNET Route	0	
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE -	No Parallel Structure	N	
(16)LAT 35° 45' 51.95"	(17)LONG 80° 23' 39.19"			(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: Prestressed Concrete							
TYPE - Channel Beam	CODE	522					
(44) STRUCTURE TYPE APPR :							
TYPE -	CODE	000					
(45) NUMBER OF SPANS IN MAIN UNIT		1		(58) DECK		7	
(46) NUMBER OF APPROACH SPANS				(59) SUPERSTRUCTURE		7	
(107)DECK STRUCTURE TYPE - 1	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			
				(31) DESIGN LOAD	H 10	1	
				(63) OPERATING RATING METHOD -	Load Factor	1	
				(64) OPERATING RATING -	HS-1	1	
				(65) INVENTORY RATING METHOD -	Load Factor	1	
				(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		1966		(67) STRUCTURAL EVALUATION		3	
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY		4	
(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		450		(36) TRAFFIC SAFETY FEATURES		0000	
(30) YEAR OF ADT 2011	(109) TRUCK ADT PCT	6%		(113)SCOUR CRITICAL BRIDGES		U	
(19) BYPASS OR DETOUR LENGTH		0 MI		PROPOSED IMPROVEMENTS			
GEOMETRIC DATA				(75) TYPE OF WORK -		CODE	
(48) LENGTH OF MAXIMUM SPAN		29 FT		(76) LENGTH OF STRUCTURE IMPROVEMENT			
(49) STRUCTURE LENGTH		31 FT		(94) BRIDGE IMPROVEMENT COST			
(50)CURB OR SIDEWALK: LEFT .5 FT RIGHT .5 FT				(95) ROADWAY IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		24.25 FT		(96) TOTAL PROJECT COST			
(52) DECK WIDTH OUT TO OUT		25.833 FT		(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		20 FT		(114)FUTURE ADT 900		(115) YEAR FUTURE ADT 2025	
(33) BRIDGE MEDIAN - No Median	CODE	0		INSPECTIONS			
(34) SKEW 0°	(35) STRUCTURE FLARED	0		(90) INSPECTION DATE		04/03/2013	
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9 FT		(92) CRITICAL FEATURE INSPECTION :		(93) CFI DATE	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		24.25 FT		A) FRACTURE CRIT DETAIL -	NO	A)	
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9 FT		B) UNDERWATER INSP -	NO	B)	
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad		0 FT		C) OTHER SPECIAL INSP	NO	C)	
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad		000 FT		SCOUR			
(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: 04/30/2013

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
DAVIDSON	9	1	280086	31	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1158	FIRST POTTS CREEK

LOCATED :	BRIDGE NAME :	CITY :
0.8 MI. N. JCT. NC150		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	450 2011	LT 233 RT 233

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1966	BMU	5.605		H 10

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :		
			TAN	90	ON 2	UNDER	0

NAVIGATION :			HT. CRN. TO BED :		WATER DEPTH :		
VC 0 FT	HC 0 FT		11 FT		1		FT

SUPERSTRUCTURE :	PRECAST PRESTRESSED CONCRETE CHANNELS
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SUBSTRUCTURE :	END BENTS:PPC CAP, TIMBER POSTS & CONCRETE SILLS, TIMBER BULKHEADS
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SPANS :	1@30'10"
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BEAMS OR GIRDERS :	10 SECTIONS PRECAST PRESTRESSED CONCRETE CHANNELS
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FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
PPC.CH, 3" AWS		25.833 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
24.25 FT	25.25 FT	LT .5 FT RT .5 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :				
HS-1	HS-1	Int Channel B	SV 38	TTST 44	DATE	04/29/2013	

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. 280086 COUNTY DAVIDSON ROUTE SR1158 OVER FIRST POTTS CREEK
 STRUCTURE TYPE PRECAST PRESTRESSED CONCRETE CHANNELS
 ROUTE ORIENTATION S - N SPANS 1@30'10

