ISSUED FOR

No No

No No

No

NUMBERED

REQUIRED

WEIGHT LIMIT

**DELINEATORS** NARROW BRIDGE

ONE LANE BRIDGE

LOW CLEARANCE



NC DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS BRIDGE MANAGEMENT UNIT** 

# BRIDGE INSPECTION REPORT

INSPECTION TYPE:	Routine Inspection
COUNTY PENDER	BRIDGE NUMBER 700117 INSPECTION CYCLE 2 YRS
ROUTE SR1520	ACROSS HOLLY SHELTER CREEK M.P. 0
LOCATION 3.0MI.S.JCT.NC50	
SUPERSTRUCTURE TIMBER FLOOR/TIM	BER JOISTS
SUBSTRUCTURE E.BTS&BTS:TIMBER	CAPS/TIMBER PILES;TIM.CRUTCH BTS.
SPANS 1@9';1@8'3;2@8'8;1@8'6;1@8'	
LONGITUDE 77° 43' 49.5"	LATITUDE 34° 38' 26.0"
PRESENT CONDITION FAIR	INVENTORY RATING
INSPECTION DATE 10/22/2010	OPERATING HS-01
PRESENT POSTING Not Posted	Not Posted PROPOSED POSTING N.P.
	8-LD ANALYSIS DATE 11-15-10
POSTING LETTER DATE	SUFFICIENCY RATING
OTHER SIGNS PRESENT 4 DELINEATO	DRS.



#### NATIONAL BRIDGE INVENTORY------ STRUCTURE INVENTORY AND APPRAISAL Run Date: 11/19/2010

(1) STATE NAME -NORTH CAROLINA BRIDG	E 700117	SUFFICIENCY RATING = 12.7
(8) STRUCTURE NUMBER(FEDERAL)	000000001410117	STATUS = Structurally Deficient
NVENTORY ROUTE (ON/UNDER) - ON	131015200	
(2) STATE HIGHWAY DEPARTMENT DISTRICT	3	
3) COUNTY CODE 141 (4) PLACE CODE	00000	(112)NBIS BRIDGE SYSTEM - YES
6) FEATURE INTERSECTED - HOLLY SHELTER CREEK		(104)HIGHWAY SYSTEM NON NHS Route
7) FACILITY CARRIED SR1520		(26) FUNCTIONAL CLASS - Local 0
9) LOCATION 3.0MI.S.JCT.NC50		(100)STRAHNET HIGHWAY - Not a STRAHNET Route
(11)MILEPOINT	0	(101)PARALLEL STRUCTURE - No Parallel Structure
	43' 49.5"	(102)DIRECTION OF TRAFFIC - 2-way Traffic
	T SHARE	(103)TEMPORARY STRUCTURE - Temporary
(99)BORDER BRIDGE STRUCTURE NO		(110)DESIGNATED NATIONAL NETWORK - Not Part of
***************************************		(20) TOLL On Free Road
STRUCTURE TYPE AND MATERIA	L —	(31) MAINTAIN - State Highway Agency 0
(43) STRUCTURE TYPE MAIN: Wood or Timber		(22) OWNER - State Highway Agency 0
TYPE - Stringer Mutlibeam or Girder	CODE 702	(37) HISTORICAL SIGNIFICANCE - Not Eligible
(44) STRUCTURE TYPE APPR :	1777	
TYPE -	CODE	CONDITION CODE
(45) NUMBER OF SPANS IN MAIN UNIT	8	
(46) NUMBER OF APPROACH SPANS		(59) SUPERSTRUCTURE
(107)DECK STRUCTURE TYPE - Timber	CODE 8	(60) SUBSTRUCTURE
(108)WEARING SURFACE / PROTECTIVE SYSTEM:	0002 0	(61) CHANNEL & CHANNEL PROTECTION
(A) TYPE OF WEARING SURFACE - Bituminous	CODE 6	(62) CULVERTS
(B) TYPE OF MEMBRANE - None	CODE 0	
(C) TYPE OF DECK PROTECTION - None	CODE 0	
(C) THE OF BEOK PROTECTION - NOIS	OODE 0	(31) DESIGN LOAD Other or Unknown
ACE AND SERVICE		(64) OPERATING RATING - HS-1  10
(27) YEAR BUILT	1956	
	1930	
(106)YEAR RECONSTRUCTED		
(42) TYPE OF SERVICE : ON - Highway	0005	***
UNDER - Waterway	CODE 15	DESCRIPTION - Open Temporary Shoring
(28) LANES: ON STRUCTURE 2 UNDER STRUC		400041041
(29) AVERAGE DAILY TRAFFIC	320	
(30) YEAR OF ADT 2009 (109) TRUCK ADT PCT	6 %	(67) STRUCTURAL EVALUATION (68) DECK GEOMETRY
(19) BYPASS OR DETOUR LENGTH	18 MI	
GEOMETRIC DATA	40.00	(69) UNDERCLEARANCES, VERTI & HORIZ
(48) LENGTH OF MAXIMUM SPAN	10 FT	
(49) STRUCTURE LENGTH	69 FT	
(50)CURB OR SIDEWALK: LEFT 0.3 FT RIGH		
(51) BRIDGE ROADWAY WIDTH CURB TO CURB	19.2 FT	
(52) DECK WIDTH OUT TO OUT	20.3 FT	Social Enter House
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)	19.0 FT	
(33) BRIDGE MEDIAN - No Median	CODE 0	PROPOSED IMPROVEMENTS —
(34) SKEW 0° (35) STRUCTURE FLARED	NO	(,
(10) INVENTORY ROUTE MIN VERT CLEAR	99 FT 99 IN	(76) LENGTH OF STRUCTURE IMPROVEMENT 0 F
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	19.2 FT	
(53) MIN VERT CLEAR OVER BRIDGE RDWY	99 FT 99 IN	(95) ROADWAY IMPROVEMENT COST
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroa	d	(96) TOTAL PROJECT COST
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad	d 99.9 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE
(56) MIN LAT UNDERCLEAR LT REF -	0.0 FT	(114)FUTURE ADT 640 (115) YEAR FUTURE ADT 2025
NAVIGATION DATA —		INSPECTIONS -
TAVIOATION DATA	CODE 0	(90) INSPECTION DATE 10/22/201
(38) NAVIGATION CONTROL - No Navigational Control		
		(92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
(38) NAVIGATION CONTROL - No Navigational Control (111)PIER PROTECTION - Not Applicable (39) NAVIGATION VERTICAL CLEARANCE	CODE	(92) CRITICAL FEATURE INSPECTION : (93) CFI DATE  A) FRACTURE CRIT DETAIL - NO A)

