



N.C. DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 BRIDGE MAINTENANCE UNIT

ATTENTION: SHORED STRUCTURE

BRIDGE INSPECTION REPORT

TYPE OF INSPECTION Routine

COUNTY CARTERET BRIDGE NUMBER 150033 INSPECTION CYCLE 2 YRS

ROUTE US70 ACROSS NORTH RIVER M.P. 000+000

LOCATION 5.5 MI.N.JCT.NC101

SUPERSTRUCTURE CONT.REINFORCED CONCRETE MONOLITHIC SLAB

SUBSTRUCTURE EBTS&IBT:RC CAP/PRESTR.CONC.PILES@VAR.CTS.

SPANS 1@23':22@21'9":1@25':22@21'9":1@23' CONT.

PRESENT CONDITION FAIR INVENTORY RATING Hs-0

INSPECTION DATE 7/1/03 OPERATING RATING Hs-0

PRESENT POSTING SV-32 TONS TTST-LGW PROPOSED POSTING Retain: S.V.-32 Tons
 & T.T.S.T.- LGW

COMPUTER UPDATE 7-22-03 ANALYSIS DATE 07-17-03

POSTING LETTER DATE _____ SPECIAL PERMIT 34° 47' - 20.9"

OTHER SIGNS PRESENT (4) DELINEATORS 76° 36' - 36.0"



Photo Looking East

SIGN NOTICE ISSUED FOR	NUMBER REQUIRED
<u>No</u> WEIGHT LIMIT	<u> </u>
<u>No</u> SPECIAL PERMIT	<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>

***** IDENTIFICATION *****

(1) STATE NAME - NORTH CAROLINA BRIDGE 150033
(8) STRUCTURE NUMBER (FEDERAL) 00000000310033
(5) INVENTORY ROUTE (OK/UNDER) - ON = 121000700
(2) STATE HIGHWAY DEPARTMENT DISTRICT 02
(3) COUNTY CODE 031 (4) PLACE CODE
(6) FEATURES INTERSECTED - RIVER
(7) FACILITY CARRIED - US70
(9) LOCATION - 5.5 MI.N.JCT.NC161
(11) MILEPOINT 000.000
(16) LAT 34 D 47 W 10.95 (17) LONG 076 D 36 W 36.03
(98) BORDER BRIDGE STATE CODE PCT SHARE
(99) BORDER BRIDGE STRUCTURE NO. #

***** SUFFICIENCY RATING *****

SUFFICIENCY RATING = 9.0
STATUS = STRUCTURALLY DEFICIENT

***** STRUCTURE TYPE AND MATERIAL *****

(43) STRUCTURE TYPE MAIN: CONCRETE CONTINUOUS
TYPE - SLAB CODE 201
(44) STRUCTURE TYPE APPR: OTHER
TYPE - OTHER CODE 000
(45) NUMBER OF SPANS IN MAIN UNIT 047
(46) NUMBER OF APPROACH SPANS 0000
(107) DECK STRUCTURE TYPE - CONCRETE C-I-F CODE 1
(108) WEARING SURFACE / PROTECTIVE SYSTEM:
A) TYPE OF WEARING SURFACE - CONCRETE CODE 1
B) TYPE OF MEMBRANE - NONE CODE 0
C) TYPE OF DECK PROTECTION - NONE CODE 0

***** CLASSIFICATION *****

(112) NBIS BRIDGE LENGTH - YES
(104) HIGHWAY SYSTEM - NHS ROUTE 1
(26) FUNCTIONAL CLASS - PRINCIPAL ARTERIAL- OTHER 02
(100) DEFENSE HIGHWAY - NOT DEFENSE HWY 0
(101) PARALLEL STRUCTURE - NONE EXISTS E
(102) DIRECTION OF TRAFFIC - 2-WAY TRAFFIC 2
(103) TEMPORARY STRUCTURE - TEMPORARY STRUCTURE T
(110) DESIGNATED NATIONAL NETWORK - NOT PART OF 0
(20) TOLL - ON FREE ROAD 3
(21) MAINTAIN - STATE HIGHWAY AGENCY 01
(22) OWNER - STATE HIGHWAY AGENCY 01
(37) HISTORICAL SIGNIFICANCE - NOT ELIGIBLE 5

***** AGE AND SERVICE *****

(27) YEAR BUILT 1969
(106) YEAR RECONSTRUCTED 0000
(42) TYPE OF SERVICE: ON - HIGHWAY
UNDER - WATERWAY CODE 15
(28) LANES: ON STRUCTURE 02 UNDER STRUCTURE 00
(29) AVERAGE DAILY TRAFFIC 009000
(30) YEAR OF ADT 2001 (109) TRUCK ADT PCT 14
(19) BYPASS, DETOUR LENGTH 99 MI

***** CONDITION *****

(58) DECK 6
(59) SUPERSTRUCTURE 6
(60) SUBSTRUCTURE 3
(61) CHANNEL & CHANNEL PROTECTION 8
(62) CULVERTS E

***** GEOMETRIC DATA *****

(48) LENGTH OF MAXIMUM SPAN 0025 FT
(49) STRUCTURE LENGTH 001028 FT
(50) CURB OR SIDEWALK: LEFT 01.6 FT RIGHT 01.6 FT
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 028.0 FT
(52) DECK WIDTH OUT TO OUT 031.5 FT
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 024 FT
(33) BRIDGE MEDIAN - NO MEDIAN CODE 0
(34) SKEW 00 DEG (35) STRUCTURE FLARED NO
(10) INVENTORY ROUTE MIN VERT CLEAR 99 FT 99 IN
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 28.0 FT
(53) MIN VERT CLEAR OVER BRIDGE RDWY 99 FT 99 IN
(54) MIN VERT UNDERCLEAR REF - NOT HWY/RR 00 FT 00 IN
(55) MIN LAT UNDERCLEAR RT REF - NOT HWY/RR 99.9 FT
(56) MIN LAT UNDERCLEAR LT 00.0 FT

***** LOAD RATING AND POSTING *****

(31) DESIGN LOAD - HS 15 3
(64) OPERATING RATING - LF HS-01 101
(66) INVENTORY RATING - LF HS-01 101
(70) BRIDGE POSTING - POSTING REQUIRED 4
(41) STRUCTURE OPEN, POSTED, OR CLOSED P
DESCRIPTION - POSTED FOR LOAD

***** APPRAISAL *****

(57) STRUCTURAL EVALUATION 2
(68) DECK GEOMETRY 4
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL E
(71) WATERWAY ADEQUACY 8
(72) APPROACH ROADWAY ALIGNMENT 8
(36) TRAFFIC SAFETY FEATURES 0000
(113) SCOUR CRITICAL BRIDGES 7

***** NAVIGATION DATA *****

(28) NAVIGATION CONTROL - BRG PERMIT NOT REQ CODE 0
(111) PIER PROTECTION - NOT APPLICABLE CODE
(39) NAVIGATION VERTICAL CLEARANCE 000 FT
(116) VERT-LIFT BRIDGE NAV MIN VERT CLEAR FT
(40) NAVIGATION HORIZONTAL CLEARANCE 0000 FT

***** PROPOSED IMPROVEMENTS *****

(75) TYPE OF WORK - REPLACE FOR DEFICIENCY CODE 311
(76) LENGTH OF STRUCTURE IMPROVEMENT 001028 FT
(94) BRIDGE IMPROVEMENT COST \$ 3,050,000
(95) ROADWAY IMPROVEMENT COST \$ 763,000
(96) TOTAL PROJECT COST \$ 4,575,000
(97) YEAR OF IMPROVEMENT COST ESTIMATE 2002
(114) FUTURE ADT 018000 (115) YEAR FUTURE ADT 2010

***** INSPECTIONS *****

(50) INSPECTION DATE 07/2003 (91) FREQUENCY 24 MO
(92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
A) FRACTURE CRIT DETAIL - NO - MO A)
B) UNDERWATER INSP - YES - 48 MO B) 08/2002
C) OTHER SPECIAL INSP - NO - MO C)
SCOUR - NOT EVALUATED

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine INSPECTION DATE 7/1/03
 BRIDGE NO. 150033 COUNTY CARTERET ROUTE US70 OVER NORTH RIVER
 STRUCTURE TYPE CONT.REINFORCED CONCRETE MONOLITHIC SLAB YEAR BUILT 1959
 ROUTE ORIENTATION W To E FOR SPAN 1-47 OF (47) SPANS

