



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY WAKE BRIDGE NUMBER 910091 INSPECTION CYCLE 2 YRS

US-70 (WESTBOUND LANE)

ROUTE US70 ACROSS CRABTREE CREEK M.P. 0

0.2 OF A MILE WEST OF US-1

LOCATION 0.2 MI.W.US1

SUPERSTRUCTURE RC DECK GIRDERS WIDENED WITH I-BEAMS

SUBSTRUCTURE EBTS:RC CAP/TIM,PPC&STEEL PILES;IBTS:RCP&BEAM

1 @ 50.5' ; 1 @ 53.75' ; 1 @ 52.5' ; 1 @ 52.3'

SPANS 1@50.5';1@53.75';1@52.5';1@52.3'

LONGITUDE 78° 40' 25.04"

LATITUDE 35° 50' 17.10"

INSPECTION DATE 09/19/2013

PRESENT CONDITION FAIR

PRESENT POSTING N NOT POSTED

PROPOSED POSTING

OTHER SIGNS PRESENT NONE



LOOKING EAST

Fracture Critical	No
Temporary Shoring	Yes
Scour Critical	No
Scour POA	No

SIGN NOTICE ISSUED FOR		NUMBERED REQUIRED
No	WEIGHT LIMIT	
No	DELINEATORS	
No	NARROW BRIDGE	
No	ONE LANE BRIDGE	
No	LOW CLEARANCE	

IDENTIFICATION			
(1) STATE NAME - NORTH CAROLINA	BRIDGE	910091	SUFFICIENCY RATING = 7
(8) STRUCTURE NUMBER(FEDERAL)	00000001830091	STATUS =	Functionally Obsolete
(5) INVENTORY ROUTE (ON/UNDER) - ON	21000700		
(2) STATE HIGHWAY DEPARTMENT DISTRICT	1		
(3) COUNTY CODE 183	(4) PLACE CODE 55000		
(6) FEATURE INTERSECTED - CRABTREE CREEK			
(7) FACILITY CARRIED US70 WBL			
(9) LOCATION 0.2 MI.W.US1			
(11) MILEPOINT	0		
(16) LAT 35° 50' 17.10"	(17) LONG 78° 40' 25.04"		
(98) BORDER BRIDGE STATE CODE	PCT SHARE		
(99) BORDER BRIDGE STRUCTURE NO			

STRUCTURE TYPE AND MATERIAL	
(43) STRUCTURE TYPE MAIN: Concrete	
TYPE - Tee Beam	CODE 104
(44) STRUCTURE TYPE APPR :	
TYPE -	CODE 000
(45) NUMBER OF SPANS IN MAIN UNIT	4
(46) NUMBER OF APPROACH SPANS	
(107) DECK STRUCTURE TYPE - 1	CODE
(108) WEARING SURFACE / PROTECTIVE SYSTEM :	
(A) TYPE OF WEARING SURFACE -	CODE
(B) TYPE OF MEMBRANE -	CODE
(C) TYPE OF DECK PROTECTION -	CODE

AGE AND SERVICE	
(27) YEAR BUILT	1952
(106) YEAR RECONSTRUCTED	
(42) TYPE OF SERVICE : ON - Highway - Pedestrian	
UNDER - Waterway	CODE 55
(28) LANES: ON STRUCTURE 5 UNDER STRUCTURE	0
(29) AVERAGE DAILY TRAFFIC	34500
(30) YEAR OF ADT 2011	(109) TRUCK ADT PCT 12%
(19) BYPASS OR DETOUR LENGTH	1 MI

GEOMETRIC DATA	
(48) LENGTH OF MAXIMUM SPAN	53 FT
(49) STRUCTURE LENGTH	209 FT
(50) CURB OR SIDEWALK: LEFT 2.8335 FT RIGHT 2.8335 FT	
(51) BRIDGE ROADWAY WIDTH CURB TO CURB	72.583 FT
(52) DECK WIDTH OUT TO OUT	80.25 FT
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)	79 FT
(33) BRIDGE MEDIAN - No Median	CODE 1
(34) SKEW 30° (35) STRUCTURE FLARED	0
(10) INVENTORY ROUTE MIN VERT CLEAR	999.9 FT
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	72.583 FT
(53) MIN VERT CLEAR OVER BRIDGE RDWY	999.9 FT
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad	0 FT
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad	000 FT
(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