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	1	G	50. APPROACH ROADWAY CONDITION			G
	b. TIMBER			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			55. ESTIMATED REMAINING LIFE			17
	c. ALUMINUM						
	d. STEEL		G				
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)			0
	e. OPEN JOINTS			65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)			0
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			G	b. SUPERSTRUCTURE	ITEM 59	7	
11. LONGITUDINAL JOIST OR STRINGERS				c. SUBSTRUCTURE	ITEM 60	6	
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		8	
17. MOVABLE SPAN MACHINERY							
				72. FIELD SCOUR EVALUATION			U
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)							
35. TIM SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS			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			NO
36. CONC SUB STR.	a. ABUT. & INT. BENT CAPS		G	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:	BT4216		
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 BRIAN HEDRICK			
Assisted By LEE HICKS			
Item No.	Grade		
10A	NO	NO CURVED GIRDERS	
35b	F	ALL POSTS ARE 1/8 IN SOFT WITH 1/8 IN CHECKING. POST 4 ABUT 2 IS DELAMINATED ON LT. FACE. POST ADDED TO RT. OF POST 2 ABUT 2 . POST ADDED TO RT. OF POST 4 ABUT 1.	
35c	F	ABUT 1 TIMBER BULKHEAD BOARD BETWEEN POST 1 AND 2 DECAYED. 2 FT. W X 4 IN. H X 2 IN. DEEP. ABUT 2 TIMBER BULKHEAD BOARDS COVERED IN ALL BAYS WITH 1 IN. X 12 IN. W TIMBER BOARDS.	
62	YES	SV 34 TTST 41	
72	U	SEE BRIDGE SCOUR ASSESSMENT 5-20-10	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 280086

County DAVIDSON

Date: 04/03/2013

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	1	POST 4 IN ABUT 2 DELAMINATED.	
3346	Repair / Maintain Timber Wings & Blkhds	SF	2	TIMBER BULKHEAD BOARD BETWEEN POST 1 AND 2 IN ABUT 1 DECAYED.	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



REPAIR TO ABUT 2 BULKHEAD BOARDS

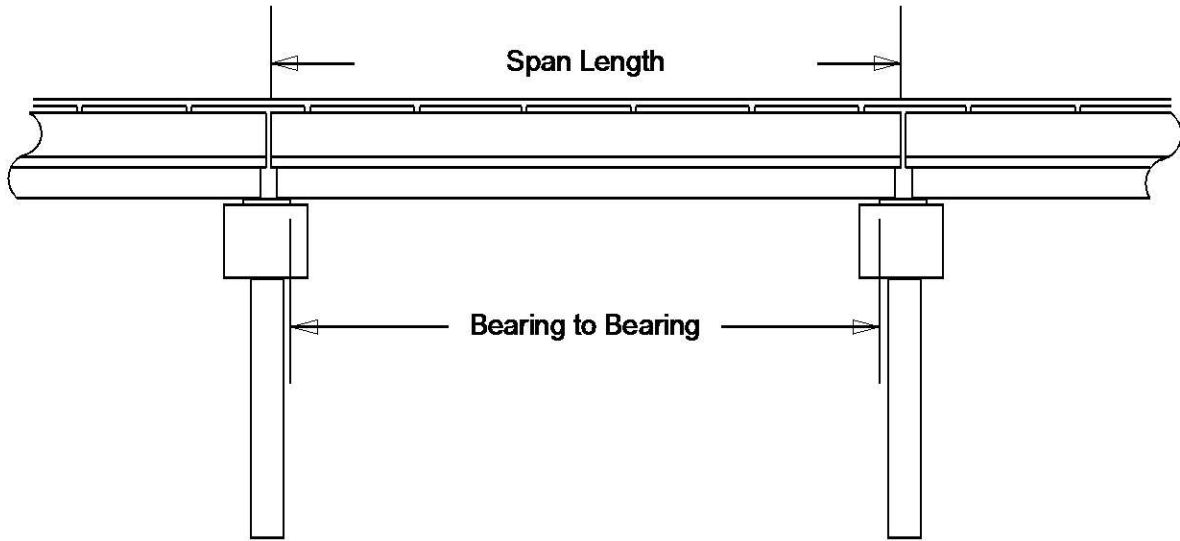


ABUT 1 TIMBER BULKHEAD BOARD BETWEEN POST 1 AND 2 DECAYED.