BRIDGE I & A FORM1 (90)A

### BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection

BRIDGE NO. 700117

COUNTY PENDER

ROUTE SR1520

OVER HOLLY SHELTER CREEK

	EVALUATION COD	E: 0-2 CRITICAL	L, 3 & 4 POOR, 5	& 6 FAIR, 7-9 GOOD		
	INSPECTION ITEM			ITEM	31	
	DECK ITEMS	GRADES		a. WATERWAY		5
1. WEARING S	SURFACE	5	& CHANNEL PROT.	b. ALIGNMENT		8
2. DECK NO.   a. CONCRETE		TINOI.	c. SCOUR		8	
OF EA TYPE	b. TIMBER	8 5		d. SLOPE PROT., RIP-RAP, DIKES,		
SPN GRADE	c. STEEL PLANK		50. APPROAC	50. APPROACH ROADWAY CONDITION		
TEM 58	d. OPEN GRID		51. APPROAC	H SLABS		
B. RAILING	a. CONCRETE		52. PAINT SYSTEM CODE			
	b. TIMBER	5	53. UTILITIES			
	c. ALUMINUM		54. RESPONSE TO LIVE LOAD			7
	d. STEEL		55. ESTIMATE	D REMAINING LIFE		10
4. CURBS, WI	HEELGUARDS, PARAPETS, MEDIANS	5				
5. WALKWAY	S (ON OR ATTACHED TO STRUCTURE	=)	60. REGULAT	ORY SIGN NOTICE IS:	SUED	NO
DECK EXP	a. STEEL PL OR FINGER		61. PROMPT-	ACTION NOTICE ISSU	ED	NO
JTS. OR	b. MISC PREFAB		62. PRESENTLY POSTED			NO
	D INSP TIME (INCLUD	E WRITE UP)(MAN HR)	12			
10. 01 E 1011	d. STANDARD JOINTS		64. TOTAL SNOOPER INSP. TIME (HRS)			
	e. OPEN JOINTS 65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)		E (MAN HRS)			
7. DECK DEB	RIS (INCLUDES EXCESS SAND/GRAV	EL) 7				
				70. SI&A GENERAL CO	INDITION RATINGS	
S	SUPER STR. (FM. 1 (90)B TRUSS) ITEM	1 59	a. DECK		ITEM 58	5
10. LONGITU	DINAL BEAMS OR GIRDERS		b. SUPERSTI	RUCTURE	ITEM 59	5
11. LONGITU	DINAL JOIST OR STRINGERS	5	c. SUBSTRU	CTURE	ITEM 60	5
12. INT. DIAP	'S, X-FRAMES, BRACING & CONN'S		d. CHANNEL	& CHANNEL PROT.	ITEM 61	5
13. END DIAP	S, CURTAIN WALLS, & CONN'S					
14. FLOOR B	EAMS AND CONNECTIONS			71. SI&A FIELD APP	RAISAL RATINGS	
15. BEARING	ASSEMBLIES (INCLUDING MISALIGN	)	a. WATERWA	AY ADAQUACY		5
100100000000000000000000000000000000000	E SYSTEM (ÓN STRUCTURE)	4	b. APPR. RD	WY. ALIGNMENT		8
17. MOVABLE	SPAN MACHINERY					
			72. FIELD SC	OUR EVALUATION		0
SL	IB STR. ITEMS. ITEM 60 (INCLUDE SC	OUR)				
35. TIM SUB	a. ABUT. & INT. BENT CAPS & RISEF	RS 6	U	ISE OF INSP. ACCESS	IBILITY EQUIPMENT	
STR.	b. PILES, POST, SILLS, & BRACING	5	SNOOPER (	CODE S, 4, OR N)	HRS	NO
	c. BULKHEADS, WING'S, & TIE BACK	(S 5	LADDER	H		NO
36. CONC	a. ABUT. & INT. BENT CAPS		BUCKET TRI	JCK		NO
SUB STR.	b. ABUT. & BENT COL'S BREASTWA	LLS	BOAT			YES
	c. ABUT. & INT. BENT PILES		OTHER			NO
	d. BACKWALLS, WING'S, RETAIN. W	ALLS				
	e. ABUT. & BENT FOOTINGS & SILLS	3				
37. STEEL	a. ABUT. & INT. BENT CAPS & RISER	RS	SPECIAL INS	SPECTION REQUESTE	D FOR	
SUB STR.	b. PILES, BRACING, AND BULKHEAD			**		
38. FOUNDA	TION PILES TYPE MATERIAL		NOTE			
	ROT., RIP-RAP (INCLUDE DRAINAGE)					
40. FENDER			80. INSPECT	ED BY:	Buyun Curon	
41. DRIFT		5	81. REVIEWE	- ACTION - 201		

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

	11-		00, 101-		518	0
BRIDGE:	11	COUNTY:	Pender	DATE:		

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:

					CODE	BY	
S I & A ITEM 103 - TEMPORARY STRUC	CTUR	E DESIGN	IATION		T	TSO	2
S I & A ITEM 59 - SUPERSTRUCTURE							
S I & A ITEM 60 - SUBSTRUCTURE					3	736	5/18/05
S I & A ITEM 64 OPERATING RATING				200			
	HS	01	BY:	RPG			
S I & A ITEM 66 - INVENTORY RATING	HS	01	BY:	RPG			

### COMMENTS

Some Piles Engased

Bridge I&A Form 1(82)H

State of North Carolina Dept. of Transportation

**Division of Highways** 

### FIELD INSPECTION REPORT

**Bridge Inspecion & Analysis** 

Team Leader BRYAN CROOM

ssisted By	RGM	
tem No.	Grade	
-1	5	LONGITUDINAL CRACKING/TRANSVERSE CRACKING IN ASPHALT WEARING SURFACE IN ALL SPANS.
2b	5	TIMBER DECK DECK BOARDS 1/2" SOFT AT ENDS.
3b	5	LONGITUDINAL CRACKING IN RAIL BOARDS UP TO 1/8" WIDE. LONGITUDINAL CRACKING ALONG RAIL POST'S UP TO 3/16" WIDE.
4	5	LONGITUDINAL CRACKING IN WHEEL GUARDS UP TO 1/4" WIDE.
11	5	LONGITUDINAL CRACKING ALONG JOIST UP TO 1/16" WIDE. JOIST 1 IN SPAN 1 OVER BENT 1 3/16" GAP BETWEEN JOIST AND CAP, JOIST 2 SIMILAR.
16	4	DRAINAGE MOST DECK DRAINAGE IS OCCURRING THROUGH ASPHALT WEARING SURFACE.
35a	6	WEST END OF BENT 2 CAP DECAYED 4" WIDE X 6" HIGH X 17" LONG. LONGITUDINAL CRACKING ALONG CAPS UP TO 1/16" WIDE. EAST END OF BENT 2 CAP DECAYED AREAS UP TO 14" LONG X 3" DIA.
35b	5	PILE 1 AT BENT 2 ENCASED IN CONCRETE. PILES 2 AND 3 AT BENT 2 ENCASED IN CONCRETE. CROSSBRACE AT AT BENT 2 SPAN 2 SIDE DECAYED AT PILE 1, 2' LONG. LONGITUDINAL CRACKING ALONG PILES UP TO 1/16" WIDE. PILE 3 AT BENT 4 SOUTH SIDE DECAYED/SPLIT 3" WIDE X 30" HIGH X 2" DEEP. PILE 2 AT BENT 4 DECAYED AT BOLT HOLE 1" WIDE X 4" HIGH X 10" DEEP. CROSSBRACE AT BENT 4 SPAN 5 SIDE DECAYED 2' LONG. PILE 1 ENCASEMENT AT BENT 4 CRACKED UP TO 1/2" WIDE. PILE 1 AT BENT 4 ENCASED IN CONCRETE. PILE 3 AT BENT 6 ENCASED IN CONCRETE. PILES 2 AND 3 AT END BENT 2 ENCASED IN CONCRETE. PILE 2 AT BENT 6 NORTH SIDE DECAYED 10" WIDE X 20" HIGH X 3" DEEP. PILE 2 AT BENT 2 ENCASEMENT CRACKED.
35c	5	SHEET PILE BOARDS AT BULKHEAD AND WINGWALLS. NORTHEAST TURNPILE AND WING PILE HOLLOW. SOUTHWEST WINGPILE DECAYED AND HOLLOW. SIGNS OF BULKHEAD LEAKAGE ALONG TOP OF END BENT CAPS.
41	5	SMALL DRIFT COLLECTING AT BENT 3 SPAN 4 SIDE 3" DIA. DRIFT COLLECTING AT PILES 1 AND 2 OF BENT 4 UP TO 5" DIA. DRIFT COLLECTING AT BENT 6 UP TO 5" DIA.

Bridge I&A Form 1(82)H
State of North Carolina
Dept. of Transportation

**Division of Highways** 

### FIELD INSPECTION REPORT

**Bridge Inspecion & Analysis** 

Team Leader	BRYAN	CROOM
1 COULT FORMOR	PILLIMIA	OILCOIN

Assisted	Ву	<b>RGM</b>
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Item No.	Grade	
45a	5	WATERWAY THE HIGHWATER LEVEL IS AT 5FT. ABOVE THE DECK.(SEE U/W REPORT)
50	6	SOUTH APPROACH ASPHALT WEARING SURFACE CRACKED AND SETTLED 1". SETTLED AREA AT CENTERLINE OF SOUTH APPROACH 2' WIDE X 16" LONG X 3" DEEP.
62	NO	NORTH APPROACH ASPHALT WEARING SURFACE SETTLED UP TO 2". NOT POSTED.

### BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 700117

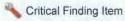
County PENDER

Date:

10/22/2010

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
2816	Asphalt Surface Repair or Replacement	SY	3	SOUTH APPROACH ASPHALT WEARING SURFACE CRACKED AND SETTLED 1". SETTLED AREA AT CENTERLINE OF SOUTH APPROACH 2' WIDE X 16" LONG X 3" DEEP. NORTH APPROACH ASPHALT WEARING SURFACE SETTLED UP TO 2".	
3304	Maintain/Replace Timber Superstructure Components	LF	2	JOIST 1 IN SPAN 1 OVER BENT 1 3/16" GAP BETWEEN JOIST AND CAP, JOIST 2 SIMILAR.	
3344	Repair / Replace Timber Substructure Components	LF	20	WEST END OF BENT 2 CAP DECAYED 4" WIDE X 6" HIGH X 17" LONG. EAST END OF BENT 2 CAP DECAYED AREAS UP TO 14" LONG X 3" DIA.	
3344	Repair / Replace Timber Substructure Components	LF	75	CROSSBRACE AT AT BENT 2 SPAN 2 SIDE DECAYED AT PILE 1, 2' LONG. CROSSBRACE AT AT BENT 2 SPAN 2 SIDE DECAYED AT PILE 1, 2' LONG.	
				PILE 3 AT BENT 4 SOUTH SIDE DECAYED/SPLIT 3" WIDE X 30" HIGH X 2" DEEP PILE 2 AT BENT 4 DECAYED AT BOLT HOLE 1" WIDE X 4" HIGH X 10" DEEP CROSSBRACE AT BENT 4 SPAN 5 SIDE DECAYED 2' LONG	
				PILE 2 AT BENT 6 NORTH SIDE DECAYED 10" WIDE X 20" HIGH X 3" DEEP	
3346	Repair / Maintain Timber Wings & Blkhds	SF	25	NORTHEAST TURNPILE AND WING PILE HOLLOW SOUTHWEST WINGPILE DECAYED AND HOLLOW. SIGNS OF BULKHEAD LEAKAGE ALONG TOP OF END BENT CAPS.	





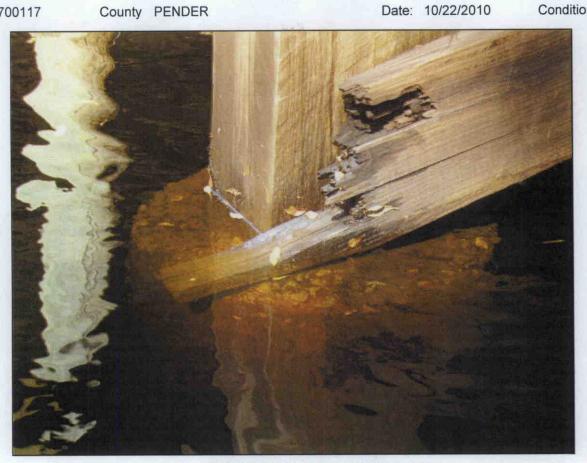
### BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 700117 Date: 10/22/2010 County PENDER

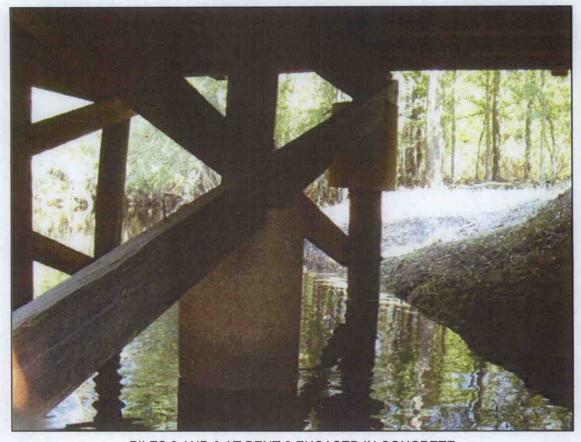
These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3366	Drift and Debris Removal	HR	30	SMALL DRIFT COLLECTING AT BENT 3 SPAN 4 SIDE 3" DIA. DRIFT COLLECTING AT PILES 1 AND 2 OF BENT 4 UP TO 5" DIA. DRIFT COLLECTING AT BENT 6 UP TO 5" DIA.	





PILE 1 AT BENT 2 ENCASED IN CONCRETE



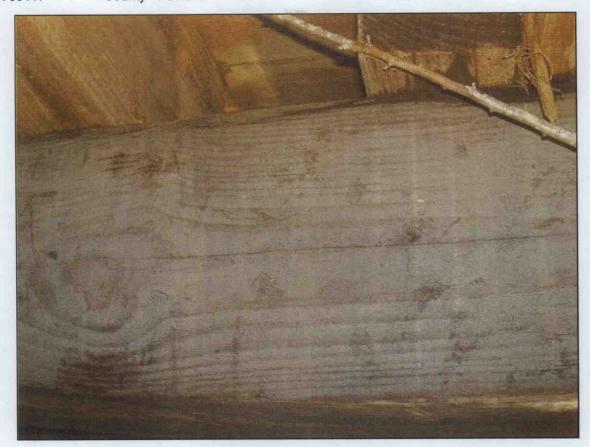
PILES 2 AND 3 AT BENT 2 ENCASED IN CONCRETE



CROSSBRACE AT AT BENT 2 SPAN 2 SIDE DECAYED AT PILE 1, 2' LONG.



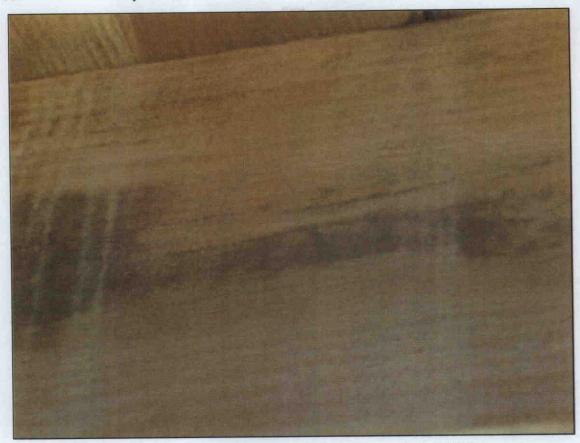
WEST END OF BENT 2 CAP DECAYED 4" WIDE X 6" HIGH X 17" LONG



LONGITUDINAL CRACKING ALONG CAPS UP TO 1/16" WIDE



LONGITUDINAL CRACKING ALONG PILES UP TO 1/16" WIDE



LONGITUDINAL CRACKING ALONG JOIST UP TO 1/16" WIDE



SMALL DRIFT COLLECTING AT BENT 3 SPAN 4 SIDE 3" DIA.



DRIFT COLLECTING AT PILES 1 AND 2 OF BENT 4 UP TO 5" DIA.



PILE 3 AT BENT 4 SOUTH SIDE DECAYED/SPLIT 3" WIDE X 30" HIGH X 2" DEEP

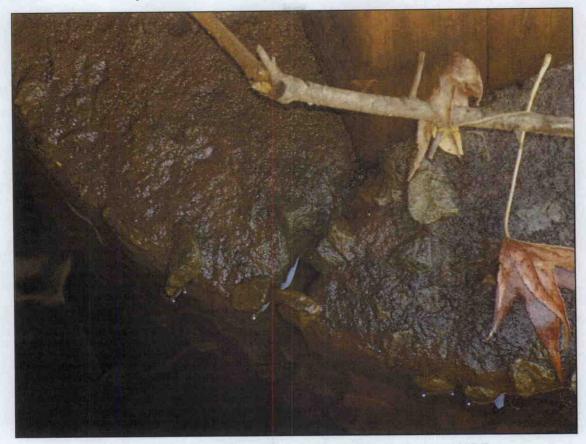
Date: 10/22/2010



PILE 2 AT BENT 4 DECAYED AT BOLT HOLE 1" WIDE X 4" HIGH X 10" DEEP



CROSSBRACE AT BENT 4 SPAN 5 SIDE DECAYED 2' LONG



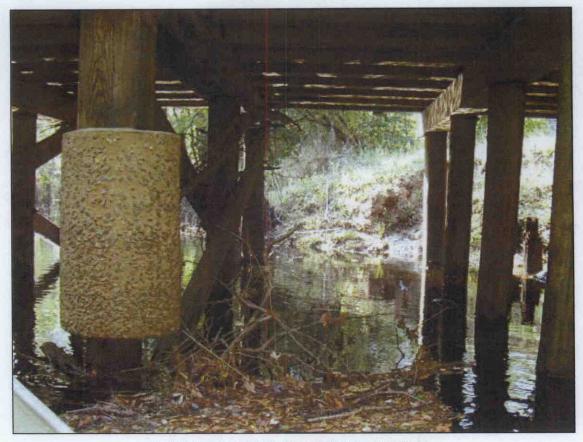
PILE 1 ENCASEMENT AT BENT 4 CRACKED UP TO 1/2" WIDE



PILE 1 AT BENT 4 ENCASED IN CONCRETE



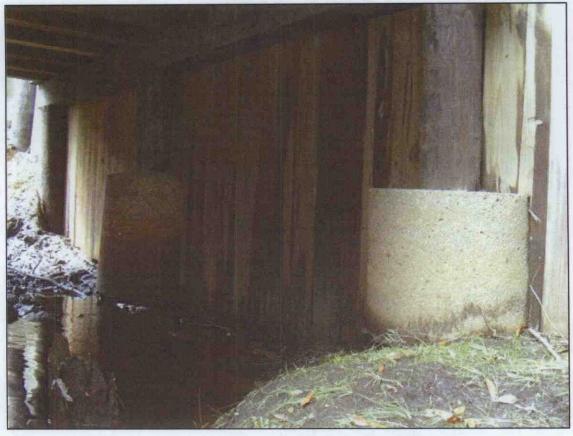
PILE 3 AT BENT 6 ENCASED IN CONCRETE



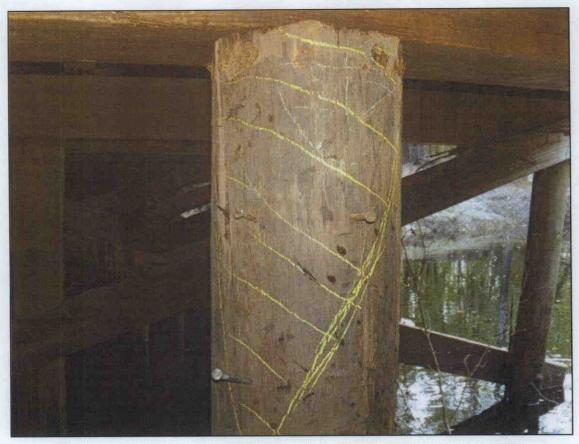
DRIFT COLLECTING AT BENT 6 UP TO 5" DIA.