CLASSIFICATION	
(112) NBIS BRIDGE SYSTEM -	YES
(104) HIGHWAY SYSTEM Is on the NHS	1
(26) FUNCTIONAL CLASS - Other Principal Arterial	14
(100) STRAHNET HIGHWAY - Not a STRAHNET Route	0
(101) PARALLEL STRUCTURE - Left Parallel Structure	L
(102) DIRECTION OF TRAFFIC - 1-way Traffic	1
(103) TEMPORARY STRUCTURE - Temporary Structure/Conditions	T
(110) DESIGNATED NATIONAL NETWORK - On the National Network	1
(20) TOLL On Free Road	3
(31) MAINTAIN - State Highway Agency	01
(22) OWNER - State Highway Agency	01
(37) HISTORICAL SIGNIFICANCE - Not Eligible	5

CONDITION	
(58) DECK	5
(59) SUPERSTRUCTURE	5
(60) SUBSTRUCTURE	5
(61) CHANNEL & CHANNEL PROTECTION	7
(62) CULVERTS	N

LOAD RATING AND POSTING	
(31) DESIGN LOAD HS 20	5
(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 - No Posting Required	5
(41) STRUCTURE OPEN, POSTED, OR CLOSED DESCRIPTION - Open Temporary Shoring	D

APPRAISAL	
(67) STRUCTURAL EVALUATION	3
(68) DECK GEOMETRY	4
(69) UNDERCLEARANCES, VERT & HORIZ	N
(71) WATERWAY ADEQUACY	5
(72) APPROACH ROADWAY ALIGNMENT	8
(36) TRAFFIC SAFETY FEATURES	0111
(113) SCOUR CRITICAL BRIDGES	8

PROPOSED IMPROVEMENTS	
(75) TYPE OF WORK -	CODE
(76) LENGTH OF STRUCTURE IMPROVEMENT	
(94) BRIDGE IMPROVEMENT COST	
(95) ROADWAY IMPROVEMENT COST	
(96) TOTAL PROJECT COST	
(97) YEAR OF IMPROVEMENT COST ESTIMATE	
(114) FUTURE ADT 69000	(115) YEAR FUTURE ADT 2025

INSPECTIONS	
(90) INSPECTION DATE	09/19/2013
(92) CRITICAL FEATURE INSPECTION :	(93) CFI DATE
A) FRACTURE CRIT DETAIL - NO	A)
B) UNDERWATER INSP - NO	B)
C) OTHER SPECIAL INSP NO	C)
SCOUR	

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Update Date: 07/10/2014

COUNTY : WAKE DIVISION : 5 DISTRICT : 1 STRUCTURE NUMBER : 910091 LENGTH : 209 FEET

ROUTE CARRIED : US70 WBL FEATURE INTERSECTED : CRABTREE CREEK

LOCATED : 0.2 MI.W.US1 BRIDGE NAME : CITY : RALEIGH

FUNC. CLASS : 14 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 34500 2011 RAIL TYPE : LT 379 RT 41

BUILT : 1952 BY : SHPWC PROJ : 4838 FED.AID PROJ : DESIGN LOAD : HS 20

REHAB : BY : DOH PROJ : 5.4080011 ALIGNMENT : TAN SKEW : 120 LANES : ON 5 UNDER 0

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 22 FT WATER DEPTH : 1 FT

SUPERSTRUCTURE : RC DECK GIRDERS WIDENED WITH I-BEAMS

SUBSTRUCTURE : EBTS:RC CAP/TIM,PPC&STEEL PILES;IBTS:RCP&BEAM

SPANS : 1@50.5';1@53.75';1@52.5';1@52.3'

BEAMS OR GIRDERS : 14 LNS VAR. I-BEAMS @ VAR. CTS.

FLOOR : 8.5 RC/NO AWS ENCROACHMENT : 7.5 PIPE DECK (OUT TO OUT) : 80.25 FT

CLEAR ROADWAY : 72.583 FT BETWEEN RAILS : 78.25 FT SIDEWALK OR CURB : LT 2.8335 FT RT 2.8335 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-1 OPE.RTG. : HS-1 CONTR.MEMBER : RCDG POSTED : SV TTST DATE

SYSTEM : Primary U.S. Route GREEN LINE ROUTE : Y

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection
 BRIDGE NO. 910091 COUNTY WAKE ROUTE US70 OVER CRABTREE CREEK
 STRUCTURE TYPE RC DECK GIRDERS WIDENED WITH I-BEAMS
 ROUTE ORIENTATION W - E SPANS 1@50.5';1@53.75';1@52.5';1@52.3'

