



NC DEPARTMENT OF TRANSPORTATION      ATTENTION  
 DIVISION OF HIGHWAYS  
 BRIDGE MANAGEMENT UNIT

# BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY JOHNSTON      BRIDGE NUMBER 500056      INSPECTION CYCLE 2 YRS  
 ROUTE US301&NC96      ACROSS HOLTS LAKE(BLACK CREEK)      M.P. 0

LOCATION 0.7 MI N JCT US701

SUPERSTRUCTURE REINFORCED CONCRETE DECK GIRDERS

SUBSTRUCTURE RC ABUTS;BTS;RNP&W PIERS EXTENDED W/BRACKETS

SPANS 4@52'6

LONGITUDE 78° 23' 4.2"      LATITUDE 35° 28' 8.8"

PRESENT CONDITION FAIR      INVENTORY RATING \_\_\_\_\_

INSPECTION DATE 03/18/2010      OPERATING RATING \_\_\_\_\_

PRESENT POSTING Not Posted      PROPOSED POSTING \_\_\_\_\_

COMPUTER UPDATE \_\_\_\_\_      ANALYSIS DATE \_\_\_\_\_

POSTING LETTER DATE \_\_\_\_\_      SUFFICIENCY RATING \_\_\_\_\_

OTHER SIGNS PRESENT NONE



LOOKING NORTH

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	_____

**IDENTIFICATION**

(1) STATE NAME -NORTH CAROLINA BRIDGE 500056  
 (8) STRUCTURE NUMBER(FEDERAL) 000000001010056  
 INVENTORY ROUTE (ON/UNDER) - ON 121003010  
 (2) STATE HIGHWAY DEPARTMENT DISTRICT 4  
 (3) COUNTY CODE 101 (4) PLACE CODE 00000  
 (6) FEATURE INTERSECTED - HOLTS LAKE(BLACK CREEK)  
 (7) FACILITY CARRIED US301&NC96  
 (9) LOCATION 0.7 MI N JCT US701  
 (11)MILEPOINT 0  
 (16)LAT 35° 28' 8.8" (17)LONG 78° 23' 4.2"  
 (98)BORDER BRIDGE STATE CODE PCT SHARE  
 (99)BORDER BRIDGE STRUCTURE NO

SUFFICIENCY RATING = 42.1  
 STATUS = Not Deficient

**CLASSIFICATION** **CODE**

(112)NBIS BRIDGE SYSTEM - YES  
 (104)HIGHWAY SYSTEM NON NHS Route 0  
 (26) FUNCTIONAL CLASS - Other Principal Arterial 14  
 (100)STRAHNET HIGHWAY - Not a STRAHNET Route 0  
 (101)PARALLEL STRUCTURE - No Parallel Structure N  
 (102)DIRECTION OF TRAFFIC - 2-way Traffic 2  
 (103)TEMPORARY STRUCTURE - Not Temporary  
 (110)DESIGNATED NATIONAL NETWORK - Not Part of 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**

(43) STRUCTURE TYPE MAIN: Concrete  
 TYPE - Tee Beam CODE 104  
 (44) STRUCTURE TYPE APPR :  
 TYPE - CODE  
 (45) NUMBER OF SPANS IN MAIN UNIT 4  
 (46) NUMBER OF APPROACH SPANS  
 (107)DECK STRUCTURE TYPE - Concrete cast-in-place CODE 1  
 (108)WEARING SURFACE / PROTECTIVE SYSTEM :  
 (A) TYPE OF WEARING SURFACE - Bituminous CODE 6  
 (B) TYPE OF MEMBRANE - None CODE 0  
 (C) TYPE OF DECK PROTECTION - None CODE 0

**CONDITION** **CODE**

(58) DECK 7  
 (59) SUPERSTRUCTURE 6  
 (60) SUBSTRUCTURE 5  
 (61) CHANNEL & CHANNEL PROTECTION 8  
 (62) CULVERTS N

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

(31) DESIGN LOAD H 15 2  
 (64) OPERATING RATING - HS-19 135  
 (66) INVENTORY RATING - HS-12 121  
 (70) BRIDGE POSTING - No Posting Required 5  
 (41) STRUCTURE OPEN, POSTED ,OR CLOSED A  
 DESCRIPTION - Open, No Restriction

