NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY GASTON BRIDGE NUMBER 350440 INSPECTION CYCLE 2 YRS

ROUTE SR2200 ACROSS DUHART`S CREEK M.P. 0

LOCATION 0.05 MI. N. JCT. US29/74

SUPERSTRUCTURE TRIPLE 8' X 7' RCBC (110' ALONG CENTERLINE OF CULVERT)

SUBSTRUCTURE INTERIOR WALLS:6"

SPANS

LONGITUDE 81° 8' 5.16" LATITUDE 35° 15' 42.23"

INSPECTION DATE 05/28/2013 PRESENT CONDITION GOOD

PRESENT POSTING N NOT POSTED PROPOSED POSTING

OTHER SIGNS PRESENT NONE

SOUTH APPROACH

Fracture Critical	No
Temporary Shoring	No
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 350440
(8) STRUCTURE NUMBER(FEDERAL) 000000000710440
(5) INVENTORY ROUTE (ON/UNDER) - ON 31022000
(2) STATE HIGHWAY DEPARTMENT DISTRICT 1
(3) COUNTY CODE 71 (4) PLACE CODE 25580
(6) FEATURE INTERSECTED - DUHART`S CREEK
(7) FACILITY CARRIED SR2200
(9) LOCATION 0.05 MI. N. JCT. US29/74
(11)MILEPOINT 0
(16)LAT 35° 15' 42.23" (17)LONG 81° 8' 5.16"
(98)BORDER BRIDGE STATE CODE PCT SHARE
(99)BORDER BRIDGE STRUCTURE NO

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN: Concrete continuous
TYPE - Culverts (includes frame culverts) CODE 219
(44) STRUCTURE TYPE APPR :
TYPE - CODE 000
(45) NUMBER OF SPANS IN MAIN UNIT 3
(46) NUMBER OF APPROACH SPANS
(107)DECK STRUCTURE TYPE - N 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 1970
(106)YEAR RECONSTRUCTED
(42) TYPE OF SERVICE : ON - Highway
UNDER - Waterway CODE 15
(28) LANES: ON STRUCTURE 5 UNDER STRUCTURE 0
(29) AVERAGE DAILY TRAFFIC 17000
(30) YEAR OF ADT 2010 (109) TRUCK ADT PCT 12%
(19) BYPASS OR DETOUR LENGTH 2 MI

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN 8 FT
(49) STRUCTURE LENGTH 25 FT
(50)CURB OR SIDEWALK: LEFT 0 FT RIGHT 0 FT
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 0 FT
(52) DECK WIDTH OUT TO OUT 0 FT
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 75 FT
(33) BRIDGE MEDIAN - No Median CODE 0
(34) SKEW 15° (35) STRUCTURE FLARED 0
(10) INVENTORY ROUTE MIN VERT CLEAR 999.9 FT
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 74.8 FT
(53) MIN VERT CLEAR OVER BRIDGE RDWY 0 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

SUFFICIENCY RATING = 95.39
STATUS = Not Deficient

CLASSIFICATION CODE

(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 - No Parallel Structure N
(102)DIRECTION OF TRAFFIC - 2-way Traffic 2
(103)TEMPORARY STRUCTURE -
(110)DESIGNATED NATIONAL NETWORK - Not on the National Network 0
(20) TOLL On Free Road 3
(31) MAINTAIN - State Highway Agency 01
(22) OWNER - State Highway Agency 01
(37) HISTORICAL SIGNIFICANCE - Not Eligible 5

CONDITION CODE

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

LOAD RATING AND POSTING CODE

(31) DESIGN LOAD HS 20 + MOD 6
(63) OPERATING RATING METHOD - Load Factor 1
(64) OPERATING RATING - HS-26 46
(65) INVENTORY RATING METHOD - Load Factor 1
(66) INVENTORY RATING - HS-20 36
(70) BRIDGE POSTING - No Posting Required 5
(41) STRUCTURE OPEN, POSTED ,OR CLOSED A
DESCRIPTION - Open, No Restriction