EVALUATION CODE: 0 - 2 CRITICAL, 3 & 4 POOR, 5 & 6 FAIR, 7 - 9 GOOD

INSPECTION ITEMS

DECK ITEMS		GRADE	45 CHANNEL & CHANNEL PROT.		a. WATERWAY	8
1 WEARING SURFACE					b. ALIGNMENT	8
2 DECK NO. OF EA. TYPE SPN. GRADE RATES SI & A ITEM 58	a. CONCRETE	47	6		c. SCOUR	6
	b. TIMBER	00			d. SLOPE PROT., RIP-RAP, DIKES, ETC.	
	c. STEEL PLANK	00				
	d. OPEN GRID	00				
3 RAILING		6		50 APPROACH ROADWAY CONDITION		7
a. CONCRETE				51 APPROACH SLABS		
b. TIMBER				52 PAINT SYSTEM	CODE	
c. ALUMINUM				53 UTILITIES		7
d. STEEL				54 RESPONSE TO LIVE LOAD		8
4 CURBS - WHEELGUARDS - PARAPETS - MEDIANS		6		55 ESTIMATED REMAINING LIFE (YEARS)		15
5 WALKWAYS (ON OR ATTACHED TO STRUCTURE)				60 REGULATORY SIGN NOTICE ISSUED		N
6 DECK EXP JTS OR DEVICES		00		61 PROMPT - ACTION NOTICE ISSUED		N
a. STEEL PL. OR FINGER PL		00		62 PRESENTLY POSTED		Y
b. MISC. PREFAB DEVICES		00		63 TOT. FIELD INSP. TIME (INCLUDE WRITE UP) (M/H)		36
c. COMPRESSION SEALS		00		64 TOTAL SNOOPER INSP. TIME (HRS)		0
d. STANDARD JOINTS		10	6	65 TOTAL TRAFFIC CONTROL TIME (M/H)		0
e. OPEN JOINTS		00		70 SI&A GENERAL CONDITION RATINGS		
7 DECK DEBRIS (INCLUDE EXCESS SAND / GRAVEL)		6		a. DECK	ITEM 58	6
				b. SUPERSTRUCTURE	ITEM 59	6
SUPERSTRUCTURE (FM. 1(90)b TRUSS) I				c. SUBSTRUCTURE	ITEM 60	5
10 LONGITUDINAL BEAMS OR GIRDERS		6		d. CHANNEL & CHANNEL PROT	ITEM 61	6
11 LONGITUDINAL JOIST OR STRINGERS				71 SI&A FIELD APPRAISAL RATINGS		
12 INT. DIAP'S, X-FRAMES, BRACING, & CONN'S				a. WATERWAY ADAQUACY		8
13 END DIAP'S, CURTAIN WALLS, & CONN'S				b. APPR. RDWY. ALIGNMENT		8
14 FLOOR BEAMS AND CONNECTIONS				72 FIELD SCOUR EVALUATION		
15 BEARINGS ASSEMBLIES (INCLUDE MISALIGN)						O
16 DRAINAGE SYSTEMS (ON STRUCTURES)		6		USE OF INSP. ACCESSIBILITY EQUIPMENT		
17 MOVABLE SPAN MACHINERY				SNOOPER (CODE P, S, 4 or N)		
SUBSTRUCURE ITEMS, ITEM 60 (INCLUDES SCOUR)				LADDER	Y/N	N
35 TIM. SUBSTR.	a. ABUT. & INT. BENT CAPS & RISERS			OVERSIDE LADDER	Y/N	N
	b. PILES, POST, SILLS, & BRACING			BUCKET TRUCK	Y/N	N
	c. BULKHEADS, WING'S, & TIE BACKS			BOAT	Y/N	Y
36 CONC. SUBSTR.	a. ABUT. & BENT CAPS	6		OTHER ()	Y/N	N
	b. ABUT. & BENT COL'S & BREASTWALLS			SPECIAL INSPECTION REQUESTED FOR:		
	c. ABUT. & INT. BENT PILES	5		NOTE:		
	d. BACKWALLS - WING'S - RETAIN. WALL	7		80 INSPECTED BY: R.D. HEATH		
e. ABUT. AND BENT FOOTINGS & SILLS			81 REVIEWED BY: <i>RHB</i>			
37 STEEL SUBSTR.	a. ABUT. & INT. BENT CAPS & RISERS			80 INSPECTED BY: R.D. HEATH		
b. PILES AND BRACING AND BULKHEADS	6		81 REVIEWED BY: <i>RHB</i>			
38 FOUNDATION PILES, TYPE MATERIAL				80 INSPECTED BY: R.D. HEATH		
39 SLOPE PROT., RIP - RAP (INCLUDE DRAINAGE)		8		81 REVIEWED BY: <i>RHB</i>		
40 FENDER SYSTEM				80 INSPECTED BY: R.D. HEATH		
41 DRIFT		7		81 REVIEWED BY: <i>RHB</i>		

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine INSPECTION DATE 8/22/01
 BRIDGE NO. 150033 COUNTY CARTERET ROUTE US70 OVER NORTH RIVER
 STRUCTURE TYPE CONT.REINFORCED CONCRETE MONOLITHIC SLAB YEAR BUILT 1959
 ROUTE ORIENTATION W To E FOR SPAN 1-47 OF (47) SPANS

EVALUATION CODE: 0 - 2 CRITICAL, 3 & 4 POOR, 5 & 6 FAIR, 7 - 9 GOOD

INSPECTION ITEMS				
DECK ITEMS		GRADE		
1 WEARING SURFACE			45 CHANNEL & CHANNEL PROT.	a. WATERWAY 8 b. ALIGNMENT 8 c. SCOUR 6 d. SLOPE PROT., RIP-RAP, DIKES, ETC.
2 DECK	a. CONCRETE	47	4	
NO. OF EA.	b. TIMBER	00		
TYPE SPN.	c. STEEL PLANK	00		
GRADE	d. OPEN GRID	00		
RATES				
SI & A ITEM				
58				
3 RAILING	a. CONCRETE		7	50 APPROACH ROADWAY CONDITION 7 51 APPROACH SLABS 52 PAINT SYSTEM CODE 53 UTILITIES 7 54 RESPONSE TO LIVE LOAD 8 55 ESTIMATED REMAINING LIFE (YEARS) 15
	b. TIMBER			
	c. ALUMINUM			
	d. STEEL			
4 CURBS - WHEELGUARDS - PARAPETS - MEDIANS			7	60 REGULATORY SIGN NOTICE ISSUED N 61 PROMPT - ACTION NOTICE ISSUED N 62 PRESENTLY POSTED Y
5 WALKWAYS (ON OR ATTACHED TO STRUCTURE)				
6 DECK EXP	a. STEEL PL. OR FINGER PL	00		63 TOT. FIELD INSP. TIME (INCLUDE WRITE UP) (M/H) 40 64 TOTAL SNOOPER INSP. TIME (HRS) 0 65 TOTAL TRAFFIC CONTROL TIME (M/H) 0
JTS OR	b. MISC. PREFAB DEVICES	00		
DEVICES	c. COMPRESSION SEALS	00		
NO. OF	d. STANDARD JOINTS	10	7	
EACH	e. OPEN JOINTS	00		
7 DECK DEBRIS (INCLUDE EXCESS SAND / GRAVEL)			6	70 SI&A GENERAL CONDITION RATINGS a. DECK ITEM 58 4 b. SUPERSTRUCTURE ITEM 59 4 c. SUBSTRUCTURE ITEM 60 4 d. CHANNEL & CHANNEL PROT ITEM 61 6
SUPERSTRUCTURE (FM. 1(90)b TRUSS) I				
10 LONGITUDINAL BEAMS OR GIRDERS			4	
11 LONGITUDINAL JOIST OR STRINGERS				
12 INT. DIAP'S, X-FRAMES, BRACING, & CONN'S				71 SI&A FIELD APPRAISAL RATINGS a. WATERWAY ADAQUACY 8 b. APPR. RDWY. ALIGNMENT 8
13 END DIAP'S, CURTAIN WALLS, & CONN'S				
14 FLOOR BEAMS AND CONNECTIONS				
15 BEARINGS ASSEMBLIES (INCLUDE MISALIGN)				
16 DRAINAGE SYSTEMS (ON STRUCTURES)			6	72 FIELD SCOUR EVALUATION 0
17 MOVABLE SPAN MACHINERY				
USE OF INSP. ACCESSIBILITY EQUIPMENT				
SUBSTRUCTURE ITEMS, ITEM 60 (INCLUDES SCOUR)				SNOOPER (CODE P, S, 4 or N) N
35 TIM.	a. ABUT. & INT. BENT CAPS & RISERS			LADDER Y/N N
SUBSTR.	b. PILES, POST, SILLS, & BRACING			OVERSIDE LADDER Y/N N
	c. BULKHEADS, WING'S, & TIE BACKS			BUCKET TRUCK Y/N N
36 CONC.	a. ABUT. & BENT CAPS	4		BOAT Y/N Y
SUBSTR.	b. ABUT. & BENT COL'S & BREASTWALLS			OTHER () Y/N N
	c. ABUT. & INT. BENT PILES	4		
	d. BACKWALLS - WING'S - RETAIN. WALL	7		SPECIAL INSPECTION REQUESTED FOR:
	e. ABUT. AND BENT FOOTINGS & SILLS			
37 STEEL	a. ABUT. & INT. BENT CAPS & RISERS			NOTE:
SUBSTR.	b. PILES AND BRACING AND BULKHEADS	6		
38 FOUNDATION PILES, TYPE MATERIAL				
39 SLOPE PROT., RIP - RAP (INCLUDE DRAINAGE)			8	
40 FENDER SYSTEM				80 INSPECTED BY: BG LITTLETON, JR. BGL (ACTING)
41 DRIFT			7	81 REVIEWED BY: RAB