**AGE AND SERVICE**

(27) YEAR BUILT 1926  
 (106)YEAR RECONSTRUCTED 1954  
 (42) TYPE OF SERVICE : ON - Highway  
 UNDER - Waterway CODE 15  
 (28) LANES: ON STRUCTURE 2 UNDER STRUCTURE  
 (29) AVERAGE DAILY TRAFFIC 10000  
 (30) YEAR OF ADT 2008 (109) TRUCK ADT PCT 12 %  
 (19) BYPASS OR DETOUR LENGTH 8 MI

**APPRAISAL** **CODE**

(67) STRUCTURAL EVALUATION 4  
 (68) DECK GEOMETRY 4  
 (69) UNDERCLEARANCES,VERTI & HORIZ N  
 (71) WATERWAY ADEQUACY 8  
 (72) APPROACH ROADWAY ALIGNMENT 8  
 (36) TRAFFIC SAFETY FEATURES 0010  
 (11)SCOUR CRITICAL BRIDGES 5

**GEOMETRIC DATA**

(48) LENGTH OF MAXIMUM SPAN 53 FT  
 (49) STRUCTURE LENGTH 210 FT  
 (50)CURB OR SIDEWALK: LEFT 1.6 FT RIGHT 1.6 FT  
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 28.4 FT  
 (52) DECK WIDTH OUT TO OUT 31.7 FT  
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 28.0 FT  
 (33) BRIDGE MEDIAN - No Median CODE 0  
 (34) SKEW 0° (35) STRUCTURE FLARED NO  
 (10) INVENTORY ROUTE MIN VERT CLEAR 99 FT 99 IN  
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 28.4 FT  
 (53) MIN VERT CLEAR OVER BRIDGE RDWY 99 FT 99 IN  
 (54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad  
 (55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad 99.9 FT  
 (56) MIN LAT UNDERCLEAR LT REF - 0.0 FT

**PROPOSED IMPROVEMENTS**

(75) TYPE OF WORK - CODE  
 (76) LENGTH OF STRUCTURE IMPROVEMENT 0 FT  
 (94) BRIDGE IMPROVEMENT COST  
 (95) ROADWAY IMPROVEMENT COST  
 (96) TOTAL PROJECT COST  
 (97) YEAR OF IMPROVEMENT COST ESTIMATE 20  
 (114)FUTURE ADT 20000 (115) YEAR FUTURE ADT 2025

**INSPECTIONS**

(90) INSPECTION DATE 03/18/2010  
 (92) CRITICAL FEATURE INSPECTION : (93) CFI DATE  
 A) FRACTURE CRIT DETAIL - NO A)  
 B) UNDERWATER INSP - YES 48Mo B) 07/01/2007  
 C) OTHER SPECIAL INSP NO C)  
 SCOUR

**NAVIGATION DATA**

(38) NAVIGATION CONTROL - No Navigational Control CODE 0  
 (111)PIER PROTECTION - Not Applicable CODE  
 (39) NAVIGATION VERTICAL CLEARANCE 0  
 (116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR  
 (40) NAVIGATION HORIZONTAL CLEARANCE 0

# BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection  
 BRIDGE NO. 500056 COUNTY JOHNSTON ROUTE US301&NC96 OVER HOLTS LAKE(BLACK CREEK)  
 STRUCTURE TYPE REINFORCED CONCRETE DECK GIRDERS  
 ROUTE ORIENTATION S - N SPANS 4@52'6"