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				45. CHANNEL & CHANNEL PROT.	a. WATERWAY	F
					b. ALIGNMENT	G
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58					c. SCOUR	G
a. CONCRETE			4	F	d. SLOPE PROT., RIP-RAP, DIKES, ETC.	F
b. TIMBER						
c. STEEL PLANK					50. APPROACH ROADWAY CONDITION	F
d. OPEN GRID					51. APPROACH SLABS	
3. RAILING					52. PAINT SYSTEM	CODE W NA
a. CONCRETE				G	53. UTILITIES	G
b. TIMBER					54. RESPONSE TO LIVE LOAD	G
c. ALUMINUM				G	55. ESTIMATED REMAINING LIFE	9
d. STEEL						
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS				G		
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)				G	60. REGULATORY SIGN NOTICE ISSUED	NO
6. DECK EXP JTS. OR DEVICES. NO. OF EACH					61. PROMPT-ACTION NOTICE ISSUED	NO
a. STEEL PL OR FINGER					62. PRESENTLY POSTED	NO
b. MISC PREFAB					63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)	5
c. COMPRESSION SEAL					64. TOTAL SNOOPER INSP. TIME (HRS)	0
d. STANDARD JOINTS			5	F	65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)	0
e. OPEN JOINTS						
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				F	71. SI&A FIELD APPRAISAL RATINGS	
14. FLOOR BEAMS AND CONNECTIONS					a. WATERWAY ADAQUACY	5
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)				G	b. APPR. RDWY. ALIGNMENT	8
16. DRAINAGE SYSTEM (ON STRUCTURE)				G	72. FIELD SCOUR EVALUATION	
17. MOVABLE SPAN MACHINERY						G
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)					USE OF INSP. ACCESSIBILITY EQUIPMENT	
35. TIM SUB STR.					SNOOPER (CODE S, 4, OR N)	HRS NO
a. ABUT. & INT. BENT CAPS & RISERS					LADDER	NO
b. PILES, POST, SILLS, & BRACING					BUCKET TRUCK	NO
c. BULKHEADS, WING'S, & TIE BACKS					BOAT	NO
36. CONC SUB STR.					OTHER	NO
a. ABUT. & INT. BENT CAPS				F	SPECIAL INSPECTION REQUESTED FOR	
b. ABUT. & BENT COL'S BREASTWALLS				F		
c. ABUT. & INT. BENT PILES						
d. BACKWALLS, WING'S, RETAIN. WALLS				G		
e. ABUT. & BENT FOOTINGS & SILLS						
37. STEEL SUB STR.						
a. ABUT. & INT. BENT CAPS & RISERS						
b. PILES, BRACING, AND BULKHEADS						
38. FOUNDATION PILES TYPE MATERIAL					NOTE	
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)				G		
40. FENDER SYSTEMS					80. INSPECTED BY:	Richard P. Stinson
41. DRIFT				F	81. REVIEWED BY:	

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

BRIDGE: **910091**County **Wake**DATE: **7/10/2014**

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 <i>7/10/14</i>
S I & A ITEM 64 OPERATING RATING	HS	BY:
S I & A ITEM 66 - INVENTORY RATING	HS	BY:

COMMENTS

Steels Saddles have been placed under Beams 8, 9 & 10 @ Bt. 1 Span 1 side.