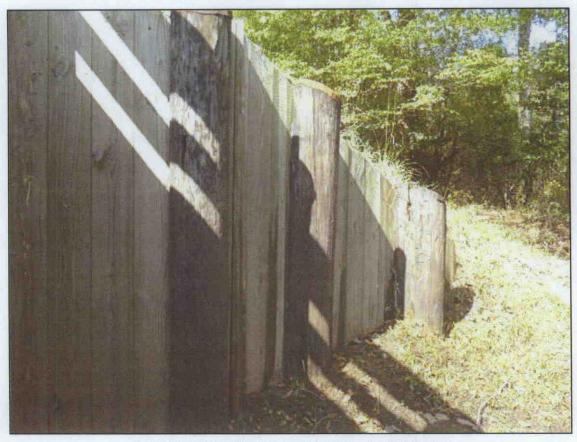
SHEET PILE BOARDS AT BULKHEAD AND WINGWALLS



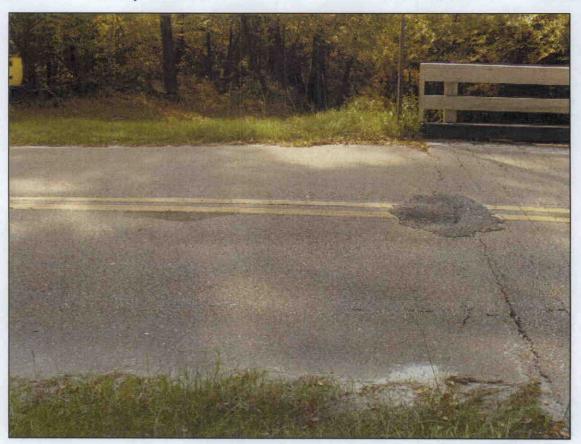
PILES 2 AND 3 AT END BENT 2 ENCASED IN CONCRETE



PILE 2 AT BENT 6 NORTH SIDE DECAYED 10" WIDE X 20" HIGH X 3" DEEP



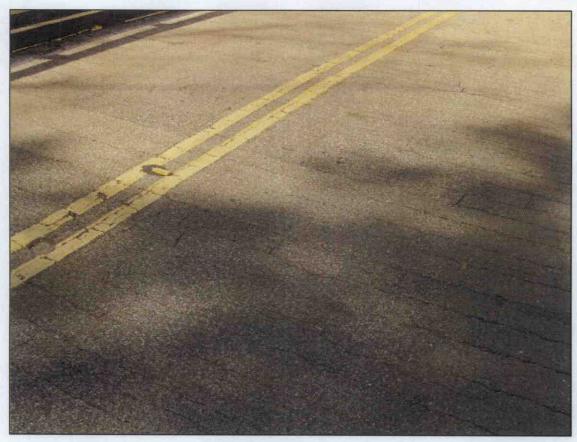
NORTHEAST TURNPILE AND WING PILE HOLLOW



SOUTH APPROACH ASPHALT WEARING SURFACE CRACKED AND SETTLED 1"



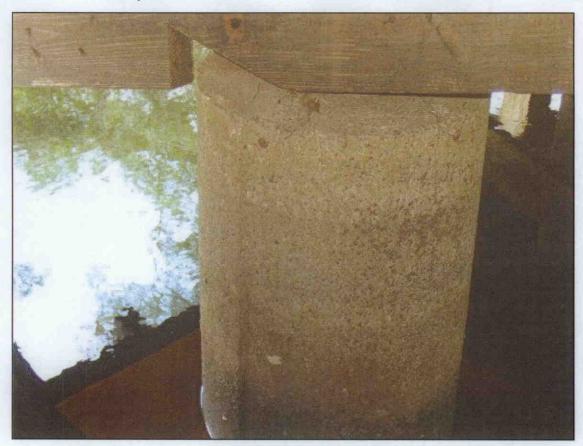
SETTLED AREA AT CENTERLINE OF SOUTH APPROACH 2' WIDE X 16" LONG X 3" DEEP



LONGITUDINAL CRACKING/TRANSVERSE CRACKING IN ASPHALT WEARING SURFACE IN ALL SPANS



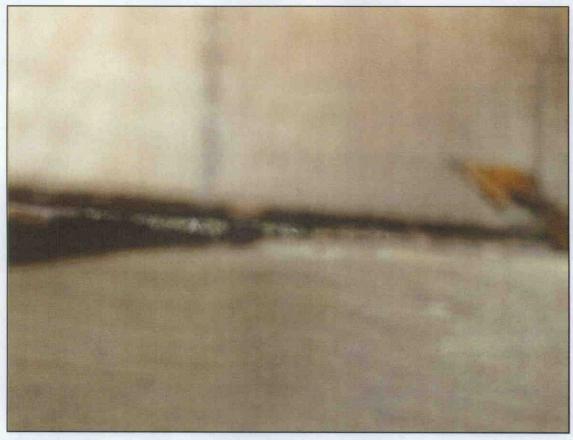
EAST END OF BENT 2 CAP DECAYED AREAS UP TO 14" LONG X 3" DIA.



PILE 2 AT BENT 2 ENCASEMENT CRACKED



SOUTHWEST WINGPILE DECAYED AND HOLLOW



JOIST 1 IN SPAN 1 OVER BENT 1 3/16" GAP BETWEEN JOIST AND CAP, JOIST 2 SIMILAR.



SIGNS OF BULKHEAD LEAKAGE ALONG TOP OF END BENT CAPS



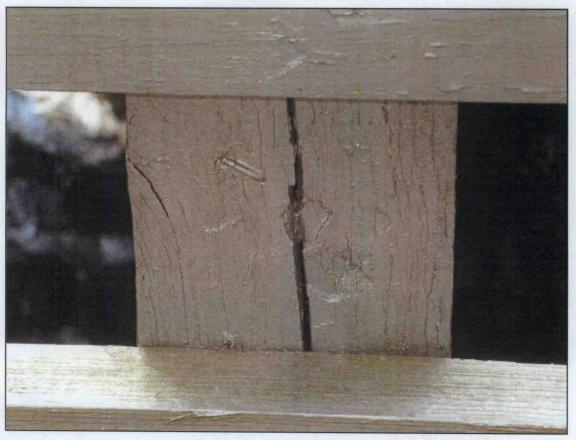
LONGITUDINAL CRACKING IN WHEEL GUARDS UP TO 1/4" WIDE



LONGITUDINAL CRACKING IN RAIL BOARDS UP TO 1/8" WIDE



NORTH APPROACH ASPHALT WEARING SURFACE SETTLED UP TO 2"