BRIDGE INSPECTION RECORD AND SUMMARY

REV. 5-30-97

INSPECTION TYPE		ROUTINE (UW)		INSPECTION DATE		8/17/02	
BRIDGE NO.	160033	COUNTY	CARTERET	ROUTE	US-70	OVER	NORTH RIVER
STRUCTURE TYPE	CONCRETE PILE SUBSTRUCTURE			YEAR BUILT	1959		
LENGTH	1028' 0"	ROUTE ORIENTATION	W-E	FOR SPANS	2-46	OF	47 SPANS
EVALUATION CODE: 0 - 2 CRITICAL, 3 & 4 POOR, 5 & 6 FAIR, 7 - 9 GOOD							
INSPECTION ITEM				ITEM 61		GRADE	
DECK ITEMS		GRADE		45 CHANNEL & CHANNEL PROT.	a. WATERWAY		8
1 WEARING SURFACE					b. ALIGNMENT		8
2 DECK NO. OF EA. TYPE SPN.		a. CONCRETE		50 APPROACH ROADWAY CONDITION	c. SCOUR		6
GRADE		b. TIMBER			d. SLOPE PROT., DIKES		
RATES		c. STEEL PLANK			RIP-RAP ETC.		
SI & A ITEM 58		d. OPEN GRID					
3 RAILING		a. CONCRETE		51 APPROACH SLABS			
		b. TIMBER		52 PAINT SYSTEMS	CODE		
		c. ALUMINUM		53 UTILITIES			
		d. STEEL		54 RESPONSE TO LIVE LOAD			
4 CURBS - WHEELGUARDS - PARAPETS - MEDIANS				55 ESTIMATED REMAINING LIFE			
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 PL.		61 PROMPT - ACTION NOTICE ISSUED			NO
		b. MISC. PREFAB DEVICES		62 PRESENTLY POSTED	SV32 TTST LL		
		c. COMPRESSION SEALS		63 TOT. FIELD INSP. TIME (INCLUDE WRITE UP)(M/H)	64 M/H		
		d. STANDARD JOINTS		64 TOTAL SNOOPER INSP. TIME (HRS)			
		e. OPEN JOINTS		65 TOTAL TRAFFIC CONTROL TIME (M/H)			
7 DECK DEBRIS (INCLUDE EXCESS SAND / GRAVEL)				70 SI&A GENERAL CONDITION RATINGS			
SUPER STR. (FM. 1 (90) B TRUSS) ITEM 69				a. DECK	ITEM 58		
10 LONGITUDINAL BEAMS OR GIRDERS				b. SUPERSTRUCTURE	ITEM 59		
11 LONGITUDINAL JOIST OR STRINGERS				c. SUBSTRUCTURE	ITEM 60		4
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 ADEQUACY			8
15 BEARINGS ASSEMBLIES (INCLUDE MISALIGN)				b. APPR. RDWY. ALIGNMENT			
16 DRAINAGE SYSTEMS (ON STRUCTURES)							
17 MOVABLE SPAN MACHINERY				72 FIELD SCOUR EVALUATION			0
SUB STR ITEMS, ITEM 60 (INCLUDE SCOUR)				USE OF INSP. ACCESSIBILITY EQUIPMENT			
35 TIM. SUB STR.		a. ABUT. & INT. BENT CAPS & RISERS		SNOOPER (CODE P, S, 4 or N)		N	
		b. PILES, POST, SILLS, & BRACING		LADDER		Y/N N	
		c. BULKHEADS, WING'S, & TIE BACKS		OVERSIDE LADDER		Y/N N	
36 CONC. SUB STR.		a. ABUT. & INT. BENT CAPS		BUCKET TRUCK		Y/N N	
		b. ABUT. & BENT COL'S & BREASTWALLS		BOAT		Y/N Y	
		c. ABUT. & INT. BENT PILES		OTHER		Y/N N	
		d. BACKWALLS - WING'S - RETAIN. WALLS					
		e. ABUT. AND BENT FOOTINGS & SILLS					
37 STEEL SUB STR.		a. ABUT. & INT. BENT CAPS & RISERS		NOTE:			
		b. PILES AND BRACING AND BULKHEADS		7			
38 FOUNDATION PILES TYPE MATERIAL							
39 SLOPE PROT., RIP - RAP (INCLUDE DRAINAGE)							
40 FENDER SYSTEMS							
41 DRIFT		7		80 INSPECTED BY:		<i>[Signature]</i>	
				81 REVIEWED BY:		<i>[Signature]</i>	

SPECIAL INSPECTION REQUESTED FOR :

SHEET # 1

BRIDGE INSPECTION RECORD AND SUMMARY FOR SHORED STRUCTURES

BRIDGE # 150033 COUNTY CARTERET DATE 9-19-00

THE FOLLOWING SI & A ITEMS ARE TO BE CODED TO REFLECT THE FACT THAT THE STRUCTURE IS SHORED UP:

	<u>CODE</u>	<u>BY</u>
SI & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION	<u>7</u>	<u> </u>
SI & A ITEM ,59 - SUPERSTRUCTURE	<u> </u>	<u> </u>
SI & A ITEM 60 - SUBSTRUCTURE	<u>3</u>	<u> </u>
SI & A ITEM 64 - OPERATING RATING HS <u>0.0</u> BY <u>SML</u>	<u>01</u>	<u>VPP</u>
SI & A ITEM 66 - INVENTORY RATING HS <u>0.0</u> BY <u>SML</u>	<u>01</u>	<u>VPP</u>

COMMENTS:

ADDED CROSS CAP @ BENT # 40

Bridge I&A Form 1(82) H
Revised 6/4/97

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAY

Bridge Maintenance Unit
Bridge Inspection Sect.