Shored

Bridge I&A Form 1(82)H State of North Carolina Dept. of Transportation Division of Highways		FIELD INSPECTION REPORT <u>Bridge Inspection & Analysis</u>	
Team Leader RICHARD P. STEIGER JR.			
Assisted By MG			
Item No.	Grade		
2a	F	CONCRETE DECK: - UNDERSIDE OF DECK IN SPAN 2 HAS TRANSVERSE CRACKS WITH EFFLO. IN BAY 11, SIMILAR IN OTHER SPANS. - TOP OF DECK IN SPAN 2 ALONG JOINT OVER BENT 2 HAS PATCHES NEAR CENTERLINE, 14 SQ.FT. - TOP OF DECK HAS FEW SCATTERED TRANSVERSE H/L CRACKS NEAR BENT 3, SIMILAR NEAR OTHER BENTS. - TOP OF DECK IN SPAN 4 HAS LARGE PATCH NEAR LEFT CURB AT EAST END OF DECK 48 SQ.FT.	
5	G	WALKWAYS: - CONCRETE SIDEWALK HAS HAIRLINE MAP AND TRANSVERSE CRACKS, ALL SPANS.	
6d	F	STANDARD JOINTS: - EXPANSION JOINTS ARE DETERIORATED AND ARE ALLOWING DRAINAGE ON TO THE SUBSTRUCTURE. - EXPANSION JOINT AT END BENT 2 IS COVERED WITH AWS, CRACKING AND BREAKING UP OVER JOINT.	
10	F	LONGITUDINAL BEAMS: CONCRETE BEAMS: - PREVIOUSLY NOTED DEFECTS HAVE BEEN REPAIRED WITH EPOXY AND CEMENT. - SPAN 1, BENT 1, GIRDER 4, LEFT SIDE IS SPALLED 18 IN. VERTICAL X 15 IN. HORIZONTAL X 5 IN. DEEP WITH EXPOSED REBAR OVER THE BENT. STEEL BEAMS: - BEAMS 11 AND 12 HAVE RANDOM AREAS OF SPOT PEELING IN THE COATING WITH SURFACE RUST, ALL SPANS (LESS THAN 5% OF COATING). NO SECTION LOSS NOTED.	
10A	NO	CURVED GIRDERS: - 4 SPANS AND NO CURVED GIRDERS.	
13	F	END DIAPHRAGMS: - PREVIOUSLY NOTED DEFECTS HAVE BEEN REPAIRED WITH EPOXY AND CEMENT. - END BENT 1, BAY 12, CURTAIN WALL SPALLING AND DELAMINATING 5 IN. X 12 IN. - END BENT 1, SOUTH OF GIRDER 14, CURTAIN WALL DELAMINATED 12 IN. X 12 IN. WITH SPALL OLD UT VOID NOT SPALLED. (SEE PHOTO # 2778) - END BENT 2, SOUTH OF GIRDER 13, CURTAIN WALL SPALLED 5 IN. X 7 IN. - END BENT 2, SOUTH OF GIRDER 14, CURTAIN WALL CRACKING AND DELAMINATING 12 IN. X 30 IN.	
15	G	BEARING ASSEMBLIES: - BEAMS 12 AT BENT 1 SPANS 1 AND 2 HAS (3) ANCHOR BOLTS MISSING NUTS BETWEEN THE TWO BEAMS.	

Bridge I&A Form 1(82)H State of North Carolina Dept. of Transportation Division of Highways		FIELD INSPECTION REPORT <u>Bridge Inspection & Analysis</u>	
Team Leader RICHARD P. STEIGER JR.			
Assisted By MG			
Item No.	Grade		
52	NA	PAINT SYSTEM: - WEATHERING STEEL BEAMS NON PAINTED. - (GRADE: (NA) / CODE: (W)).	
36a	F	CONCRETE BENT CAPS: - SOME PREVIOUSLY LISTED DEFECTS REPAIRED WITH EPOXY AND CEMENT. - BENT 2 CAP WEST FACE HAS TOP EDGE SPALL UNDER GIRDER 4, 12 IN X 3 IN X 2 IN DEEP. - BENT 3 CAP EAST FACE DELAMINATED NEAR GIRDER 4. - SPALL AND DELAMINATION ON WEST FACE ON BENT NO. 1 CAP BELOW GIRDER NO. 8 22 INCH X 4 INCH DELAMINATION ON WEST FACE ON BENT NO. 1 CAP SPAN NO. 1 UNDER GIRDER NO. 5 SADDLE UNDER GIRDER NO. 8 FLAKING ON WEST SIDE OF BENT NO. 1 SPAN NO. 1 SPALL ON EAST FACE OF BENT NO. 1 CAP SPAN NO. 1 UNDER GIRDER NO. 10 WHICH IS SUPPORTED BY SADDLE	
36b	F	CONCRETE COLUMNS: - PREVIOUSLY LISTED DEFECTS REPAIRED WITH EPOXY AND CEMENT. - BENT 1 COLUMN 3 SURFACE PITTED NEAR WATERLINE AT SOUTHEAST CORNER, 1/2 IN DEEP.	
41	F	DRIFT: - DRIFT IN SUPERSTRUCTURE.	
45a	F	WATERWAY: - SEE DRIFT.	
45d	F	CHANNEL SLOPE PROTECTION: - BANK EROSION, WASHED OUT UNDER SPAN NO. 1 LOOKING NORTH	
50	F	APPROACH ROADWAY: - WEST APPROACH CRACKING AND BREAKING UP ALONG END OF DECK. - SOUTH APPROACH CRACKING AND BREAKING UP IN SPOTS NEAR END OF SPAN 4 DECK. - GUARD RAIL TERMINAL END AT NE CORNER DAMAGED.	
62	NO	PRESENTLY POSTED: - NOT POSTED AT TIME OF INSPECTION.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 910091