Structure Data Worksheet

Spans

County: DAVIDSON Structure No: 280086 Date: 04/03/2013 Inspected By: BTH



Span No	Span Length	Bearing to Bearing	Comments
1	30.833	29.417	NBIS BL : 28.166 FT

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 280086 County: DAVIDSON Date: 04/03/2013 By: BTH

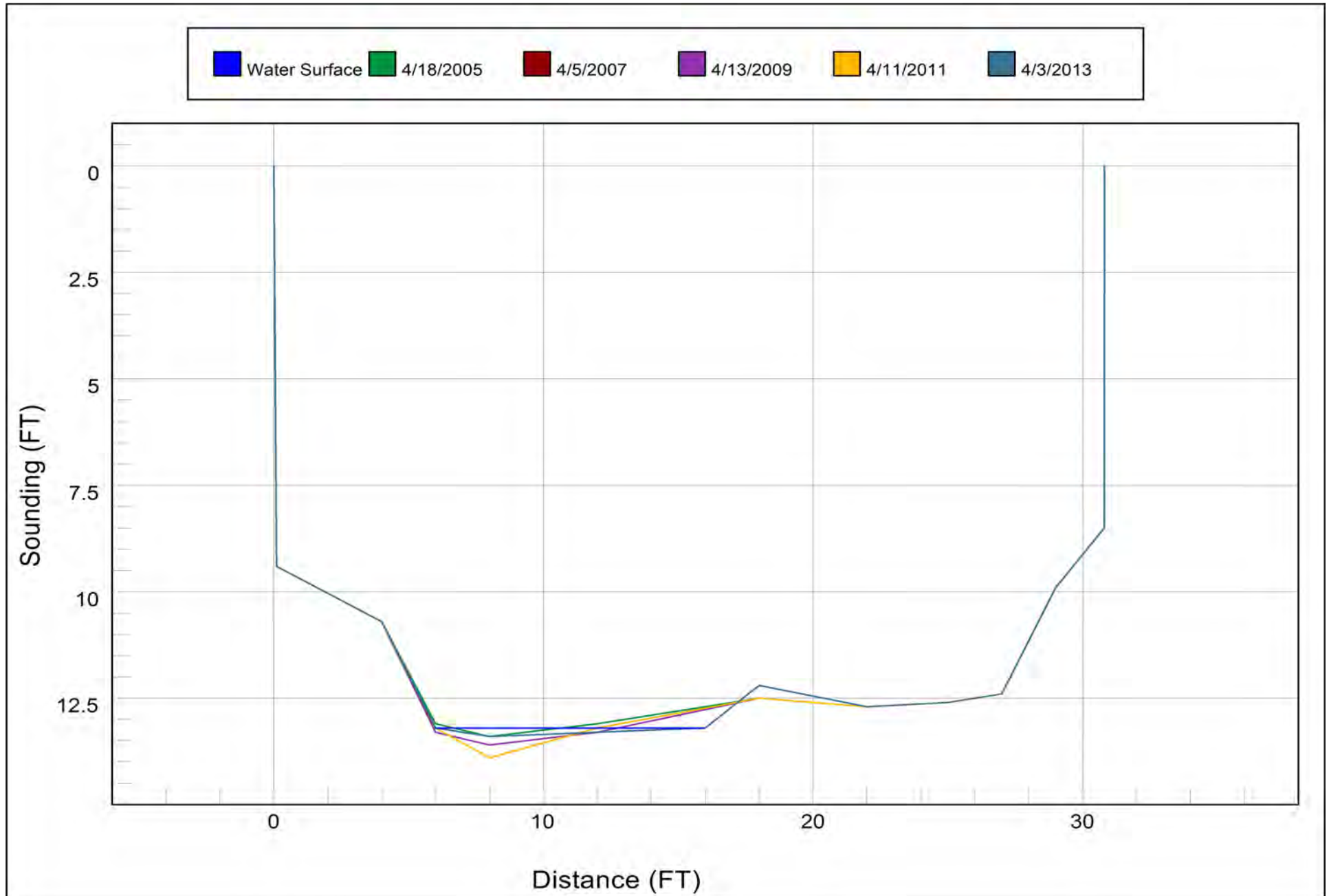
Record sounding from top of rail. Other location if needed: _____