Field Inspection Report

Bridge Inspection & Analysis

Bridge No. 150033

Route US70

County CARTERET

Team Leader: R.D. HEATH

Date: 7/1/03

Assisted By: PERRY D. IPOCK

Item No.	Description
2A	RC DECK (6) LONGITUDINAL AND TRANSVERSE CRACKING NOTED IN TOP OF MOST SPANS. (PHOTOS) HL AND MAP CRACKS THRU OUT AT BOTTOM FACE. SPAN 5 HAS ROTATED TO 1" TOWARDS THE SOUTH AT BENT 5. NO CHANGE SINCE LAST INSPECTION.
3a	CONC. RAILS (6) MINOR SPALLS IN TOP OF POST. (PHOTO)
4	CONC. CURBS (6) H/L CRACKING NOTED IN BOTH CURBS. (PHOTO)
6d	STD. JOINTS (6) SOME JOINT SEALS ARE DETERIORATING OR CRACKING ALLOWING LEAKAGE. (PHOTO)
7	DECK DEBRIS (6) DEBRIS ALONG THE CURBS WITH VEGETATION AT JOINTS ADJACENT TO CURBS. (PHOTOS)
10	MONOLITHIC SLAB (6) SPALLED AREAS HAVE BEEN PATCH SINCE THE LAST INSPECTION. (PHOTO) (6) REMAINING PORTIONS OF MONO SLABS WITH CRACKS AND MINOR DELAM AT RANDOM. SURFACE SPALLS ADJACENT TO CAPS AT RANDOM BENTS (PHOTOS)
16	DRAINAGE SYSTEM (6) SEE ITEM 7.
36A	RC CAPS (6) MAPCRACKING WITH EFFLO. ON THE ENDS. (PHOTO) SOME CAPS EXHIBIT LONGITUDINAL CRACKS ALONG FACE.
36C	RC PILES (5) SEVERAL PILES HAVE CRACKS, SPALLS WITH EXPOSED RUSTY STEEL AND MODERATE DELAMINATION. (PHOTO) FEW REMAINING PILES HAVE VERT FACIAL CRACKS WITH RUST STAINS. SEE CURRENT UNDERWATER REPORT.
37B	STEEL PILES (6) STEEL CRUTCH AT P-1, BT 40, HAS BEEN REPAIRED WITH ANOTHER STEEL HP CRUTCH CAP AND PILE. RUST NOTED WITH MINOR LOSS. (PHOTO)
50	APPROACH (6) APPROACH FILL AREAS ADJACENT TO ROADWAY AT ALL (4) CORNERS HAVE BEEN STABILIZED WITH RIP RAP AFTER HURRICANE BERTHA.



MAPCRACKING IN THE E.B.L. @ SPAN 18, BENT 17



SCALING IN THE E.B.L. @ SPAN 20



LONGITUDINAL CRACKED IN THE E.B.L. @ SPAN 28



TRANSVERSE CRACKED IN THE E.B.L. @ SPAN 31



TRANSVERSE CRACKED IN THE E.B.L. @ SPAN 32



LONGITUDINAL CRACKED IN THE E.B.L. 2 SPAN 38



HAIRLINE CRACKED @ SPAN 13 UNDERSIDE (SIMILAR THRU OUT MOST SPANS)



REPAIRS @ THE UNDERSIDE OF SPAN 28



REPAIRS @ BENT 32 & SPAN 33 UNDERSIDE



REPAIRS @ SPAN 43 UNDERSIDE



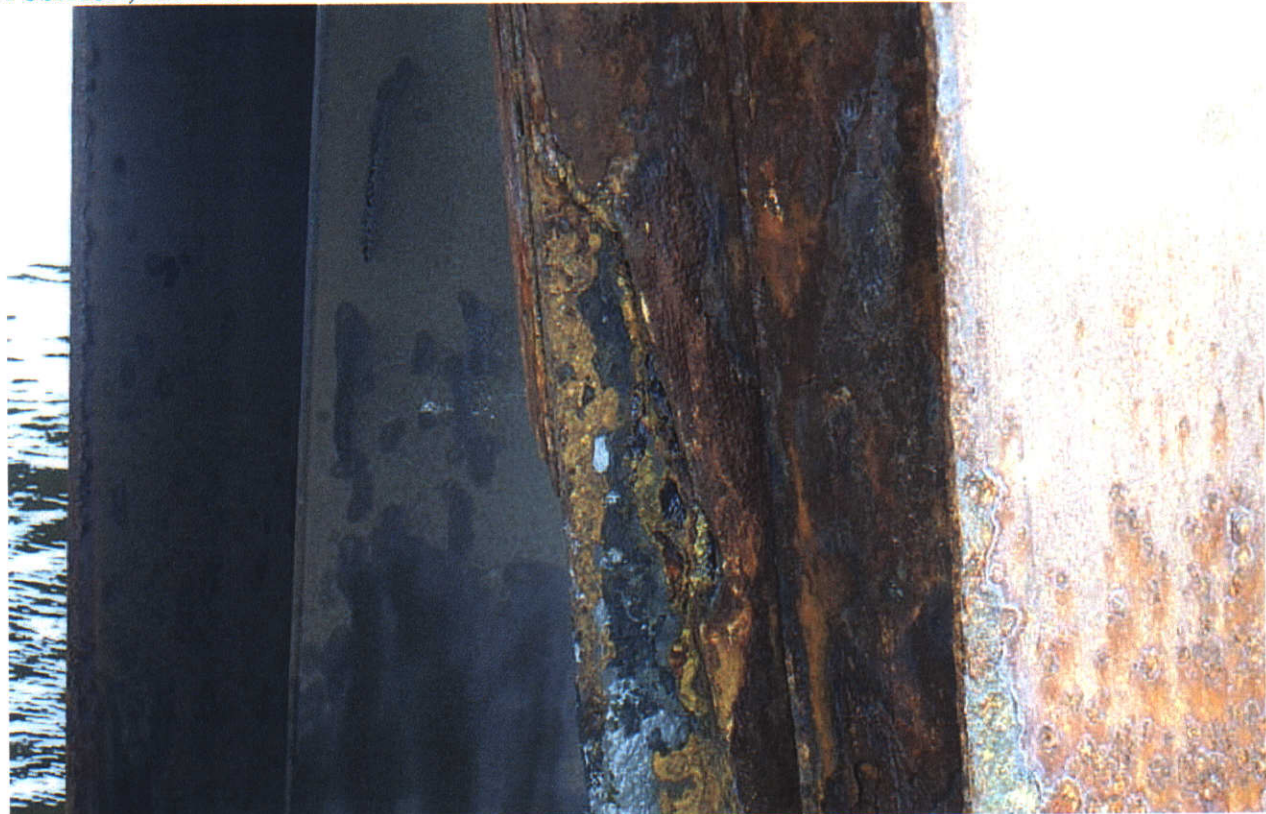
CRACKED W/ EFFLO. @ THE SOUTH END OF BENT 5 (OTHERS SIMILAR)



CAP & PILE REPAIRS @ SPAN 2 SIDE OF BENT 2



MARINE GROWTH & MINOR CORROSION ON REPLACEMENT STEEL CRUTCHBENT @ PILE POSITION, BENT 40



CORROSION ON THE OLD STEEL CRUTCHBENT (HAS BEEN REPLACED W/ ANOTHER STEEL CRUTCHBENT)



REPAIR ON PILE 3 @ SPAN 13, BENT 12



REPAIR CRACKED W/ RUST STAIN ON PILE 2 @ BENT 34



PILE 3 CRACKED & RUST STAINED @ SPAN 42 SIDE OF BENT 42



POST 32 SPALLED @ THE SOUTH RAIL, SPAN 10 (OTHER POST SPALLS SIMILAR)



NORTH CURB CRACKED @ BENT 41



DEBRIS & VEGETATION @ THE E.BL. CURB & BENT 27 JOINT



DECK PATCHES IN THE N.B.L. @ SPANS 40 & 41, BENT 40



EAST APPROACH (TRANSVERSE CRACKED & MINOR SETTLED)