County WAKE

Date: 09/19/2013

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	20	APPROACHES CRACKING AND BREAKING UP AT EDGES OF DECK	
3306	Maintain Concrete Superstructure Components	SF	50	CONCRETE BEAMS AND DIAPHRAGMS CRACKED, DELAMINATED AND SPALLED.	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



SPALL, CRACKS AND DELAMINATION IN BACKWALL BAY 12 END BENT 1



MISSING NUTS GIRDER 12 BENT 1 SPAN 1 AND SPAN 2



SPALL BAY 5 SPAN 3 (RANDOM BAY 5 SPAN 3)



TRANSVERSE CRACK WITH EFFLORESCENCE BOTTOM OF DECK BAY 3 SPAN 2 (RANDOM THROUGHOUT)



DRIFT BAY 2 BENT 1 SPAN 1



DAMAGED TERMINAL END OF GUARDRAIL NORTHEAST CORNER



CRACKS VOIDS IN ASPHALT WEARING SURFACE END BENT 2 JOINT (END BENT 1 SIMILAR)



SPALL BENT 1 JOINT SPAN 1 SIDE

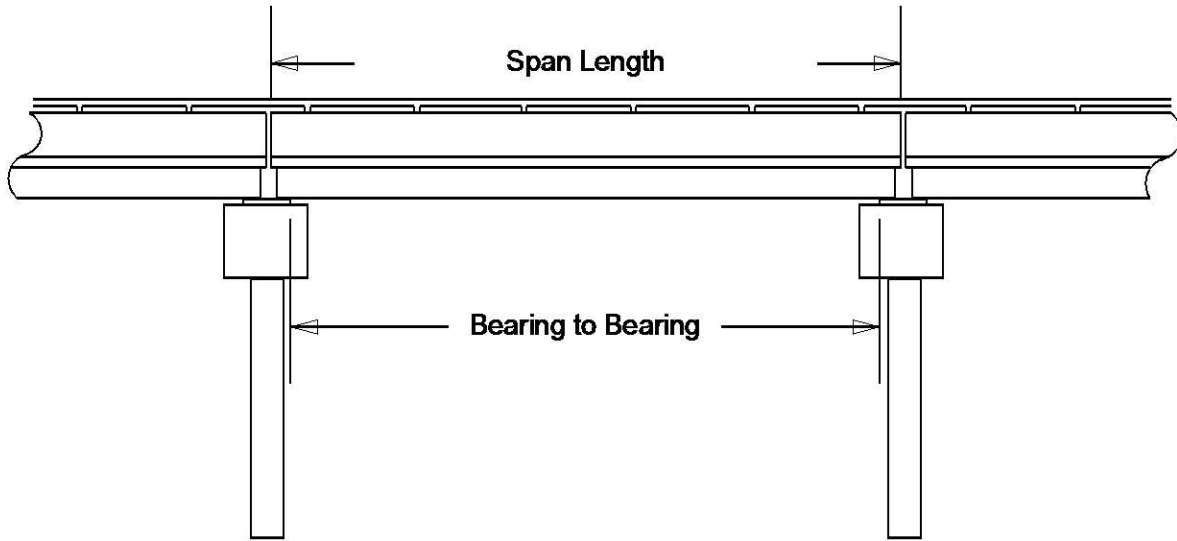


CRACKS AND VOIDS IN TOP OF DECK AND ASPHALT WEARING SURFACE END BENT 1 JOINT

Structure Data Worksheet

Spans

County: WAKE Structure No: 910091 Date: 09/19/2013 Inspected By: RPSJR



Span No	Span Length	Bearing to Bearing	Comments
1	51.953	50.953	
2	53.750	52.750	
3	52.490	51.490	
4	52.302	51.302	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 910091 County: WAKE Date: 09/19/2013 By: RPSJR