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

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

Bridge I&A Form 1(82)H		<h1>FIELD INSPECTION REPORT</h1> <h2><u>Bridge Inspection &amp; Analysis</u></h2>	
<b>State of North Carolina</b> <b>Dept. of Transportation</b> <b>Division of Highways</b>			
Team Leader <b>WILLIS C MAY</b>			
Assisted By <b>WTW</b>			
Item No.	Grade		
1	6	WEARING SURFACE: 6 TRANSVERSE, MAP CRACKS, AND DELAMINATION IN ASPHALT WEARING SURFACE ALONG EXPANSION JOINTS OVER INTERIOR BENTS. LONGITUDINAL CRACKS IN ASPHALT IN ALL SPANS.	
2a	7	CONCRETE DECK: 7 HAIRLINE CRACK WITH EFFLORESCENCE IN DECK OVERHANG AT SOUTHEAST CORNER. 12 IN X 12 IN X 6 IN DEEP SPALL WITH EXPOSED REBAR AND 12 IN X 10 IN X 3 IN DEEP SPALL IN RIGHT OVERHANG AT BENT 3.	
3a	6	CONCRETE RAILING: 6 WEATHERING AND SCALING OF RAIL WITH EXPOSED AGGREGATE . TOPS OF GUARDRAIL POSTS AT RIGHT SIDE GUARDRAIL ATTACHMENT IN SPAN 1 HAVE SURFACE SPALLS. GUARDRAIL POST BASES OF SPAN 3 AND SPAN 4 OVER BENT 3 ARE SPALLED 4 IN. DEEP WITH EXPOSED REBAR.	
4	6	CURBS, 6 WEATHERING AND SCALING OF CURB WITH EXPOSED AGGREGATE. TRANSVERSE HAIRLINE CRACK IN CURBS, RANDOM THROUGHOUT.	
7	6	DECK DEBRIS: 6 DEBRIS AND VEGETATION 6 IN. HIGH OUT 12 IN. ALONG CURBS.	
10	6	LONGITUDINAL BEAMS: 6 SPAN 1 GIRDER 4 SPAN 1 HAS LONGITUDINAL AND TRANSVERSE CRACK WITH DELAMINATION IN 10 FT. LONG AT MIDPOINT. SPAN 2 10 IN X 2 IN X 1/2 IN DEEP SPALL WITH EXPOSED REBAR IN BOTTOM OF GIRDER 5, SPAN 2. 1/4 IN. LONGITUDINAL CRACK IN BOTTOM OF GIRDER 5 AT MIDSPAN.	
16	4	DRAINAGE SYSTEM 4 ALL DRAIN HOLES ARE CLOGGED WITH DEBRIS AND VEGETATION.	

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State of North Carolina Dept. of Transportation Division of Highways			
Team Leader <b>WILLIS C MAY</b>			
Assisted By <b>WTW</b>			
Item No.	Grade		
36a	5	CONCRETE CAPS 5	
		ABUTMENT 1- HAIRLINE TO 1/16 IN. HORIZONTAL CRACK AND MAP CRACKING WITH EFFLORESCENCE IN FACE OF ABUTMENT UNDER GIRDER 5. 3 FT. X 12 IN. X 12 IN. DEEP SPALL WITH EXPOSED REBAR IN ABUTMENT 1 CAP UNDER GIRDER 1. 7 IN X 2 IN X 1 IN. DEEP SPALL WITH EXPOSED REBAR IN ABUTMENT CAP UNDER GIRDER 2. 4 FT X 4 IN X 1 IN. DEEP SPALL WITH EXPOSED REBAR IN ABUTMENT CAP UNDER GIRDER 3. HAIRLINE VERTICAL CRACKS AT EACH SIDE OF GIRDERS 2,3,4 IN ABUTMENT 1 CAP AND DOWN INTO BREASTWALL.	
		BENT 1- HAIRLINE TO 1/16 IN. HORIZONTAL CRACK AND 12 IN. X 6 IN. X 1 IN. DEEP SPALL WITH EXPOSED REBAR IN FACE OF BENT 1 CAP, SPAN 1 SIDE UNDER GIRDER 3. 1/8 IN CRACK WITH DELAMINATION UNDER GIRDER 4 SPAN 1 SIDE .	
		BENT 2- 1/4 IN. DIAGONAL CRACK IN FACE CAP, SPAN 3 SIDE, RIGHT SIDE OF GIRDER 4 AT CORNER OF BUILDUP. HAIRLINE VERTICAL CRACKS AT G2 SPAN 3 SIDE .	
		BENT 3- 12 IN. X 7 IN. X 1 IN. DEEP SPALL WITH EXPOSED REBAR IN BOTTOM OF BENT CAP, SPAN 3 SIDE BETWEEN GIRDERS 3 AND 4. HAIRLINE TO 1/16 IN. HORIZONTAL CRACK WITH DELAMINATION IN FACE OF CAP, SPAN 3 SIDE BETWEEN GIRDERS 3 AND 4.	
36b	5	BREASTWALLS 5 ABRASION WITH EXPOSED COARSE AGGREGATE IN FACES . ABUTMENT 1 VERTICAL HAIRLINE CRACKS IN FACE OF BREASTWALL EXTENDING DOWN FROM GIRDERS 2,3, 4. SOLID WEBS IN INTERIOR BENTS HAVE HAIRLINE VERTICAL CRACKS IN FACES BETWEEN COLUMNS.	
36d	5	CONCRETE RETAINING WALLS 5 ABUTMENT 1 2 FT. OF EROSION BEHIND LEFT WINGWALL AT ABUTMENT 1 . HAIRLINE DIAGONAL IN LEFT WINGWALL OF ABUTMENT 1. END BENT 2 BACKWALL EXTENSIONS AT END BENT 2 LEFT AND RIGHT SIDE ARE UNDERMINED ( SEE PHOTO ) .	
39	5	SLOPE PROTECTION 5 MISSING RIP RAP AND SLOPE EROSION AT END BENT 2 .	