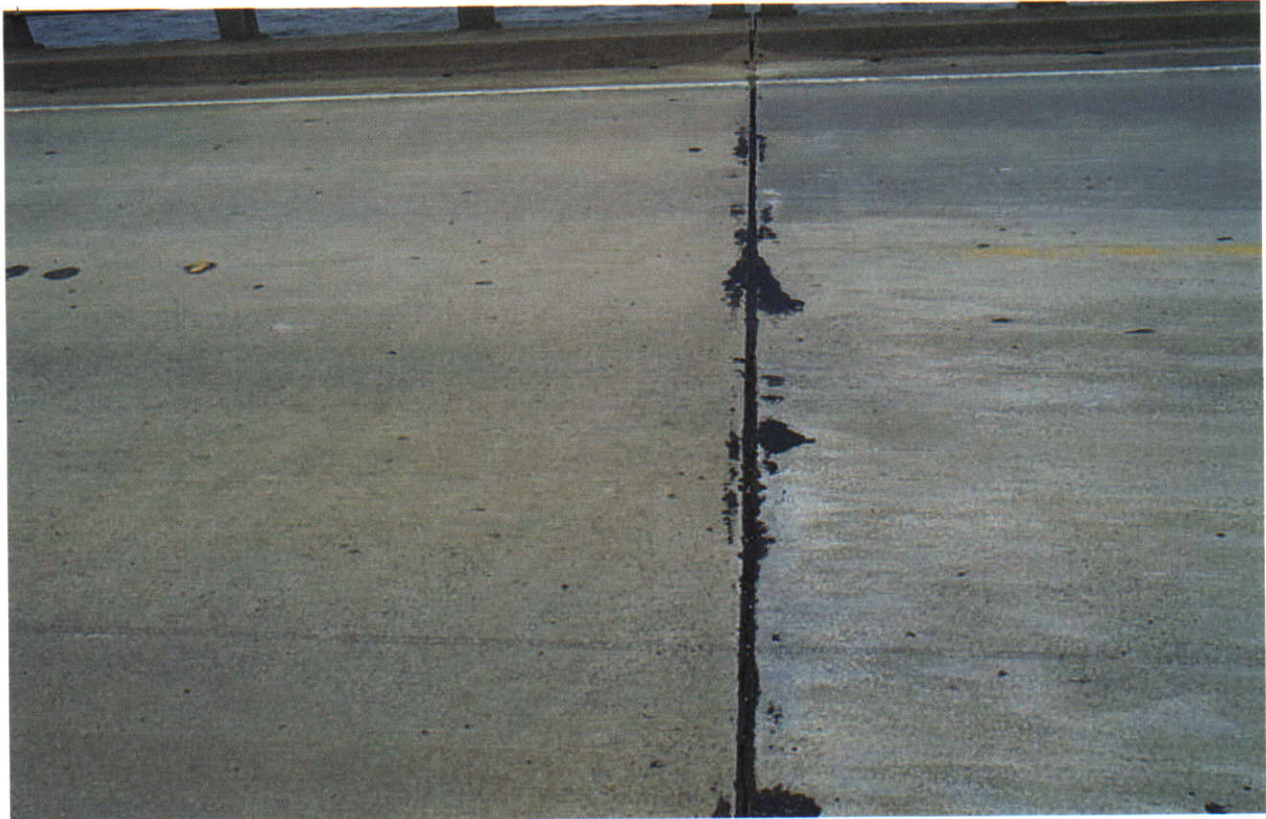
EAST APPROACH (MINOR SETTLED @ THE W.B.L.)



WEST APPROACH (TRANSVERSE CRACKED & MINOR SETTLED)



BENT 5 JOINT (SEALED)



BENT 20 JOINT (DETERIORATED)



TRANSVERSE CRACKED OVER BENT 9 IN THE E.B.L.

NORTH CAROLINA

Revised 6/13/97

DEPARTMENT of TRANSPORTATION

DIVISION of HIGHWAYS

BRIDGE MAINTENANCE UNIT

STRUCTURE DATA FILE

COUNTY CARTERET

BRIDGE NO. 150033

- CONTENTS:
- DATA CARD
 - STRUCTURE DATA WORK SHEETS
 - STREAM BED SOUNDINGS & PROFILE SKETCH
 - FORM 501 or 502
 - FORM BMD - 9
 - RETURNED PROMPT ACTION NOTICE SHOWING REPAIRS
 - OTHER SKETCHES & NOTES SHOWING STRUCTURE DETAILS
 - PHOTOGRAPHS

NOTE: STRUCTURE ANALYSIS - CHECK _____ YES or NO _____
 WHEN PLANS ARE AVAILABLE

FIELD INSPECTOR _____

DATE: 07/01/03

BY : R.D. HEATH

B80028

BRIDGE MAINTENANCE UNIT
DATA ON EXISTING STRUCTURE

RUN DATE 07/22/03

COUNTY: DIV.: DIST.: STRUCTURE NUMBER: LENGTH:
CARTERET 02 2 15 0033 1028 FEET

ROUTE CARRIED: FEATURE INTERSECTED:
US70 NCRTH RIVER

LOCATED: BRIDGE NAME:
5.5 MI.N.JCT.NC101

FUNC. CLASS: SYST.ON: SYST.UNDER: ADT & YR: RAIL TYPE:
PAR FA 9000 01 LT 111 RT 111

BUILT: BY: PROJ: FED.AID PROJ: DESIGN LOAD:
1959 SHC 8.12038 S1156 HS-15

REHAB: BY: PROJ: ALIGNMENT: SKEW: LANES:
TAN. 090 ON 02 UNDER 00

NAVIGATION: HT.CRN.TO BED: WATER DEPTH:
VC --- FT HC --- FT 21 FT 9 FT

SUPERSTRUCTURE:
CONT.REINFORCED CONCRETE MONOLITHIC SLAB

SUBSTRUCTURE:
EBTS&IBT:RC CAP/PPC.PILES W/ STL.CRUTCH BTS.ADDED.

SPANS:
1@23';22@21'9';1@25';22@21'9';1@23' CONT.

BEAMS OR GIRDERS:
CONT.REINFORCED CONCRETE MONOLITHIC SLAB

FLOOR: ENCROACHMENTS: DECK (CUT TO OUT):
1.5 RC/NO AWS 031.5

CLEAR ROADWAY: BETWEEN RAILS: SIDEWALK OR CURB:
028.0 031 .3 LT 01.6 RT 01.6

VERT.CL.OVER: VERT.CL.UNDER: HOR.CL.UNDER: SPECIAL PERMIT:
99 FT 99 IN 00 FT 00 IN 00.0 FT

INV.RTG.: OPE.RTG.: CONTR.MEMBER: POSTED:
HS- 1 HS- 1 SLAE SV 32 TTST LM DATE 10 28 1998

SYSTEM: GREEN LINE ROUTE:
4 PRIMARY NO, BUT HAS ALLOW. WTS

2ND OPENING: 3RD OPENING: 4TH OPENING: 5TH OPENING:

REMARKS:

STRUCTURE DATA WORKSHEET

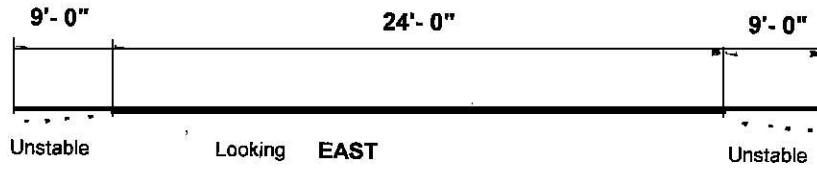
Bridge # **150033**

County **CARTERET**

Date **7/1/03**

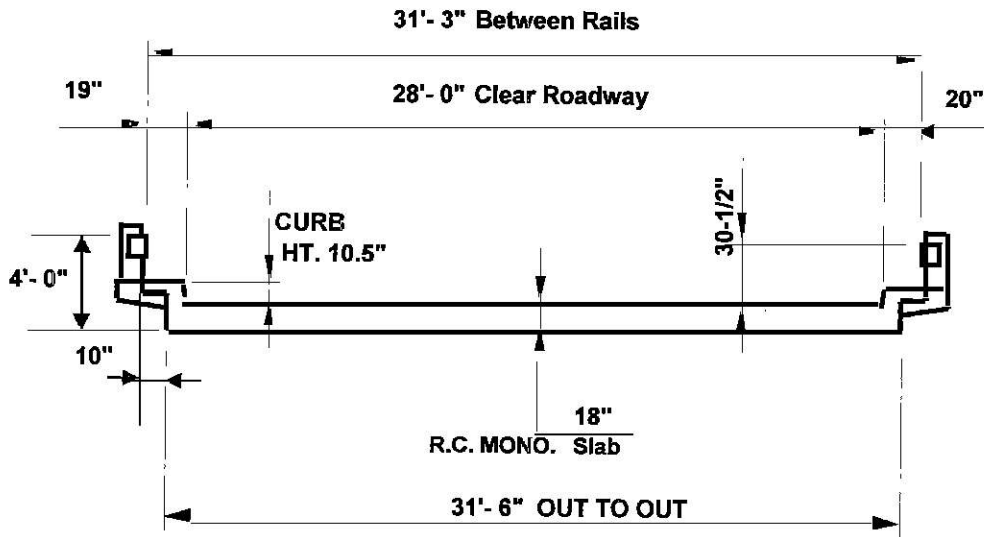
By. **PDI**

APPROACH ROADWAY WIDTH (SI & A ITEM 32)



SIMILAR SECTION

Rail Type: 111



Span	Length	Brq. To Brq.
1	23'- 0"	SEE PLANS
2 THRU 23	21'- 9"	
24	25'- 0"	
25 THRU 46	21'- 9"	
47	23'- 0"	