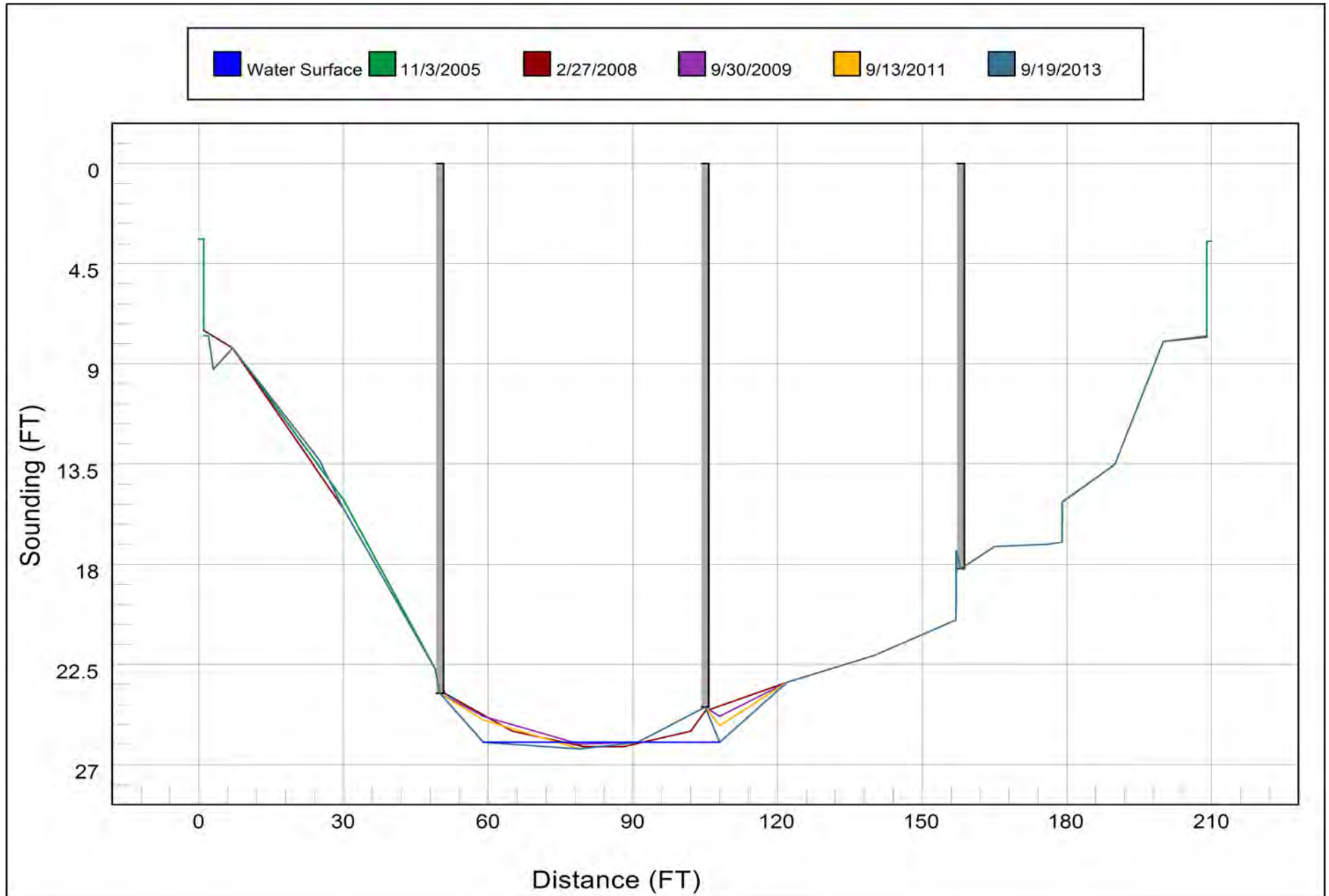
Record sounding from top of rail. Other location if needed: TOP OF RAIL

Distance from Highwater Mark to top of rail: 5 Location of Highwater Mark: SUPERSTRUCTURE