Bridge I&A Form 1(82)H <b>State of North Carolina</b> <b>Dept. of Transportation</b> <b>Division of Highways</b>		<b>FIELD INSPECTION REPORT</b>  <u>Bridge Inspeccion &amp; Analysis</u>	
Team Leader <b>WILLIS C MAY</b>			
Assisted By <b>WTW</b>			
<b>Item No.</b>	<b>Grade</b>		
<b>50</b>	<b>6</b>	APPROACH ROADWAY CONDITION    6 APPROACH 1 TRANSVERSE CRACKS IN APPROACH 1 WITH UP TO 1 IN. SETTLEMENT AT ABUTMENT 1 , END BENT 2 SIMILAR . APPROACH 2 RIGHT SIDE CURB IS SETTLED AND SEPERATED 8 IN. FROM END OF BRIDGE . 30 FT. OF GUARDRAIL DAMAGE AT RIGHT SIDE OF APPROACH 2 .	

# BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 500056

County JOHNSTON

Date: 03/18/2010

## 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	180	APPROACHES ARE CRACKED AND SETTLED, ASPHALT OVER EXPANSION JOINTS CRACKED.	
3306	Maintain Concrete Superstructure Components	SF	40	SURFACE SPALLS, CRACKS, AND DELAMINATIONS IN BOTTOM OF GIRDERS.	
3318	Maint to Concrete Handrail	LF	4	GUARDRAIL POST BASES OF SPAN 3 AND SPAN 4 OVER BENT 3 ARE SPALLED 4 IN. DEEP WITH EXPOSED REBAR. TOPS OF GUARDRAIL POSTS AT RIGHT SIDE GUARDRAIL ATTACHMENT IN SPAN 1 HAVE SURFACE SPALLS.	
3348	Maintain Concrete Substructure Components	LF	20	CRACKS, SPALLS, AND DELAMINATION IN CAPS.	
3352	Maint Slope Protection	SF	200	RIP RAP MISSING AT END BENT 2 WITH UNDERMINING OF CAP AND ENDS OF BACKWALL EXTENSIONS.	
3376	Clean/Wash Bridge Decks	SF	420	DEBRIS ALONG CURBLINES CLOGGING ALL DRAINS.	