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	ABUT 1	0	0.0	ABUT 1
0.1	9.4		0.1	9.2	
4	10.7				
6	13.2	WS WE			
8	13.4				
16	13.2	WS WE			
18	12.2				
22	12.7				
25	12.6				
27	12.4				
29	9.9				
30.8	8.5		30.8	8.5	
30.81	0	ABUT 2	30.81	0.0	ABUT 2

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch

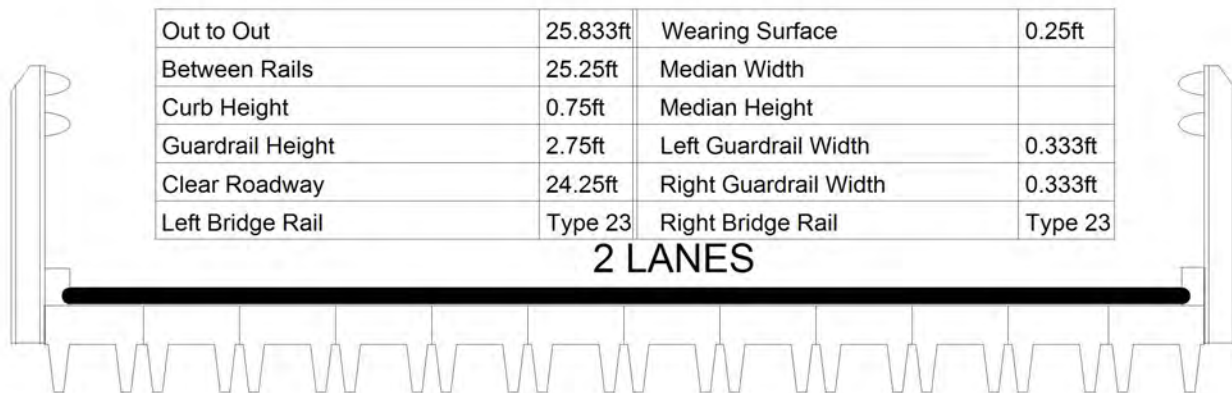


Roadway	20ft Wide	2 Paved Lanes	Looking North
Left Shoulder	6ft Wide		6ft Unpaved
Right Shoulder	6ft Wide		6ft Unpaved
Left Guardrail			
Right Guardrail			

MEASUREMENTS VERIFIED 4-03-13 BTH
MEASUREMENTS VERIFIED 4-11-11 BTH
MEASUREMENTS VERIFIED 4-13-09 BTH

Title APPROACH ROADWAY		Description SHEET 1	
Bridge No: 280086	Drawn By: BTH	Date: 04/04/07	File Name: S0090000078

Bridge Inspection Field Sketch



Measurements for Span #	1		
Deck Thickness	0.417	Left Overhang	
Top of Rail to Bottom of Beam	4.333	Right Overhang	

No. of Channels	10
Leg Width	.209ft
Leg Height	1.0ft
Leg to Leg (Centers)	2.0ft
Channel Width	2.542ft
Channel Height	1.42ft
Comments	