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
1	7.75	Top of Cap			
2	7.75	Top of Cap			
3	9.25	GROUND AT CAP			
7	8.3				
25	13.333				
30	15.5				
49	22.7				
50	23.8	BENT 1	50	19.6	BENT 1
59	26	Water Surface/Water Edge (WSWE)			
79	26.3				
91	26				
105	24.417	BENT 2	105	23	BENT 2
108	26	Water Surface/Water Edge (WSWE)			
122	23.3				
140	22.1				
157	20.5				
157.1	17.4				
158	18.2	BENT 3	158	18.3	BENT 3
165	17.2				
176	17.1				
179	17				
179.1	15.2				
190	13.5				
200	8				
209	7.75	Top of Cap			

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch

US HWY 70 LOOKING WEST



Roadway	73ft Wide	6 Paved Lanes	Looking West
Left Shoulder	1ft Wide	1ft Paved	
Right Shoulder	5ft Wide	5ft Paved	
Left Guardrail	1ft from road		
Right Guardrail	5ft from road		

LIDAR VERIFIED 090513

Title

APPROACH SLAB

Description

EAST APPROACH LOOKING WEST

Bridge No: 910091

Drawn By: RLB

Date: 2/12/2008

File Name: S0214000024

Bridge Inspection Field Sketch

BENT CONSTRUCTED FOR FIRST BRIDGE WIDENING
INTERIOR BENTS TWO AND THREE SIM.

2.500 + / - COLUMNS TAPERED

Cap Information			Material Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.		Right Beam to End of Cap.			
14.584 ft.	2.500 ft.	2.500 ft.	3.417 ft.	3.750 ft.						
Subcap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information			Material							
Length	Width	Height	INSPECTED BY: RPS, MG - 09/19/2013							
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Concrete	7.417 ft.	2.500 ft.			Vertical	No	No	No	No
2	Concrete		2.500 ft.			Vertical	No	No	No	No
Bent/Abutment #: 1			Similar Bents:							

Title
INTERIOR BENT 1

Description
TWO COLUMNS

Bridge No: 910091

Drawn By: ado

Date: 10/5/2009

File Name: S0010034783

Bridge Inspection Field Sketch



Cap Information			Material Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.		Right Beam to End of Cap.			
35.000 ft.	2.500 ft.	2.500 ft.	5.000 ft.	5.000 ft.						
Subcap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information			Material							
Length	Width	Height	INSPECTED BY: RPS, MG - 09/19/2013							
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Concrete	12.500 ft.	2.500 ft.			Vertical	No	No	No	No
2	Concrete	12.500 ft.	2.500 ft.			Vertical	No	No	No	No
3	Concrete		2.500 ft.			Vertical	No	No	No	No
Bent/Abutment #: 1 Similar Bents:										

Title ORIGINAL INT. BENT 1		Description THREE TAPERED COLUMNS	
Bridge No: 910091	Drawn By: ado	Date: 10/5/2009	File Name: S0010034784

Bridge Inspection Field Sketch

WORK LINE

RIGHT SIDE TIED INTO ORIGINAL INT. BENT 1
INTERIOR BENTS TWO AND THREE SIM.

Cap Information			Material Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
11.500 ft.	3.667 ft.	2.500 ft.	7.208 ft.	4.292 ft.						
Subcap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information			Material							
Length	Width	Height	INSPECTED BY: RPS, MG - 09/19/2013							
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Concrete		3.500 ft.			Vertical	No	No	No	No
Bent/Abutment #:			1							
Similar Bents:										

Title	RIGHT SIDE INT. BNT. 1
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Description
DRILLED SHAFT

Bridge No: 910091

Drawn By: ado

Date: 10/5/2009

File Name: S0010034785

Bridge Inspection Field Sketch

LOOKING EAST

INTERIOR BENTS TWO AND THREE SIM.

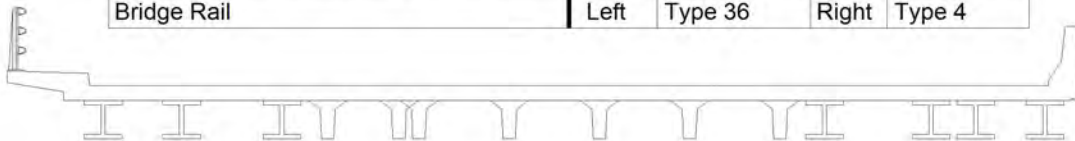
ADDED AS PART OF BRIDGE WIDENING

Cap Information			Material Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.			Right Beam to End of Cap.		
21.375 ft.	4.167 ft.	2.500 ft.	9.833 ft.	11.542 ft.						
Subcap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information			Material							
Length	Width	Height	INSPECTED BY:RPS, MG - 09/19/2013							
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Concrete		4.0 ft.			Vertical	No	No	No	No
Bent/Abutment #: 1 Similar Bents:										