Key

 Priority Maintenance Item

 Critical Finding Item

 Priority Maintenance Level Not Determined



TRANSVERSE CRACKS IN APPROACH 1 WEARING SURFACE



TRANSVERSE CRACK AND UNEVENNESS OVER END BENT 1 WEARING SURFACE





RIGHT SIDE GUARDRAIL POST AT GUARDRAIL CONNECTION IN SPAN 1 SPALLED



DECK DRAINS CLOGGED WITH VEGETATION



RANDOM TRANSVERSE CRACK IN TOP OF CURBLINES



TRANSVERSE CRACKING IN WEARING SURFACE OVER BENT 1



GUARDRAILS SCALED WITH COARSE AGGREGATE EXPOSED



TRANSVERSE CRACKING AND SMALL VOIDS IN WEARING SURFACE OVER BENT 2



TRANSVERSE CRACKING IN WEARING SURFACE OVER BENT 3



TRANSVERSE CRACK IN WEARING SURFACE OVER END BENT 2



TRANSVERSE AND LONGITUDINAL CRACKS IN APPROACH 2 WEARING SURFACE



UNDERMINING AT END BENT 2 RIGHT SIDE WINGWALL - LEFT SIDE SIMILAR



RIGHT SIDE CURB END TREATMENT AT END BENT 2 PULLED OUT AND SETTLED



SPALLING UNDER GIRDER 1 BEARING AT ABUTMENT 1



SPALL WITH EXPOSED REBAR IN ABUTMENT 1 UNDER GIRDER 3



RANDOM VERTICAL CRACKS IN FACE OF ABUTMENT 1



SPALLING AND DELAMINATION IN BOTTOM EDGE OF BENT 1 CAP SPAN 1 SIDE



SHALLOW SPALLING WITH EXPOSED REBAR IN BOTTOM OF GIRDER 5 IN SPAN 2 AT 1/3 POINT FROM BENT 1





CRACK IN GIRDER 4 RETAINING BLOCK AT BENT 2 SPAN 3 SIDE



CRACKING IN FACE OF CAP AT BENT 3 BAY 3 SPAN 3 SIDE



GUARDRAIL POST BASES AT THE RIGHT SIDE OF BENT 3 SPALLED WITH EXPOSED REBAR

BRIDGE MANAGEMENT UNIT  
 DATA ON EXISTING STRUCTURE

Run Date: 05/27/2010

COUNTY : JOHNSTON DIV : 4 DIST : 3 STRUCTURE NUMBER : 500056 LENGTH : 210 FEET

ROUTE CARRIED : US301&NC96 FEATURE INTERSECTED : HOLTS LAKE(BLACK CREEK)

LOCATED : 0.7 MI N JCT US701 BRIDGE NAME : CITY :

FUNC. CLASS : 14 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 10000 2008 RAIL TYPE : LT 111 RT 111

BUILT : 1926 BY : SHPWC PROJ : 240 FED.AID PROJ : DESIGN LOAD : H 15

REHAB : 1954 BY : SHPWC PROJ : 2333 ALIGNMENT : TAN SKEW : 90 LANES : ON 2 UNDER

NAVIGATION : VC 0.0 FT HT. CRN. TO BED : 25 FT WATER DEPTH : 9 FT

SUPERSTRUCTURE : REINFORCED CONCRETE DECK GIRDERS

SUBSTRUCTURE : RC ABUTS;BTS;RNP&W PIERS EXTENDED W/BRACKETS

SPANS : 4@52'6

BEAMS OR GIRDERS : REINFORCED CONCRETE DECK GIRDER

FLOOR : RC/5.5AWS ENCROACHMENT : DECK (OUT TO OUT) : 31.7 FT

CLEAR ROADWAY : 28.4 FT BETWEEN RAILS : 31.5 FT SIDEWALK OR CURB : LT 1.6 FT RT 1.6 FT

VERT.CL.OVER : 99 FT 99 IN VERT.CL.UNDER : 00 FT 00 IN HOR.CL.UNDER : 0.0 FT

INV.RTG. : HS-12 OPE.RTG. : HS-19 CONTR.MEMBER : RCDG POSTED : SV TTST DATE 02/24/2009

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

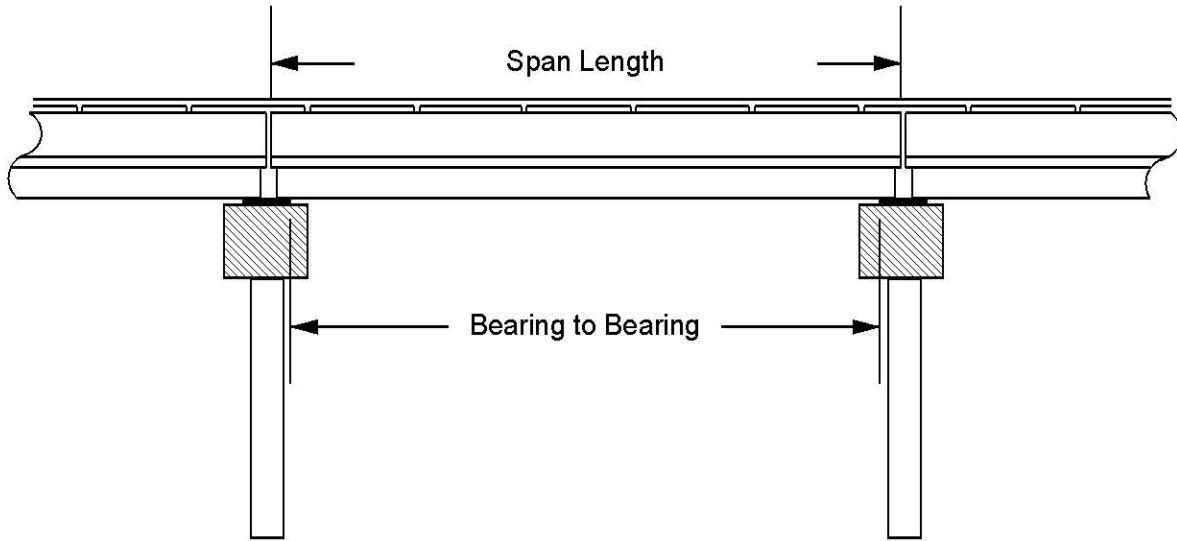
2ND OPENING : 3RD OPENING : 4TH OPENING : 5TH OPENING :