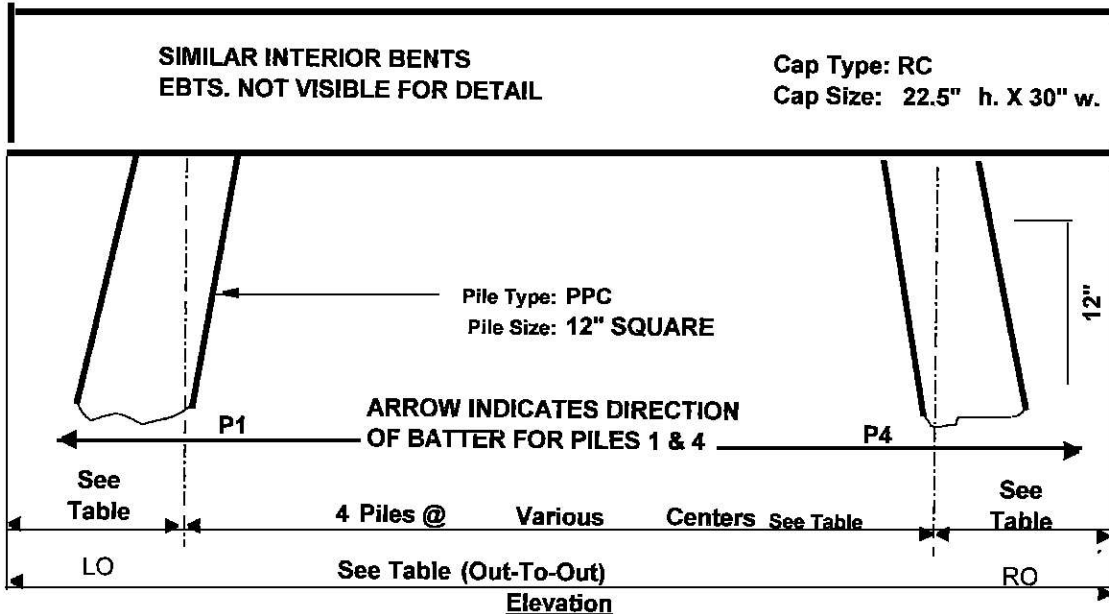
STRUCTURE DATA WORKSHEET

Bridge # **150033**

County **CARTERET**

Date **7/1/03**

By **PDI**



Bent #:	Left Overh'ng LO	Right Overh'ng RO	Pile Spacing (feet)								Out-To-Out
			P1-P2	P2-P3	P3-P4	P4-P5	P5-P6	P6-P7	P7-P8	P8-P9	
1	22.5"	22.5"	8'-7"	8'-7"	8'-7"						0
2											0
3											0
4											0
5											0
6											0
7											0
8											0
9											0
10											0



RC CAPS @ EXPANSION BENTS ARE 32" H X 30" w.



COLLARED PILES

- | | | |
|--------------------|------------------------|---------------------|
| BT. 1 - PILE 1-4 | BT. 14- PILE 2 | BT. 33 - PILE 1 & 4 |
| BT. 2- PILE 1 | BT. 15- PILE 2 & 4 | BT. 44 - PILE 1 |
| BT. 3- PILE 1 | BT. 17- PILE 1 & 3 | BT. 46 - PILE 1-4 |
| BT. 6- PILE 4 | BT. 18- PILE 1 | |
| BT. 7- PILE 1 | BT. 19 - PILE 1 & 4 | |
| BT. 9- PILE 1 | BT. 20 - PILE 1, 2 & 3 | |
| BT. 10- PILE 2 | BT. 21 - PILE 3 | |
| BT. 11- PILE 2 & 3 | BT. 25 - PILE 1 | |
| BT. 13- PILE 2 & 4 | BT. 31 - PILE 3 & 4 | |

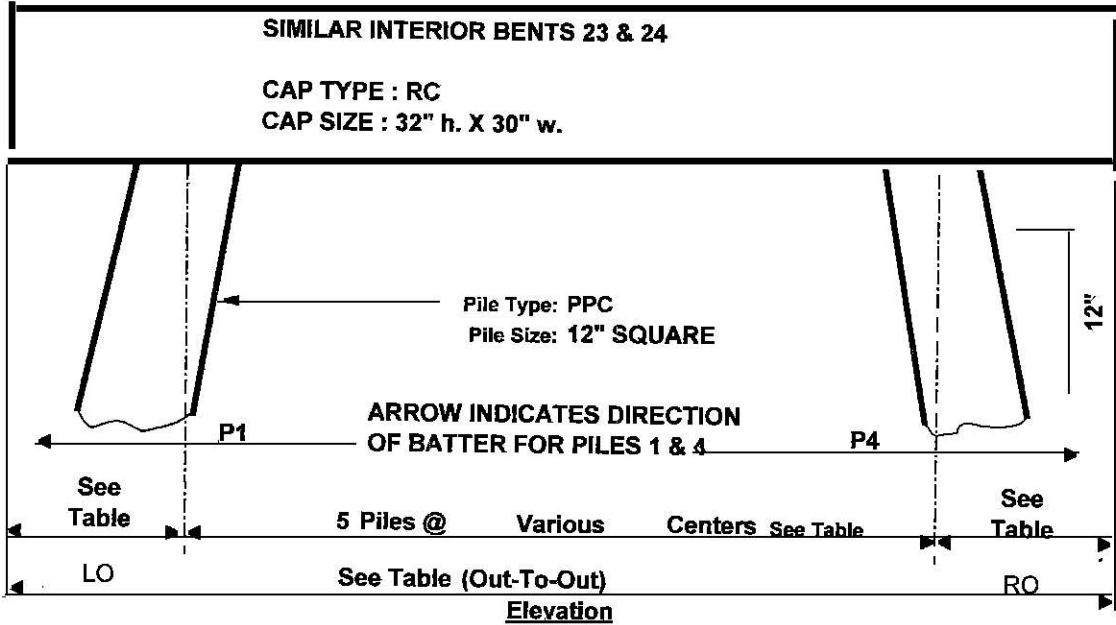
STRUCTURE DATA WORKSHEET

Bridge # **150033**

County: **CARTERET**

Date **7/1/03**

By **PDI**



Bent #:	Left Overh'ng LO	Right Overh'ng RO	Pile Spacing (feet)								Out-To-Out
			P1-P2	P2-P3	P3-P4	P4-P5	P5-P6	P6-P7	P7-P8	P8-P9	
1	22.5"	22.5"	6'-6"	6'-6"	6'-6"	6'-6"					0
2											0
3											0
4											0
5											0
6											0
7											0
8											0
9											0
10											0