LONGITUDINAL CRACKING ALONG RAIL POST'S UP TO 3/16" WIDE

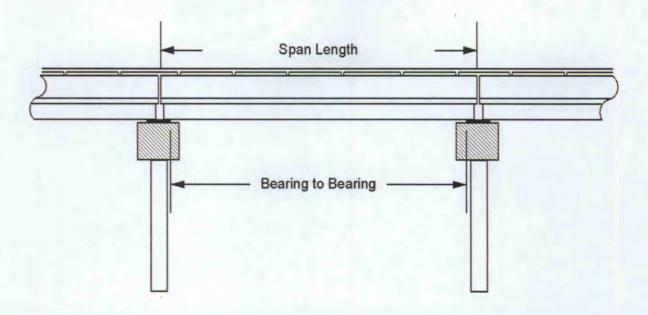
#### **BRIDGE MANAGEMENT UNIT**

DATA ON EXISTING STRUCTURE Run Date: 11/19/2010

COUNTY: PENDER	ı	OIV:	DIST:	STRUCTURE NU	JMBER : 70011	17	NGTH	69	FEET
ROUTE CARRIED :	1520		FEATURE	INTERSECTED :	LLY SHEL	TER CREE	ΞK		
LOCATED:			BRIDGE N			CITY:			
3.0MI.S.J0	CT.NC50								
FUNC. CLASS:	SYST.ON:	SYST.U		ADT & YR :		RAIL			
09	NFA	555	NFA	320		LT			227
BUILT:			:	FED.AID P	ROJ:	DESIGN	LOAD		Day of the second
1956	В	MU							her or known
REHAB: B	Y:	PROJ:	ALIGN	MENT: SKE	: W	LANES:			
	BMU	5.275	1	TAN	90	ON	2	UNDE	ER
NAVIGATION:			HT. (	CRN. TO BED :		WATER D	EPTH	:	
VC 0.0	FT	HC 0.0	FT	14	FT		8		FT
SUPERSTRUCTURE:	TIMBER	R FLOOR/TI	MBER JOIST	S					
		@8'3;2@8'8	3;1@8'6;1@8	'4;1@7'11;1@9'10					
SPANS : BEAMS OR GIRDERS	1@9';1			'4;1@7'11;1@9'10 S@VAR.CTS.					
	1@9';1		MBER JOIST	S@VAR.CTS.	(OUT TO O	UT):			
BEAMS OR GIRDERS	1@9';1	ES 6X12 TIM	MBER JOIST	S@VAR.CTS.	(OUT TO O	UT) : 20.3 FT	r		
BEAMS OR GIRDERS FLOOR: 4X8TIM/1	1@9';1 : 10 LIN	ES 6X12 TIM	MBER JOISTS	S@VAR.CTS. DECK	(OUT TO O	20.3 FT	r		
BEAMS OR GIRDERS FLOOR: 4X8TIM/1 AWS	1@9';1 : 10 LIN	ES 6X12 TIN	MBER JOISTS	S@VAR.CTS.  DECK  SIDE		20.3 FT		RT	0.3 F
BEAMS OR GIRDERS  FLOOR:  4X8TIM/1 AWS  CLEAR ROADWAY:  19.2  VERT.CL.OVER:	1@9';1 : 10 LIN	ES 6X12 TIMENCROACH BETWEEN RA	MBER JOISTS MENT :  AILS :  19.8 I	S@VAR.CTS.  DECK  SIDE	WALK OR C LT DER :	20.3 FT CURB : 0.3 F		RT	0.3 F
BEAMS OR GIRDERS  FLOOR:  4X8TIM/1 AWS  CLEAR ROADWAY:  19.2	1@9';1 : 10 LIN	ES 6X12 TIN ENCROACH BETWEEN RA	MBER JOISTS MENT :  AILS :  19.8 I	S@VAR.CTS.  DECK  SIDE	WALK OR C	20.3 FT CURB : 0.3 F		RT	0.3 F
BEAMS OR GIRDERS  FLOOR:  4X8TIM/1 AWS  CLEAR ROADWAY:  19.2  VERT.CL.OVER: 99 FT 99 IN	1@9';1 : 10 LIN E FT	ES 6X12 TIMENCROACH BETWEEN RA	MBER JOISTS MENT :  AILS :  19.8 I	S@VAR.CTS.  DECK  SIDE  THOR.CL.UNE	WALK OR OLT LT DER: 0.0 F	20.3 FT CURB : 0.3 F		RT	0.3 F
BEAMS OR GIRDERS  FLOOR:  4X8TIM/1 AWS  CLEAR ROADWAY:  19.2  VERT.CL.OVER: 99 FT 99 IN	1@9';1 : 10 LIN	ES 6X12 TIMENCROACH BETWEEN RA ERT.CL.UNDI 00 FT 0	MBER JOISTS MENT:  AILS:  19.8 I  ER:  00 IN	S@VAR.CTS.  DECK  SIDE  FT  HOR.CL.UNE  POSTED P, SV	WALK OR OLT LT DER: 0.0 F	20.3 FT CURB : 0.3 F			0.3 F
BEAMS OR GIRDERS  FLOOR:  4X8TIM/1 AWS  CLEAR ROADWAY:  19.2  VERT.CL.OVER: 99 FT 99 IN  INV.RTG.: HS-1	1@9';1 : 10 LIN	ES 6X12 TIMENCROACH BETWEEN RA ERT.CL.UNDI 00 FT 0	MBER JOISTS MENT:  AILS:  19.8 I ER: 00 IN  TR.MEMBER:  CAF	S@VAR.CTS.  DECK  SIDE  FT  HOR.CL.UNE  POSTED P, SV	WALK OR CLT DER: 0.0 F	20.3 FT CURB : 0.3 F	DATE	07/14	
BEAMS OR GIRDERS  FLOOR:  4X8TIM/1 AWS  CLEAR ROADWAY:  19.2  VERT.CL.OVER: 99 FT 99 IN  INV.RTG.: HS-1	1@9';1 : 10 LIN	ES 6X12 TIMENCROACH BETWEEN RA ERT.CL.UNDI 00 FT 0	MBER JOISTS MENT:  AILS:  19.8 I ER: 00 IN  TR.MEMBER:  CAF	S@VAR.CTS.  DECK  SIDE  FT  HOR.CL.UNE  POSTED P, SV	WALK OR CLT DER: 0.0 F	20.3 FT CURB : 0.3 F	T DATE	07/14	
BEAMS OR GIRDERS  FLOOR:  4X8TIM/1 AWS  CLEAR ROADWAY:  19.2  VERT.CL.OVER: 99 FT 99 IN  INV.RTG.: HS-1  SYSTEM:	1@9';1 : 10 LIN	ES 6X12 TIMENCROACH BETWEEN RA ERT.CL.UNDI 00 FT 0	MBER JOISTS MENT:  AILS:  19.8 I  ER:  00 IN  TR.MEMBER:  CAF	S@VAR.CTS.  DECK  SIDE  FT  HOR.CL.UNE  POSTED P, SV	WALK OR CLT DER: 0.0 FT 0: TTST GREEN	20.3 FT	DATE	07/14	0.3 F

#### **Structure Data Worksheet**

County: PENDER Structure No: 700117 Date: 10/22/2010 Inspected By: BC



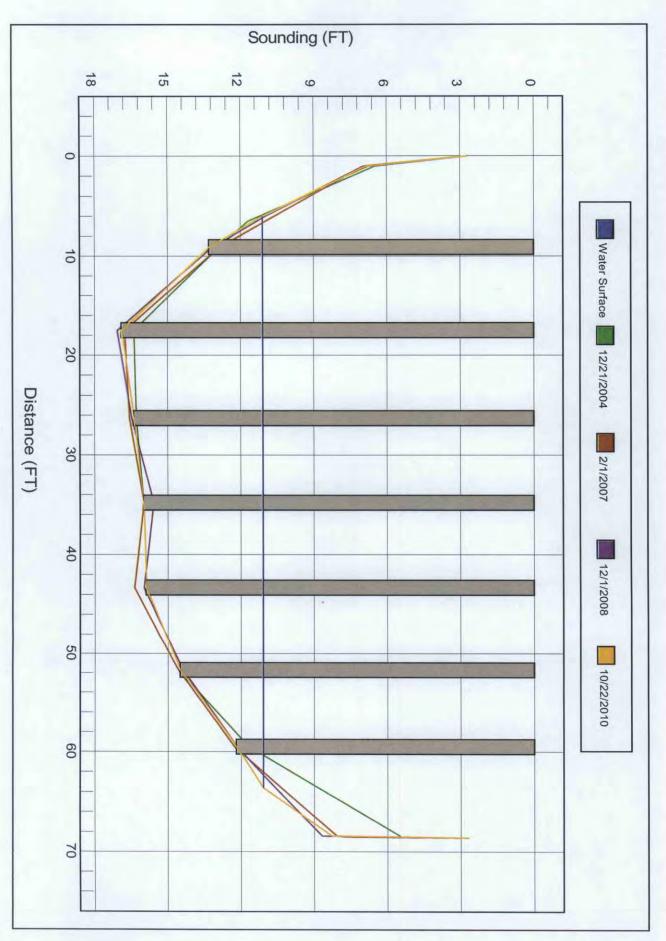
Span No	Span Length	Bearing to Bearing	Comments	
1	9'	8'		
2	8.250'	7.750'		
3	8.667'	8.16'		
4	8.667'	8.16'		
5	8.5'	8'		
6	8.333'	7.83'		
7	7.916'	7.41'		
8	9.750'	9'		