MEASUREMENTS VERIFIED 4-03-13 BTH
 MEASUREMENTS VERIFIED 4-11-11 BTH
 MEASUREMENTS VERIFIED 4-13-09 BTH

Title

SUPERSTRUCTURE

Description

SHEET 2

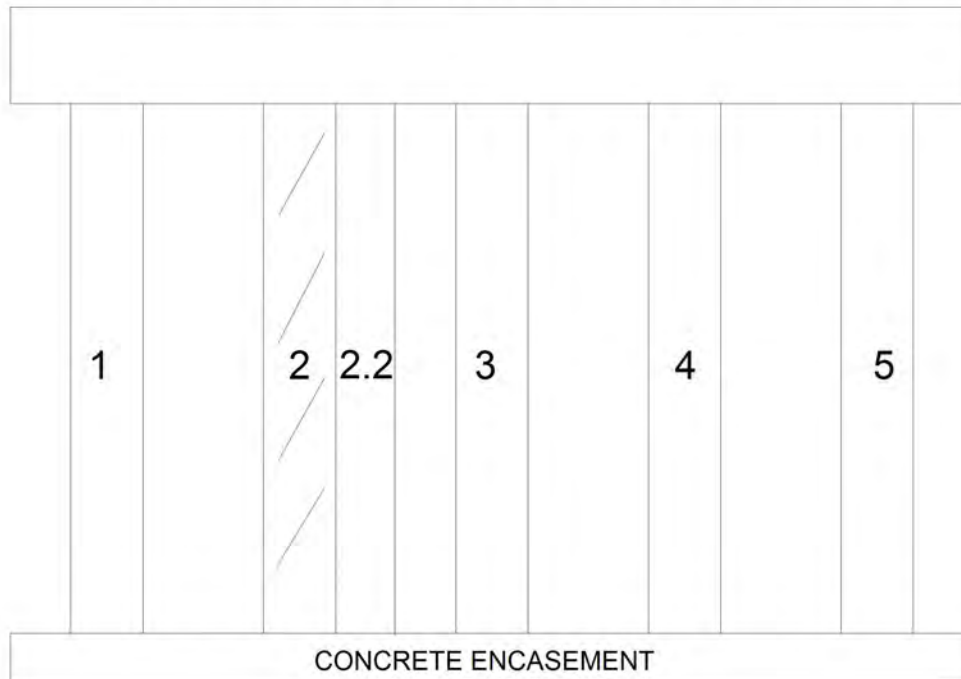
Bridge No: 280086

Drawn By: BTH

Date: 04/04/07

File Name: S0090000079

Bridge Inspection Field Sketch



Abutment #	2		
Cap - Pre-Cast			
Cap Size	26ft Long	1.333ft Wide	1ft High
Left Overhang	1.5ft	Lt Cap/Beam Overhang	.417ft
Right Overhang	1.5ft	Rt Cap/Beam Overhang	.417ft
Sill - Spread			
Sill Size			