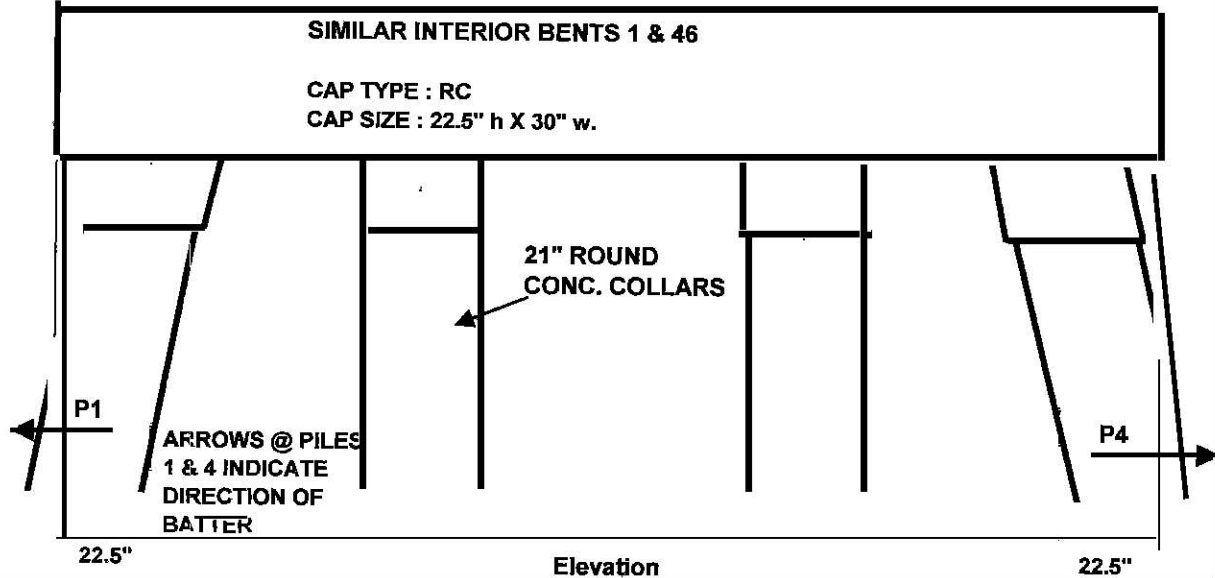
STRUCTURE DATA WORKSHEET

Bridge # **150033**

County **CARTERET**

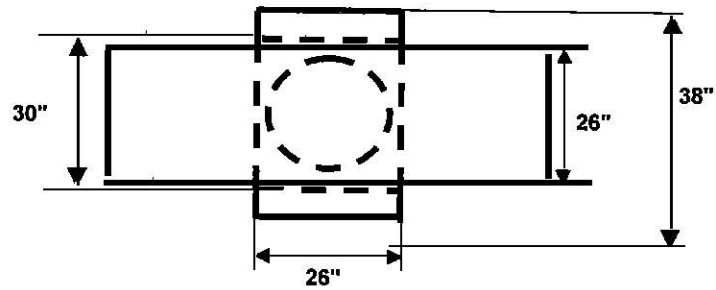
Date **7/1/03**

By **PDI**



Pile or Post Spacing											
P1-P2	P2-P3	P3-P4	P4-P5	P5-P6	P6-P7	P7-P8	P8-P9	P9-P10	P10-P11	P11-P12	P12-P13
8'-7"	8'-7"	8'-7"									

PLAN VIEW OF SIMILAR PEDESTAL



STRUCTURE DATA WORKSHEET

Bridge # 150033

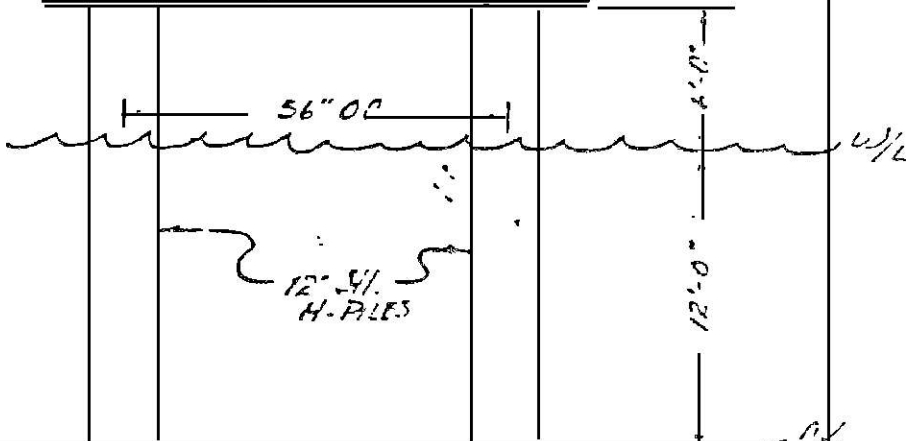
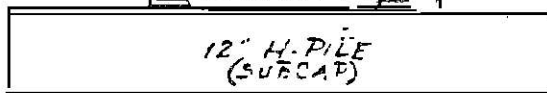
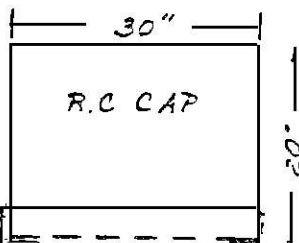
County CARTERET

Date 7/1/03

By PDI

4"X4" ANGLE IRON
COLLAR EXTENDS SOUTH
ALONG BOTTOM OF CAP
48' EA SIDE

FACING SOUTH



BT #40 REPAIR ON N. END - P. 1

COEF 0000

STREAM BED SOUNDINGS
(SEE NEXT SHEET FOR PROFILE SKETCH)

BR. INSP WORKSHEET (1/1/90)
Revised 10/9/98

Bridge # 150033 COUNTY CARTERET DATE 7/01/03 BY PDI

RECORD SOUNDINGS FROM TOP OF RAIL. OTHER LOCATION IF NEEDED _____

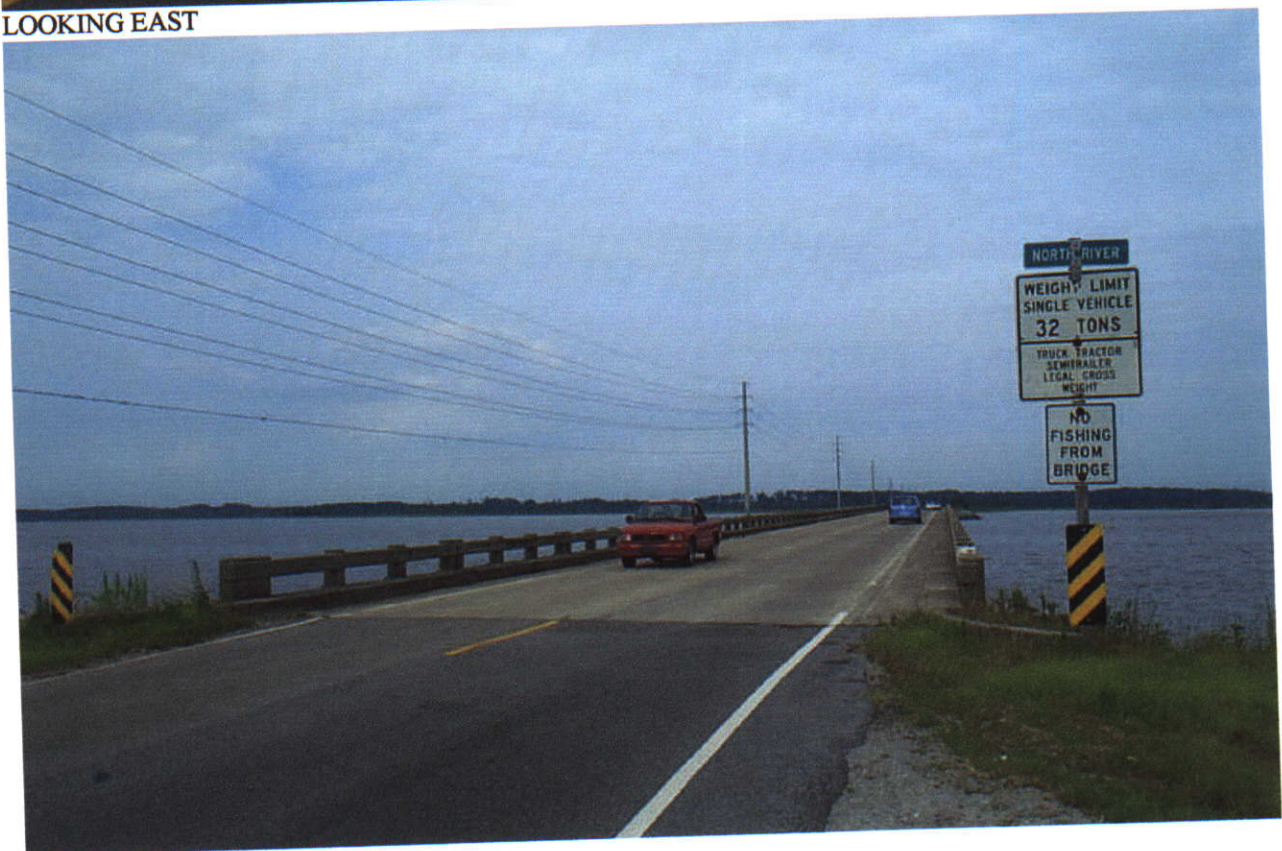
DISTANCE HIGHWATER MARK TO TOP OF RAIL _____ LOCATION H W MARK TIDAL

NOTE Draft a Stream Bed Profile sketch and record soundings at the stream face of abutments, C/L of piers, WE, WS, and major contour changes on the downstream side. Record soundings at the stream face abutments and C/L piers on the upstream side.