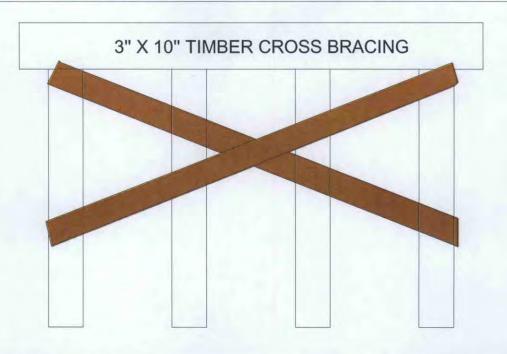
# Stream Bed Soundings (See next sheet for profile sketch)

Bridge No: 700117	County: PENDER	Date: 10/22/2010	By:	ВС	
Record sounding from t	op of rail. Other location if nee	ded:			A.
Distance from Highwate	r Mark to top of rail:	Location of Highwater Mark:			

	D	OWNSTREAM			UPSTREAM
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.7	top of deck			
1	6.9	GROUND AT CAP	1	6.0	ground at cap
6	11.1	WE/WS			
9.1	13.3	BENT 1	9.1	6.8	BENT 1
17.5	16.9	BENT 2	17.5	12.7	BENT 2
26.3	16.4	BENT 3	26.3	15.4	BENT 3
34.8	16	BENT 4	34.8	15.7	BENT 4
43.3	15.9	BENT 5	43.3	16.7	BENT 5
51.7	14.5	BENT 6	51.7	17	BENT 6
59.5	12.2	BENT 7	59.5	12.9	BENT 7
63.6	11.1	WE/WS			
68.4	8.3	GROUND AT CAP	68.4	10.1	GROUND AT CAP
68.6	2.7	top of deck			

Top of Rail = 0 FT (Sounding) Bridge: 700117 STREAMBED PROFILE (Downstream) County PENDER Date: 10/22/2010





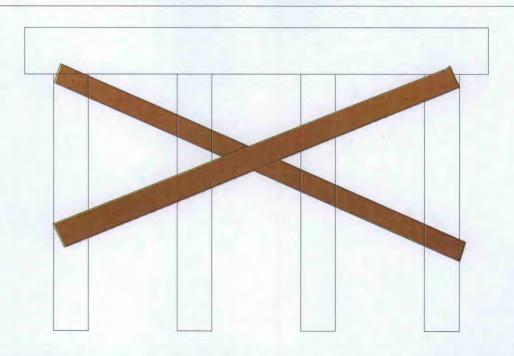
Bent#	1		
Cap - Beam Type (	Wood or Steel)		
Cap Size	20.208ft Long	1ft Wide	1ft High
Left Overhang	1.875ft	It-beam to end of cap	.667 ft
Right Overhang	1.5ft	rt-beam to end of cap	.667 ft

Pile#	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	6.1667		11" DIA		Vertical
2	Wood or Timber	Pile Bent	6.1667		11" DIA.		Vertical
3	Wood or Timber	Pile Bent	4.5		11" DIA.		Vertical
4	Wood or Timber	Pile Bent			11" DIA.		Vertical

Title		Descri	iption	
SUBSTRUCTURE 4		BENT 1.		
Bridge No: 700117	Drawn By: rgm		Date: 12/01/2008	File Name: S0038000123

Roadway	19.0ft Wide	1 Paved Lanes	Looking East
Left Shoulder	6ft Wide	Oft Paved	6ft Unpaved
Right Shoulder	6ft Wide	Oft Paved	6ft Unpaved
Left Guardrail			
Right Guardrail			

Title		Descri	ption		
roadway		roadway			
Bridge No: 700117	Drawn By: rgm		Date: 12/01/2008	File Name: S0042000258	



Bent#	3		
Cap - Beam Type (	Wood or Steel)		
Cap Size	20.54ft Long	1ft Wide	0.99ft High
Left Overhang	1.875ft	It-beam to end of cap	.667 ft
Right Overhang	1.5ft	rt-beam to end of cap	.667 ft

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	6.083		11" DIA.		Vertical
2	Wood or Timber	Pile Bent	6.083		11" DIA.		Vertical
3	Wood or Timber	Pile Bent	5.0		11" DIA.		Vertical
4	Wood or Timber	Pile Bent			11" DIA.		Vertical

Title		Description			
SUBSTRUCTURE 5		BENT:			
Bridge No: 700117	Drawn By: ram		Date: 12/01/2008	File Name: \$0038000124	

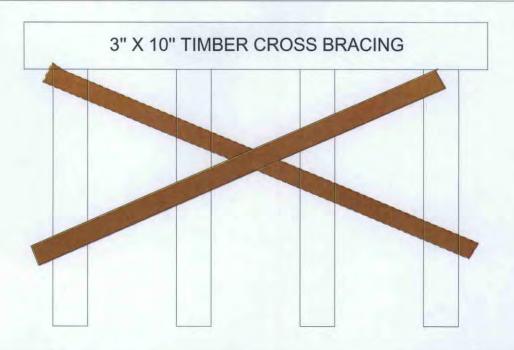


Measurements for Span #	1		
Deck Thickness	.333	Left Overhang	.708
Top of Rail to Bottom of Beam	4.292	Right Overhang	.708

Beam No	Beam Type	Spacing	Comments	
1	Timber (Rectangular)	1.833ft		
2	Timber (Rectangular)	2.083ft		
3	Timber (Rectangular)	2.083ft		
4	Timber (Rectangular)	2.083ft		
5	Timber (Rectangular)	2.083ft		
6	Timber (Rectangular)	2.083ft		
7	Timber (Rectangular)	2.083ft		
8	Timber (Rectangular)	2.083ft		
9	Timber (Rectangular)	2.479ft		
10	Timber (Rectangular)			

#### **ALL SPANS SIMILAR**

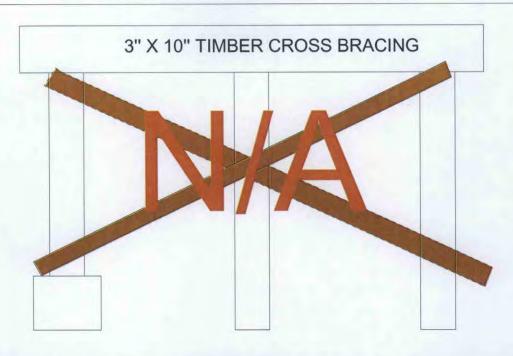
Title SUPERSTRUCTURE		Descri		
		LOOKING EAST		
Bridge No: 700117	Drawn By: rgm		Date: 12/1/2008	File Name: S0042000259



Bent#	5			
Cap - Beam Type (	Wood or Steel)			
Cap Size	20.45ft Long	1ft Wide	0.99ft High	
Left Overhang	1.875ft	It-beam to end of cap	.667 ft	
Right Overhang	1.5ft	rt-beam to end cap	.667 ft	

Pile#	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	5.5		9.5" DIA.		Vertical
2	Wood or Timber	Pile Bent	5.5		11" DIA.		Vertical
3	Wood or Timber	Pile Bent	6.083		11"DIA.		Vertical
4	Wood or Timber	Pile Bent			11' DIA.		Vertical

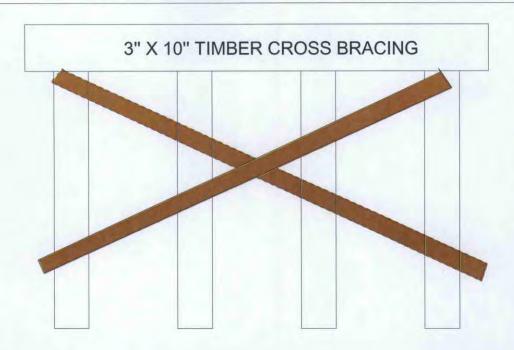
Title SUBSTRUCTURE 6		Description				
		BENT 5.				
Bridge No: 700117	Drawn By: rgm		Date: 12/01/2008	File Name: S0038000125		



Bent#	2	PILE 1 ENCASED	
Cap - Beam Type (	Wood or Steel)		
Cap Size	20.0ft Long	.854ft Wide	.958ft High
Left Overhang	1.0ft	It-beam to end of cap	.667 ft
Right Overhang	1.0ft	rt-beam to end of cap	.667 ft

Pile#	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	9FT.		1FT.		Vertical
2	Wood or Timber	Pile Bent	9FT.		1FT.		Vertical
3	Wood or Timber	Pile Bent			1FT.		Vertical