APPRAISAL CODE

(67) STRUCTURAL EVALUATION 7
(68) DECK GEOMETRY N
(69) UNDERCLEARANCES,VERTI & HORIZ N
(71) WATERWAY ADEQUACY 7
(72) APPROACH ROADWAY ALIGNMENT 8
(36) TRAFFIC SAFETY FEATURES NNNN
(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 34000 (115) YEAR FUTURE ADT 2025

INSPECTIONS

(90) INSPECTION DATE 05/28/2013
(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 Run Date: 07/05/2013

COUNTY :	DIVISION :	DISTRICT:	STRUCTURE NUMBER :	LENGTH :
GASTON	12	1	350440	25 FEET

ROUTE CARRIED : SR2200

FEATURE INTERSECTED : DUHART`S CREEK

LOCATED : 0.05 MI. N. JCT. US29/74

BRIDGE NAME :

CITY :

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
14	FA	NFA	17000 2010	LT 0 RT 0

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1970	DOH			HS 20 + MOD

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
			TAN	105	ON 5 UNDER 0

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT HC 0 FT	20 FT	1 FT

SUPERSTRUCTURE : TRIPLE 8`X7` RC BOX CULVERT; 110` ALONG CENTERLINE CULVERT

SUBSTRUCTURE : INTERIOR WALLS:6"

SPANS :

BEAMS OR GIRDERS :

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
		0 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
0 FT	0 FT	LT 0 FT RT 0 FT

VERT.CL.OVER :
0 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :
HS-20	HS-26		SV TTST DATE

SYSTEM : Secondary S.R. Route

GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE I & A FORM1 (90)A

BRIDGE INSPECTION RECORD AND SUMMARY
(R. C. BOX CULVERTS)

INSPECTION TYPE Routine Inspection INSPECTION DATE 05/28/2013 ROUTE ORIENTATION S - N
BRIDGE NO. 350440 ROUTE SR2200 OVER DUHART`S CREEK

EVALUATION CODES: CRITICAL (C, 0 - 3); POOR (P, 4); FAIR (F, 5, 6); GOOD (G, 7 - 9)

1. Top Slab			G
2. Bottom Slab			G
3. Ext. & Int. Walls			G
4. Wingwalls - Retaining Walls			G
5. Headwalls, Toewalls, Flumes			G
6. Structure Alignment - Settlement			G
7. Drainage Systems (On Structure)			G
8. Channel & Channel Protection	a. Waterway		G
	b. Alignment		G
	c. Scour		G
	d. Slope Prot. (Rip-Rap, Dikes, etc.)		
9. Approach Roadway Condition			G
10. Estimated Remaining Life			40
11. Channel & Channel Protection		Item 61	7
12. Culvert & Retaining Walls		Item 62	7
13. Waterway Adequacy		Item 71	7
14. Approach Roadway		Item 72	8
15. Field Scour Evaluation			G
16. Presently Posted			NO
17. Regulatory Sign Notice Issued			NO
18. Prompt Action Notice Issued			NO
19. Total Field Inspection Time			4
20. Inspected By			

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 DEREK RICKUS

Assisted By DJA

Item No.	Grade	
8a	G	1' SEDIMENT IN BARREL 1
3	G	H/L VERTICAL CRACKING ALONG THE INT. AND EXTERIOR WALLS. HORIZ. CRACKING ALONG THE SOUTHWEST WING

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 350440 County GASTON Date: 05/28/2013

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3370	Maintenance and Repair of NBIS Pipes and Culverts	LF	112	H/L VERTICAL CRACKING ALONG THE INT. AND EXTERIOR WALLS.	

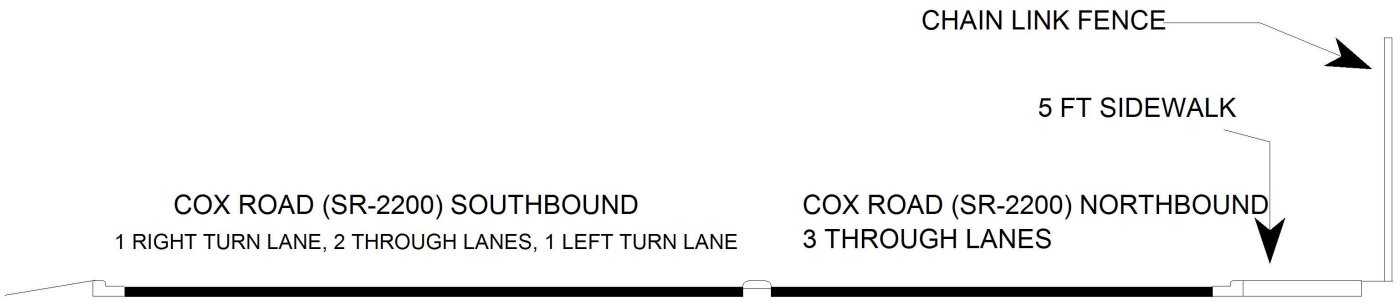
Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