REMARKS :

# Structure Data Worksheet

*Spans*

County: JOHNSTON      Structure No: 500056      Date: 03/18/2010      Inspected By: WCM



Span No	Span Length	Bearing to Bearing	Comments
1	52.5		
2	52.5		
3	52.5		
4	52.5		

# Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 500056 County: JOHNSTON Date: 03/18/2010 By: WCM

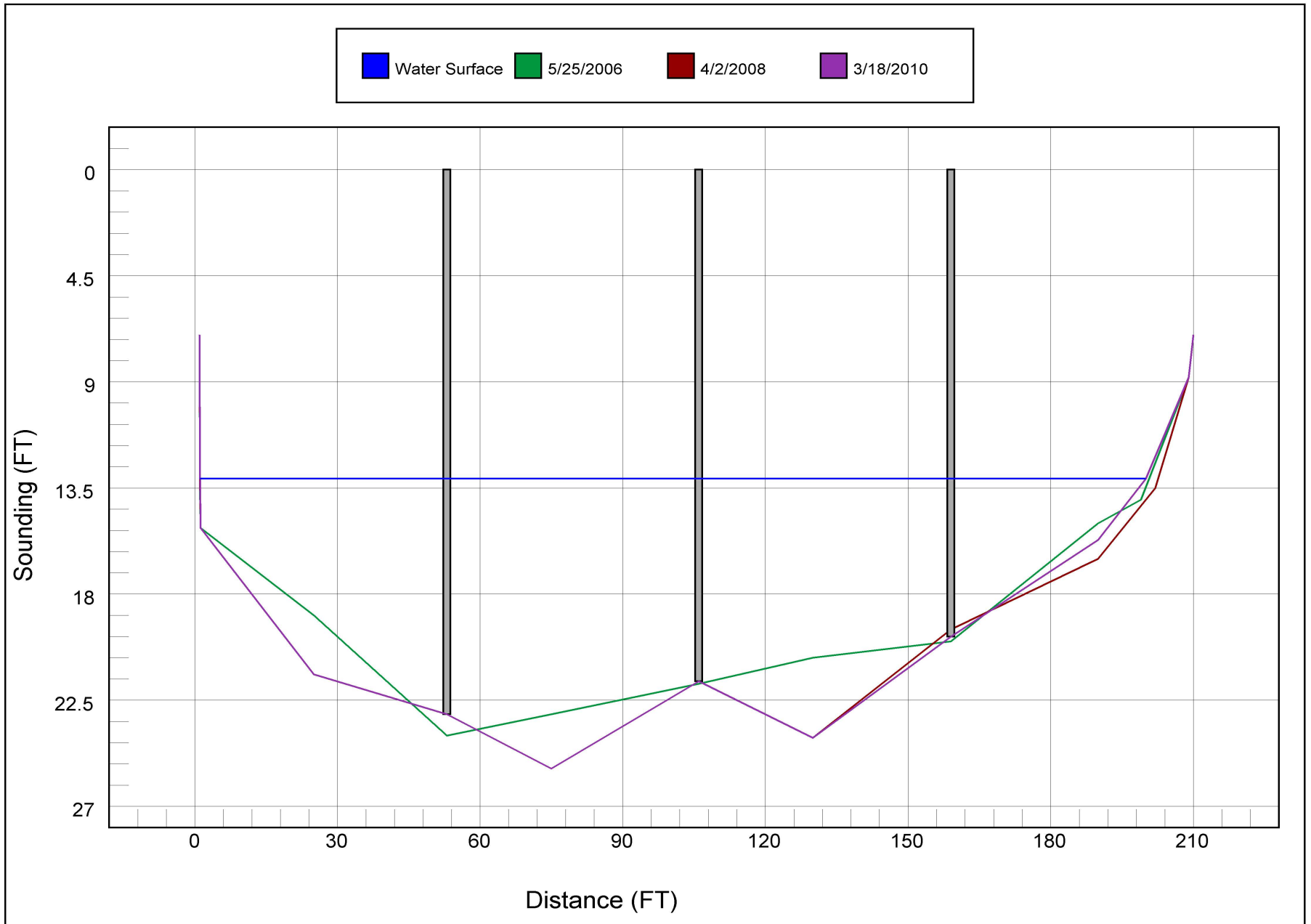
Record sounding from top of rail. Other location if needed: \_\_\_\_\_