DOWNSTREAM-SOUTH			UPSTREAM-NORTH		
DISTANCE (Station)	SOUNDING	DESCRIPTION	DISTANCE (Station)	SOUNDING	DESCRIPTION
34	11	WS & WE			WS & WE
1007	11	WS & WE			WS & WE
0	0	EBT. 1	0	0	EBT. 1
1	4.0	TOP OF CAP	1	4.0	TOP OF CAP
23	7.4	BT 1	23	7.0	BT 1
34	11.0	WS & WE			
44.8	14.2	BT 2	44.8	2.5	BT 2
66.6	15.1	BT 3	66.6	4.0	BT 3
88.4	15.7	BT 4	88.4	4.0	BT 4
110.2	16.0	BT 5	110.2	6.0	BT 5
132	18.0	BT 6	132	6.0	BT 6
153.8	18.0	BT 7	153.8	7.0	BT 7
175.6	17.6	BT 8	175.6	6.0	BT 8
197.4	17.6	BT 9	197.4	6.0	BT 9
219.2	17.7	BT 10	219.2	6.0	BT 10
241	17.5	BT 11	241	7.0	BT 11
262.8	17.1	BT 12	262.8	6.2	BT 12
284.6	17.3	BT 13	284.6	6.0	BT 13
306.4	17.0	BT 14	306.4	6.2	BT 14
328.2	17.7	BT 15	328.2	6.0	BT 15
350	17.5	BT 16	350	6.3	BT 16
371.8	18.0	BT 17	371.8	7.0	BT 17
393.6	19.0	BT 18	393.6	7.0	BT 18
415.4	20.2	BT 19	415.4	9.0	BT 19
437.2	20.9	BT 20	437.2	9.9	BT 20
459	21.5	BT 21	459	10.5	BT 21
480.8	21.0	BT 22	480.8	10.5	BT 22
502.6	21.2	BT 23	502.6	10.0	BT 23
527.6	21.0	BT 24	527.6	10.5	BT 24
549.4	21.0	BT 25	549.4	10.6	BT 25
571.2	20.5	BT 26	571.2	9.9	BT 26
593	20.0	BT 27	593	9.0	BT 27
614.8	19.4	BT 28	614.8	7.0	BT 28
636.6	18.5	BT 29	636.6	8.0	BT 29
658.4	18.0	BT 30	658.4	7.2	BT 30
680.2	19.0	BT 31	680.2	7.2	BT 31
702	19.2	BT 32	702	7.3	BT 32
723.8	19.5	BT 33	723.8	7.8	BT 33
745.6	19.0	BT 34	745.6	7.8	BT 34
767.4	19.0	BT 35	767.4	8.0	BT 35
789.2	18.8	BT 36	789.2	7.9	BT 36
811	18.5	BT 37	811	7.7	BT 37
832.8	18.0	BT 38	832.8	6.8	BT 38
854.6	17.0	BT 39	854.6	6.4	BT 39
876.4	16.5	BT 40	876.4	6.5	BT 40
898.2	15.4	BT 41	898.2	5.0	BT 41
920	15.2	BT 42	920	5.0	BT 42
941.8	14.5	BT 43	941.8	4.4	BT 43
963.6	14.0	BT 44	963.6	4.4	BT 44
985.4	13.5	BT 45	985.4	2.5	BT 45
1007	11.0	WS & WE			
1007.2	11.0	BT 46	1007.2	2.0	BT 46
1029.2	4.0	TOP OF CAP	1029.2	4.0	TOP OF CAP
1030.2	0.0	EBT. 2	1030.2	0.0	EBT. 2



LOOKING EAST



LOOKING WEST



LOOKING EAST OFF BRIDGE



LOOKING WEST OFF BRIDGE



SOUTH SIDE (SIMILAR SOUTH SIDE)



NORTH SIDE W/ UTILITY (SIMILAR SOUTH SIDE W/ UTILITY)



NORTH SIDE



SOUTH SIDE



BENCH MARK @ THE SOUTHEAST CORNER



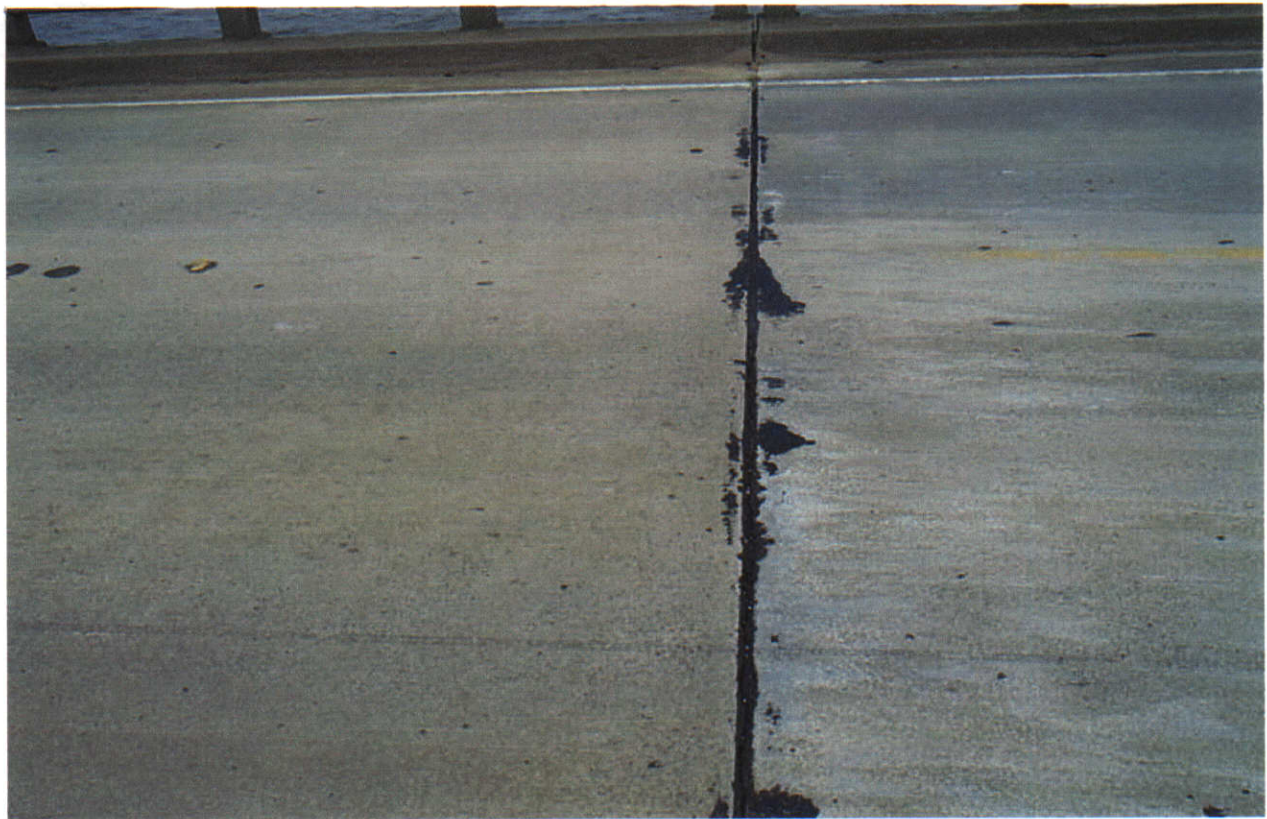
DATA PLATE @ THE NORTHEAST CORNER



BENT 5 JOINT



BENT 7 JOINT



BENT 20 JOINT



END BENT 1 (SIMILAR END BENT 2)



SPAN 2 UNDERSIDE



SPAN 13 UNDERSIDE



SOUTH END OF BENT 5



NORTH END OF BENT 27



NORTH END OF BENT 40 W/ STEEL CRUTCHBENT



SPAN 40 SIDE OF BENT 40 W/ STEEL CRUTCHBENT (STEEL CRUTCHBENT @ ORIGINAL PILE 1)



SPAN 47 SIDE OF BENT 46 (PILES 1- 4 ENCASED, SIMILAR BENT 1 & PILES 1- 4 ENCASED)



SPAN 24 SIDE OF BENT 24 (CHANNEL SPAN 24)



SPAN 20 SIDE OF BENT 20 (PILES 1, 2 & 3 ENCASED) (SIMILAR ENCASED PILES @ MANY OTHER BENTS)



SPAN 2 SIDE OF BENT 2 (PILE 1 ENCASED)



UPSTREAM (NORTH)



DOWNSTREAM (SOUTH)