1' SEDIMENT IN BARREL 1

H/L VERTICAL CRACKING ALONG THE INT. AND EXTERIOR WALLS.

Bridge Inspection Field Sketch



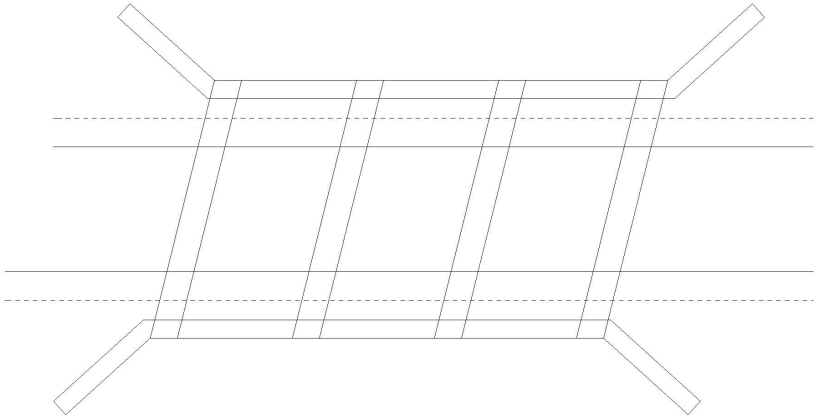
Left Lanes			
Roadway	41.3ft Wide	4 Paved Lanes	South Bound
Right Shoulder	8ft Wide	2ft Paved	6ft Unpaved
Right Guardrail			
Left Guardrail			
Median	1.9ft Wide	0.5ft High	
Right Lanes			
Roadway	29.5ft Wide	3 Paved Lanes	North Bound
Right Shoulder	9ft Wide	2ft Paved	7ft Unpaved
Left Guardrail			
Right Guardrail			

VERIFIED 5-21-2013 BY DELVIN ADAMS

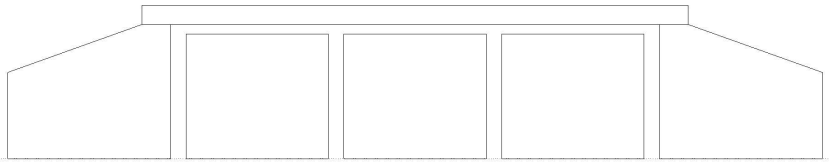
Title	**Description**
APPROACH ROADWAY	LOOKING NORTH

Bridge No: 350440	**Drawn By:** DELVIN ADAMS	**Date:** 5/9/2011	**File Name:** S0146031543

Bridge Inspection Field Sketch



Crown of Roadway



Bed

Number of Barrels	Skew	Distance From Crown to Bed
3	105°	20ft
Length Along Center Line of Culvert		Length Along Center Line of Roadway
110ft		25ft

Barrel #	Width	Height	Wall Thickness	Scour at Inlet	Scour at Outlet
1	8.000ft	7.000ft	0.5ft	No	No
2	8.000ft	7.000ft	0.5ft	No	No
3	8.000ft	7.000ft		No	No

VERIFIED 5-21-2013 BY DELVIN ADAMS

Title	**Description**		
CULVERT DIMENSIONS	PLAN & PROFILE		
Bridge No: 350440	**Drawn By:** DELVIN ADAMS	**Date:** 5/9/2011	**File Name:** S0146031544

NORTH APPROACH

SOUTH APPROACH

Structure 350440 County GASTON Date: 05/28/2013 Structure Photos

DOWNSTREAM

LOOKING DOWNSTREAM

LOOKING UPSTREAM

UPSTREAM