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
1	7	TOP OF CAP			
1.1	13.1	Water Surface/Water Edge (WSWE)			
1.2	15.2	STREAMBED AT CAP	1.2	16.7	STREAMBED AT CAP
25	21.4				
53	23.1	BENT 1	53	23.7	BENT 1
75	25.4				
106	21.7	BENT 2	106	21.8	BENT 2
130	24.1				
159	19.8	BENT 3	159	19.5	BENT 3
190	15.7				
200	13.1	Water Surface/Water Edge (WSWE)			
209	8.8	GROUND AT CAP	209	10.1	GROUND AT CAP
210	7	TOP OF CAP			

### STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



## Bridge Inspection Field Sketch



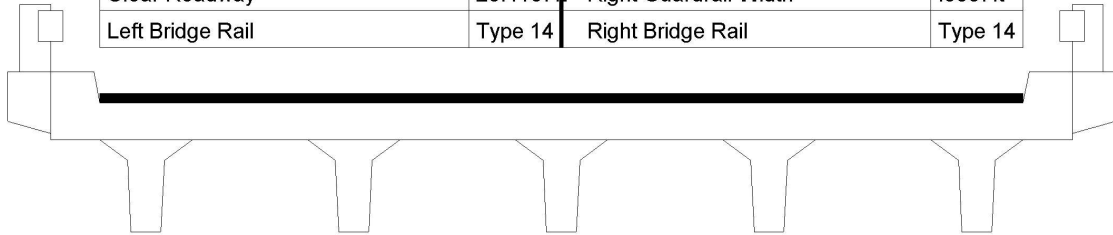
Roadway	24ft Wide	2 Paved Lanes	Looking North
Left Shoulder	3.5ft Wide	1ft Paved	2.5ft Unpaved
Right Shoulder	3.5ft Wide	2.5ft Paved	1ft Unpaved
Left Guardrail	3.5ft from road		
Right Guardrail	3.5ft from road		

CHECKED: 3/18/10 WCM

<b>Title</b>		<b>Description</b>	
APPROACH ROADWAY		LOOKING NORTH	
<b>Bridge No:</b> 500056	<b>Drawn By:</b> KMM	<b>Date:</b> 05/23/2006	<b>File Name:</b> S0242000606

# Bridge Inspection Field Sketch

Deck Width/Out to Out	31.6667ft	Wearing Surface	.4583ft
Between Rails	31.5ft	Median Width	
Curb Height	.5833ft	Median Height	
Top Rail to Deck/Wearing Surface	2.5ft	Left Guardrail Width	.6667ft
Clear Roadway	28.4167ft	Right Guardrail Width	.6667ft
Left Bridge Rail	Type 14	Right Bridge Rail	Type 14



Measurements for Span #	1		
Deck Thickness	.625	Left Overhang	3.3333
Top of Rail to Bottom of Beam	*6.8333	Right Overhang	3.3333

\*EXTERIOR GIRDER DIMENSION

Beam No	Beam Type	Spacing	Comments
1	RC Deck Girder	4.5ft	42 IN RCDG
2	RC Deck Girder	8.0ft	51 IN RCDG
3	RC Deck Girder	8.0ft	51 IN RCDG
4	RC Deck Girder	4.5ft	51 IN RCDG
5	RC Deck Girder		42 IN RCDG