Title LEFT INT.BT. 1		Description SINGLE DRILLED SHAFT	
Bridge No: 910091	Drawn By: ado	Date: 10/5/2009	File Name: S0010034782

Bridge Inspection Field Sketch

Deck Width/Out to Out	80.25ft	Between Rails	78.25ft
Clear Roadway	72.583ft	Wearing Surface	
Median Width		Median Height	
Curb Height		Left	0.5ft
Sidewalk Width		Left	
Clear Roadway (Rail to Median)		Left	
Guardrail Width		Left	
Top of Rail to Deck/Wearing Surface		Left	3.917ft
Bridge Rail		Left	Type 36
		Right	Type 4



Measurements for Span #	1		
Deck Thickness	1.125	Left Overhang	3.083
Top of Rail to Bottom of Beam	5.083	Right Overhang	3.083

Beam Number	Beam Type	Spacing	Comments
1	Steel I Beam	8.25ft	2.417 ht. x .875 w x .052 flng. thick
2	Steel I Beam	7.5ft	2.417 ht. x .875 w x .052 flng. thick
3	Steel I Beam	3.417ft	2.417 ht. x .875 w x .052 flng. thick
4	RC Deck Girder	5.333ft	3.104 ht. x 1.5 wide
5	RC Deck Girder	1.5ft	3.042 ht. x 1.5 wide
6	RC Deck Girder	6.75ft	3.146 ht. x 1.500 wide
7	RC Deck Girder	6.75ft	3.250 ht. x 1.500 wide
8	RC Deck Girder	6.75ft	3.292 ht. x 1.500 wide
9	RC Deck Girder	6.75ft	3.271 ht. x 1.500 wide
10	RC Deck Girder	3.338ft	3.250 ht. x 1.500 wide
11	Steel I Beam	8ft	2.698 ht. x .948 wide x .062 flng thick.
12	Steel I Beam	3.333ft	2.698 ht. x .948 wide x .062 flng thick.
13	Steel I Beam	6.25ft	2.417 ht. x .875 wide x .052 flng. thick.
14	Steel I Beam	ft	2.417 ht. x .875 wide x .052 flng. thick.

INSPECTED BY:RPS, MG 09/19/2013

Title

TYPICAL SECTION

Description

LOOKING EAST

Bridge No: 910091

Drawn By: RLB

Date: 2/12/2008

File Name: S0214000021



END BENT 1 (END BENT 2 SIMILAR)



UTILITY BAY 2



PIPE CROSSING UNDER SPAN 1



BEARING (OTHERS SIMILAR)



UTILITY HOLE RIGHT SIDE OF GIRDER 14 END BENT 1 (PHOTO 1 OF 2)



CAPPED OFF UTILITY PIPE FROM ADJACENT BRIDGE (PHOTO 2 OF 2)



SADDLE SUPPORT BENT 1 GIRDERS 8 THROUGH 10



SUPERSTRUCTURE SPAN 2 GIRDERS 1 THROUGH 3



SUPERSTRUCTURE SPAN 2 GIRDERS 4 THROUGH 10



SUPERSTRUCTURE SPAN 2 GIRDERS 11 THROUGH 14



BENT 3 SPAN 3 (OTHERS SIMILAR)



NORTH PROFILE LOOKING SOUTH



GREENWAY UNDER SPAN 4



LOOKING WEST



GUARDRAIL NORTHEAST CORNER



APPROACH ROADWAY ASPHALT WEARING SURFACE EAST END (OTHER END SIMILAR)



END BENT 2 JOINT (END BENT 1 SIMILAR)



TOP OF DECK SPAN 4 (OTHERS SIMILAR)



GUARDRAIL ATTACHMENT NORTHEAST CORNER



LEFT SIDEWALK AND 3 BAR METAL RAIL



DIRT AND DEBRIS LEFT SIDEWALK



BENT 3 JOINT (OTHERS SIMILAR)



LOOKING NORTH DOWNSTREAM



SOUTH PROFILE



LOOKING EAST



LOOKING SOUTH



GREENWAY UNDER SPAN 4



LOOKING UPSTREAM FROM UNDER BRIDGE



LOOKING DOWNSTREAM FROM UNDER BRIDGE



RIGHT BARRIER RAIL