Title		Description				
SUBSTRUCTURE1		BENTS	BENTS 2, 4 AND 6			
Bridge No: 700117	Drawn By: rgm		Date: 12/01/2008	File Name: S0042000260		



Bent#	7			
Cap - Beam Type (	Wood or Steel)			
Cap Size	20.12ft Long	1ft Wide	0.99ft High	
Left Overhang	1.792ft	It-beam to end of cap	.667 ft	
Right Overhang	1.5ft	rt-beam to end of cap	.667 ft	

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	5.75		11" DIA.		Vertical
2	Wood or Timber	Pile Bent	5.916		10" DIA.		Vertical
3	Wood or Timber	Pile Bent	5.167		11" DIA.		Vertical
4	Wood or Timber	Pile Bent			11" DIA.		Vertical

Title SUBSTRUCTURE 7		Description				
		BENT 7.				
Bridge No: 700117	Drawn By:rgm		Date: 12/01/2008	File Name: S0038000126		

### **Bridge Inspection Field Sketch** Abutment # Cap - Beam Type (Wood or Steel) Cap Size 20ft Long 1ft Wide 1ft High Left Overhang 1ft It-beam to end of cap .667 ft Right Overhang 1ft rt beam to end of cap .667 ft Pile #Material Pile Type Spacing Length Width/Diam. Height Orientation 1 Wood or Timber Pile Bent 12" DIA. Vertical 2 Wood or Timber Pile Bent 9 12" DIA. Vertical 3 Wood or Timber Pile Bent 12" DIA. Vertical MEASUREMENTS VERIFIED BY RGM ON 10-22-10 Title Description END BENT 1. SUBSTRUCTURE 2

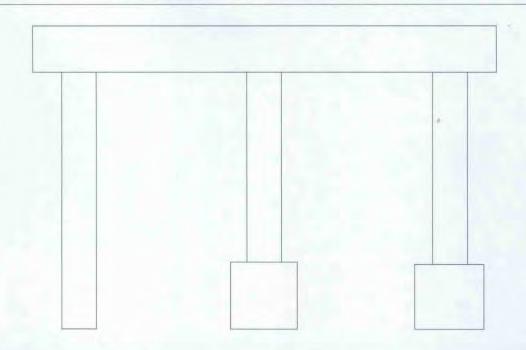
Date: 12/01/2008

File Name: S0042000261

Bridge No: 700117

Drawn By: rgm

## **Bridge Inspection Field Sketch**



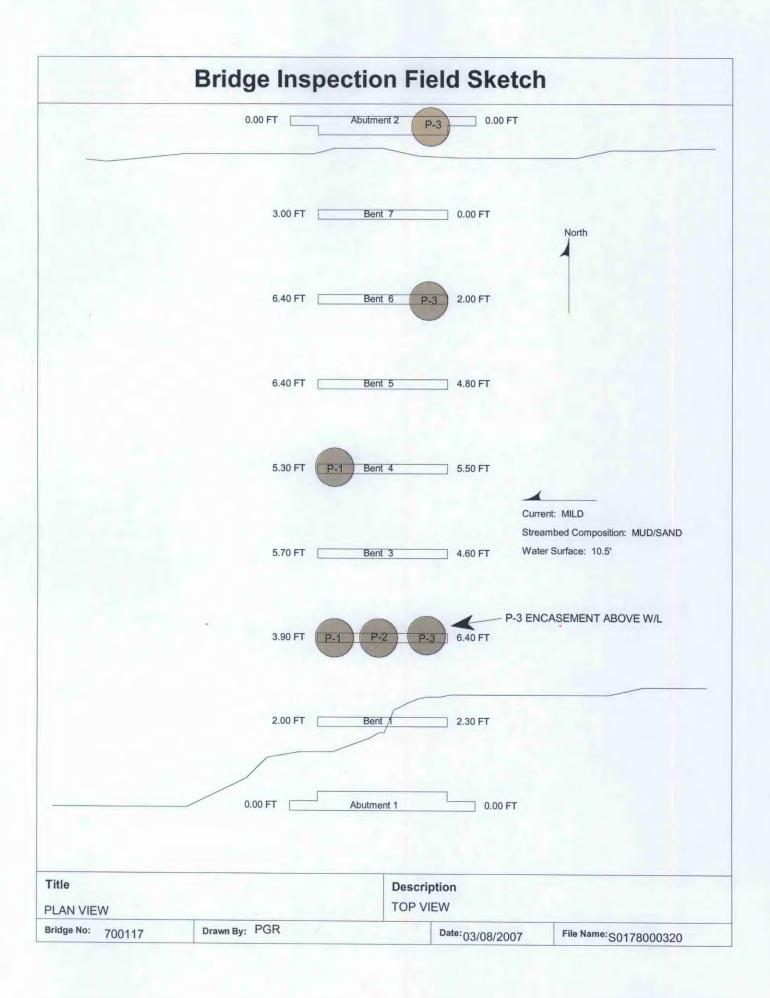
Abutment#	2	PILE'S 2,AND 3 ENCASED.		
Cap - Beam Type (	Wood or Steel)			
Cap Size	20ft Long	0.854ft Wide	0.958ft High	
Left Overhang	1ft	It-beam to end of cap	.667 ft	
Right Overhang	1ft	rt-beam to end of cap	.667 ft	

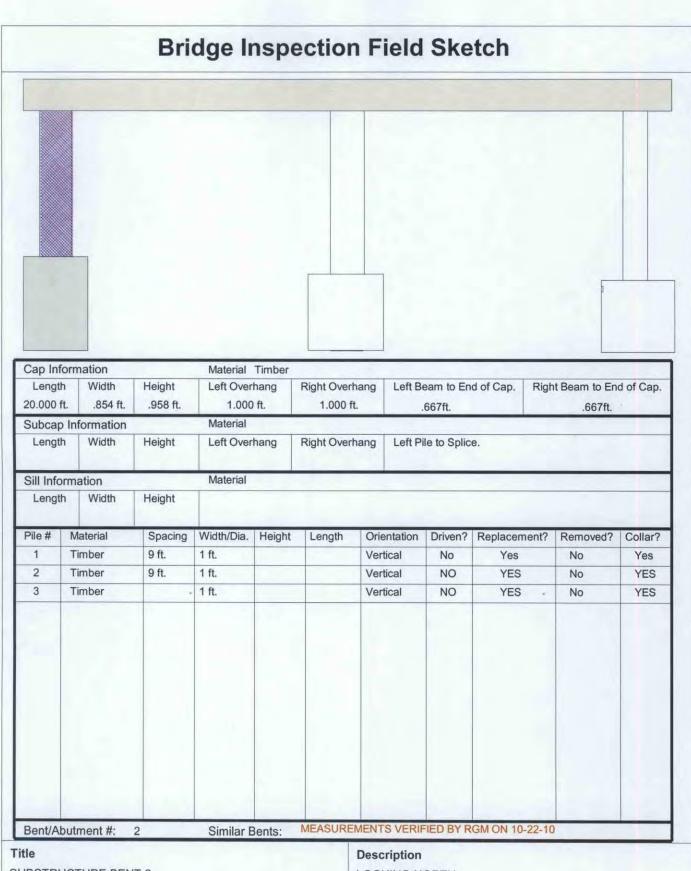
Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	9		12" DIA.		Vertical
2	Wood or Timber	Pile Bent	9		12" DIA.		Vertical
3	Wood or Timber	Pile Bent			12" DIA.		Vertical

## MEASUREMENTS VERIFIED BY RGM ON 10-22-10

Title Description
SUBSTRUCTURE 3 END BENT 2.