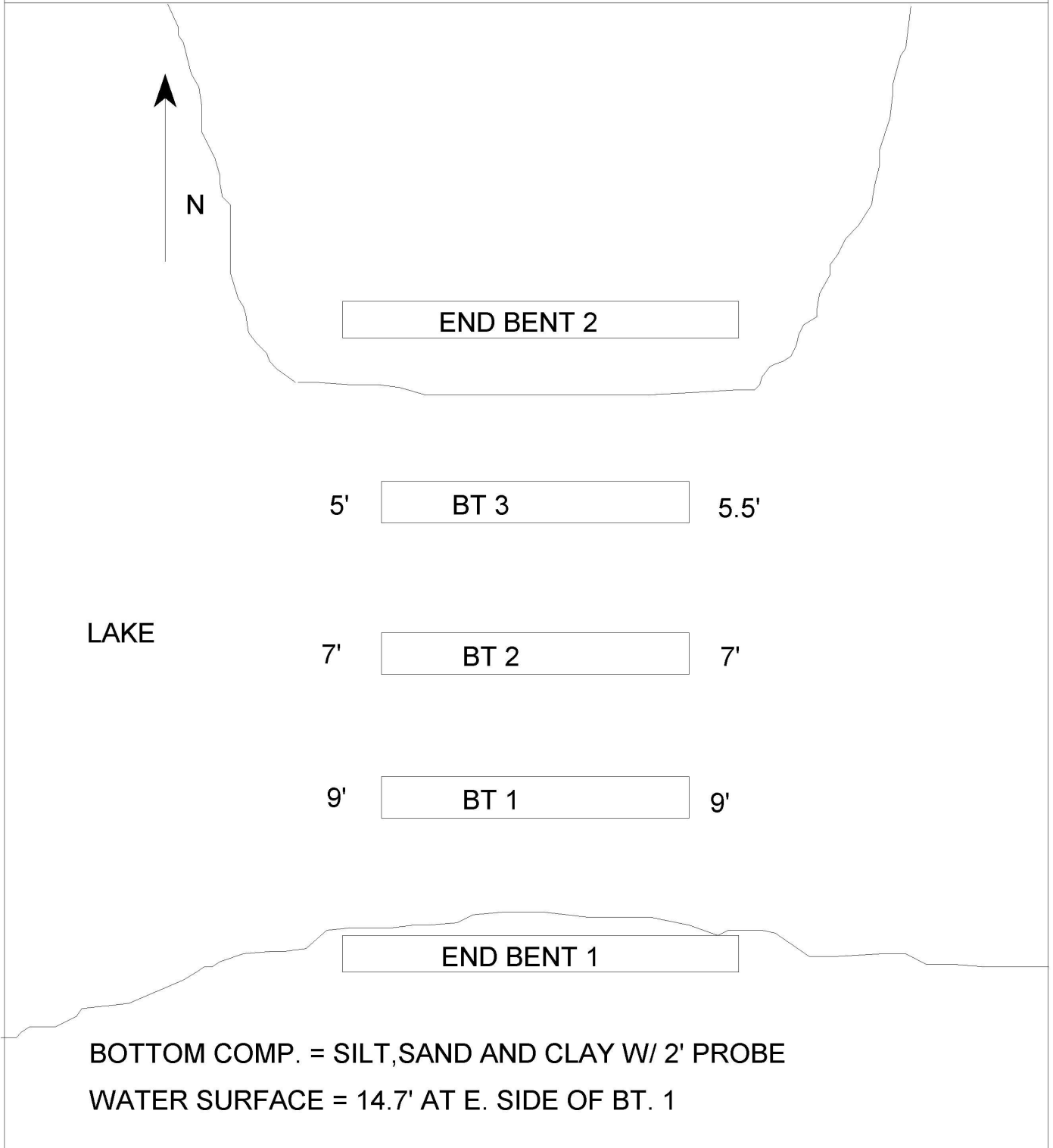
Top of Rail to Bottom of Beam - Interior Girder = 7.5833 ft.

CHECKED: 3/18/10 WCM

<b>Title</b> TYPICAL SECTION		<b>Description</b> 5 LINES OF PC DECK GIRDERS	
<b>Bridge No:</b> 500056	<b>Drawn By:</b> KMM	<b>Date:</b> 05/23/2006	<b>File Name:</b> S0242000605



# Bridge Inspection Field Sketch



<b>Title</b> PLAN VIEW		<b>Description</b> WATERWAY	
<b>Bridge No:</b> 500056	<b>Drawn By:</b> BZC	<b>Date:</b> 7/19/2007	<b>File Name:</b> S0158000432



LOOKING NORTH



RIGHT SIDE GUARDRAIL TERMINAL END IN APPROACH 1, OTHERS SIMILAR



RIGHT SIDE GUARDRAIL CONNECTION IN SPAN 1



SPAN 1 OVERVIEW, OTHER SPANS SIMILAR



LOOKING WEST UPSTREAM



LOOKING EAST DOWNSTREAM



LOOKING SOUTH



TYPICAL GIRDER BEARING POINT



BENT 3 SPAN 4 SIDE



WEST PROFILE



BENT 1 SPAN 1 SIDE



ABUTMENT 1 OVERVIEW



END BENT 2



EAST PROFILE





SUPERSTRUCTURE OVERVIEW



SUPERSTRUCTURE OVER END OF CAP



UTILITIES CONNECTION



UTILITIES ALONG THE LEFT SIDE OVERHANG