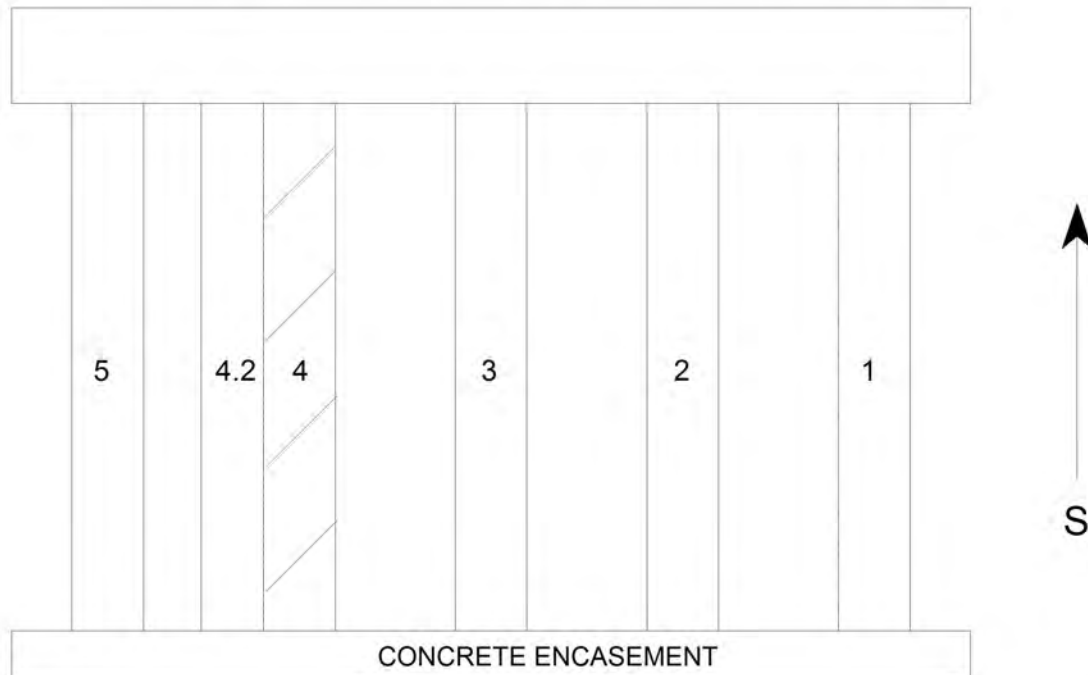
Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	6.583		.833X.833FT		Vertical
2	Wood or Timber	Pile Bent	4.917		.833X.833FT		Vertical
3	Wood or Timber	Pile Bent	5.75		.833X.833FT		Vertical
4	Wood or Timber	Pile Bent	5.75		.833X.833FT		Vertical
5	Wood or Timber	Pile Bent			.833X.833FT		Vertical

ABUT CAP HAVE .123 FT CROWN @ CENTER LINE
 POST # 2 IN ABUT # 2 HAS A .833 FT x .833 FT POST ADDED .833 FT TO RT.

MEASUREMENTS VERIFIED 4-03-13 BTH
 MEASUREMENTS VERIFIED 4-11-11 BTH
 MEASUREMENTS VERIFIED 4-13-09 BTH

Title		Description	
SUBSTRUCTURE		SHEET 3	
Bridge No: 280086	Drawn By: BTH	Date: 04/04/07	File Name: S0090000080

Bridge Inspection Field Sketch



Abutment #	1		
Cap - Pre-Cast			
Cap Size	26ft Long	1.333ft Wide	1ft High
Left Overhang	1.5ft	Lt Cap/Beam Overhang	.417ft
Right Overhang	1.5ft	Rt Cap/Beam Overhang	.417ft
Sill - Spread			
Sill Size			

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	4.917		.833X.833FT		Vertical
2	Wood or Timber	Pile Bent	6.583		.833X.833FT		Vertical
3	Wood or Timber	Pile Bent	5.75		.833X.833FT		Vertical
4	Wood or Timber	Pile Bent	5.75		.833X.833FT		Vertical
5	Wood or Timber	Pile Bent			.833X.833FT		Vertical

ABUT CAP HAVE .123 FT CROWN @ CENTER LINE

POST # 4 IN ABUT # 1 HAS A .833 FT x .833 FT POST ADDED .833 FT TO RT.

MEASUREMENTS VERIFIED 4-03-13 BTH

MEASUREMENTS VERIFIED 4-11-11 BTH

MEASUREMENTS VERIFIED 4-13-09 BTH

Title

SUBSTRUCTURE

Description

SHEET 4

Bridge No: 280086

Drawn By: BTH

Date: 04/04/07

File Name: S0090000081



LOOKING NORTH



SOUTH POSTING



LOOKING WEST



DOWNSTREAM



UPSTREAM



LOOKING SOUTH



NORTH POSTING



LOOKING EAST



ABUT 1 WITH TEMPORARY REPAIR



UPSTREAM



ABUT 2 WITH TEMPORARY REPAIR



SUPERSTRUCTURE SPAN



DOWNSTREAM