Bridge No: 700117 Drawn By: rgm Date: 12/01/2008 File Name: S0042000262



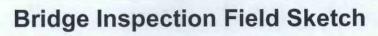


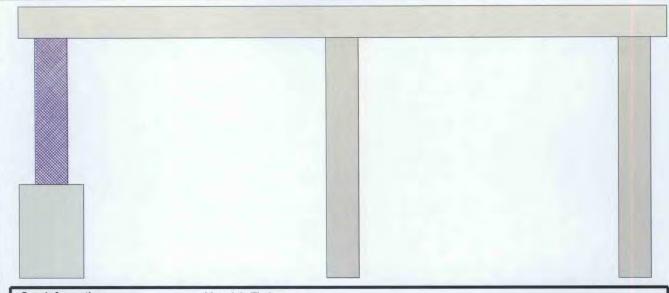
 Title
 Description

 SUBSTRUCTURE BENT 2
 LOOKING NORTH

 Bridge No: 700117
 Drawn By: RGM

 Date: 12/1/2008
 File Name: S0042061247





	formation		Material	Timber								
Lengtl 20.000 f		Height .958 ft.	Left Over		Right Overh				nd of Cap. Righ		ht Beam to End of Cap .667ft.	
Subcap	Information		Material									
Length Width		Height	Left Overhang		Right Overhang		Left Pile to Splice.					
Sill Info	rmation		Material									
Lengt	h Width	Height										
Pile#	Material	Spacing	Width/Dia.	Height	Length	Orientation		Driven?	Replaceme	ent? Re	moved?	Collar
1	Timber	9 ft.	1 ft.			Vertical		No	Yes	N	10	Yes
2	Timber	9 ft.	1 ft.			Vertical		rtical Yes		N	No	No
3	Timber	ber				Vertica	al	Yes	No	- N	10	No

Title
SUBSTRUCTURE BENT 4

Description

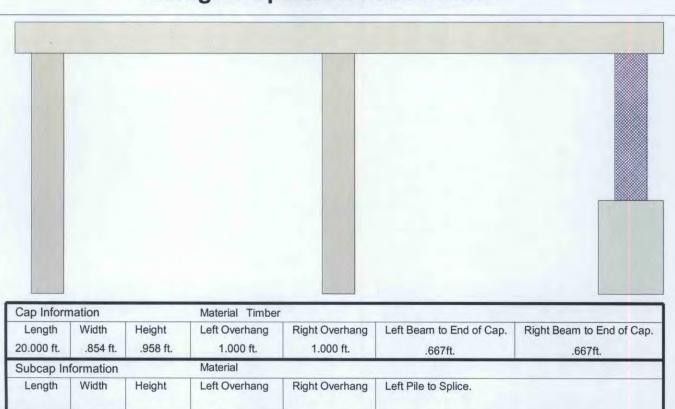
LOOKING NORTH

Bridge No: 700117 Drawn By: RGM

Date: 12/1/2008

File Name: S0042061248

## **Bridge Inspection Field Sketch**



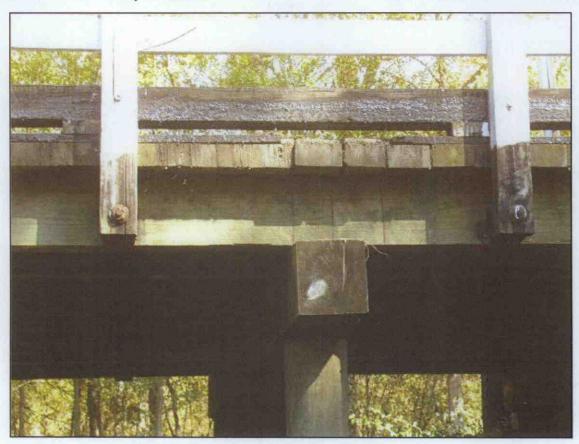
Lengtl 20.000 f		Height .958 ft.	Left Over		Right Overh	100			Right Beam to En		
Subcar	Information		Material								
Lengt	h Width	Height	Left Over	hang	Right Overh	nang	Left Pi	le to Splic	e.		
Sill Info	rmation		Material								
Lengt	h Width	Height									
Pile#	Material	Spacing	Width/Dia.	Height	Length	Orie	ntation	Driven?	Replacemen	nt? Removed?	Collar
1	Timber	9 ft.	1 ft.			Vertical		Yes	No	No	No
2	Timber	9 ft.	1 ft.			Vertical		Yes	No	No	No
3	Timber		1 ft			Vert	tical	No	Yes	No	Yes
Rent/Al	outment #:	6	Similar E	Ponto:	MEAGLID	EMEN	Te VED	IEIED DV	RGM ON 10-	22.40	

 Title
 Description

 SUBSTRUCTURE BENT 6
 LOOKING NORTH

 Bridge No: 700117
 Drawn By: RGM

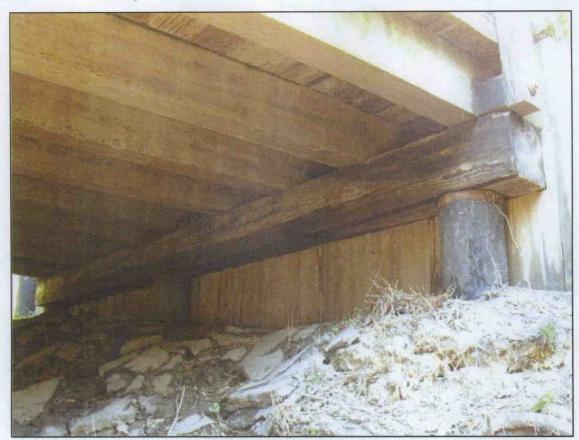
 Date: 12/1/2008
 File Name: S0042061249



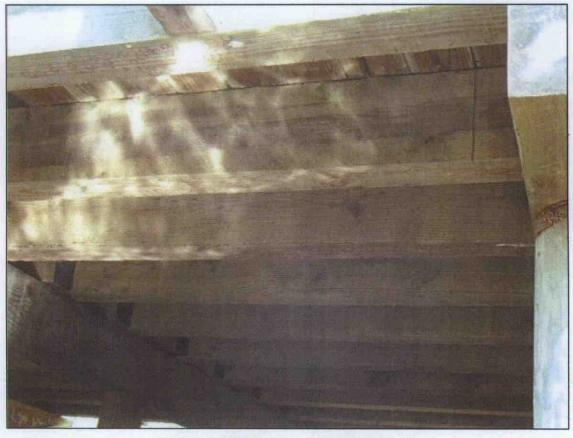
WEST END OF BENT 1 BENTS 3,5 AND 7 SIMILAR



WEST END OF BENT 2 BENTS 4 AND 6 SIMILAR



END BENT 1 END BENT 2 SIMILAR



SPAN 2 UNDERSIDE ALL SPANS SIMILAR

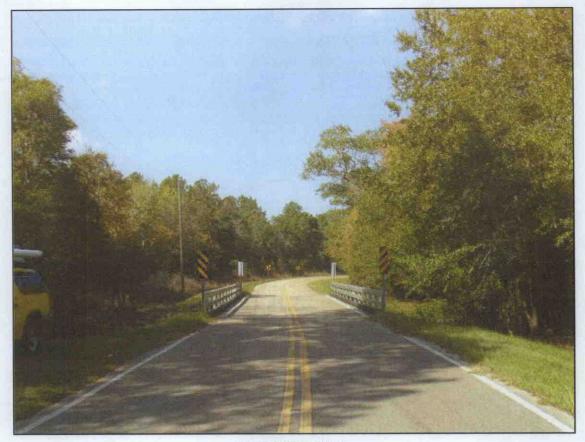
Date: 10/22/2010 Structure Photos



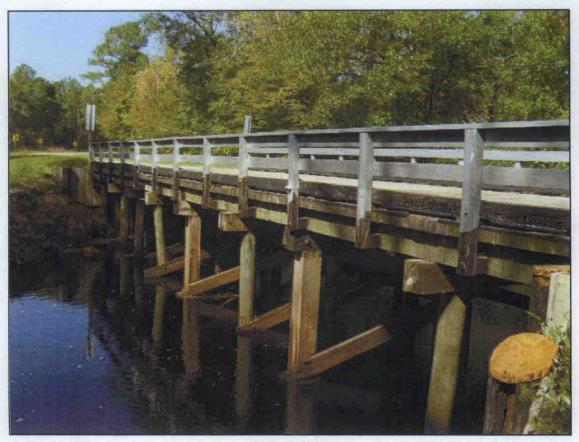
BENT 5 BENTS 1,3 AND 7 SIMILAR



BENT 6 BENTS 2 AND 4 SIMILAR



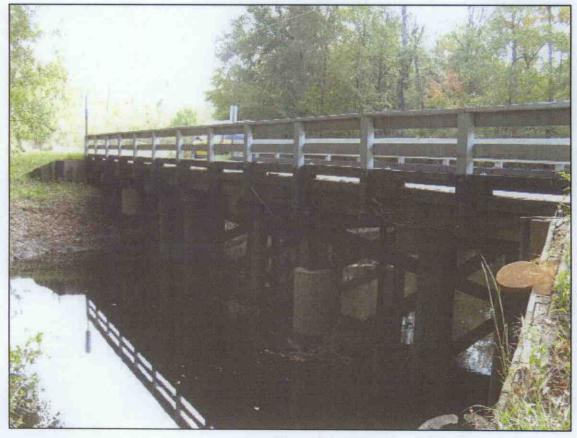
LOOKING NORTH



WEST SIDE



LOOKING SOUTH



EAST SIDE



CLOSE UP OF ASPHALT WEARING SURFACE



**UPSTREAM EAST** 



DOWNSTREAM WEST