



NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 BRIDGE MANAGEMENT UNIT

ATTENTION

IMPACT DAMAGE REPORT ON SPAN 2
 RATINGS FOR SPAN 2 ITEMS ONLY
 PRIORITY MAINTENANCE REQUESTED

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Damage Inspection Report

COUNTY BUNCOMBE BRIDGE NUMBER 100369 INSPECTION CYCLE 0 YRS
 ROUTE I-40 EBL ACROSS BILTMORE ESTATE ROAD M.P. 49500

LOCATION .8 MI.W.JCT.US25

SUPERSTRUCTURE REINFORCED CONCRETE FLOOR ON I-BEAMS

SUBSTRUCTURE E.BTS:RC CAPS/H-PILES;INT.BTS:RC POST & BEAM/PILE FTGS.

SPANS 3 @ 45'

LONGITUDE 82° 33' 14.35" LATITUDE 35° 33' 30.01"

PRESENT CONDITION POOR INVENTORY RATING _____

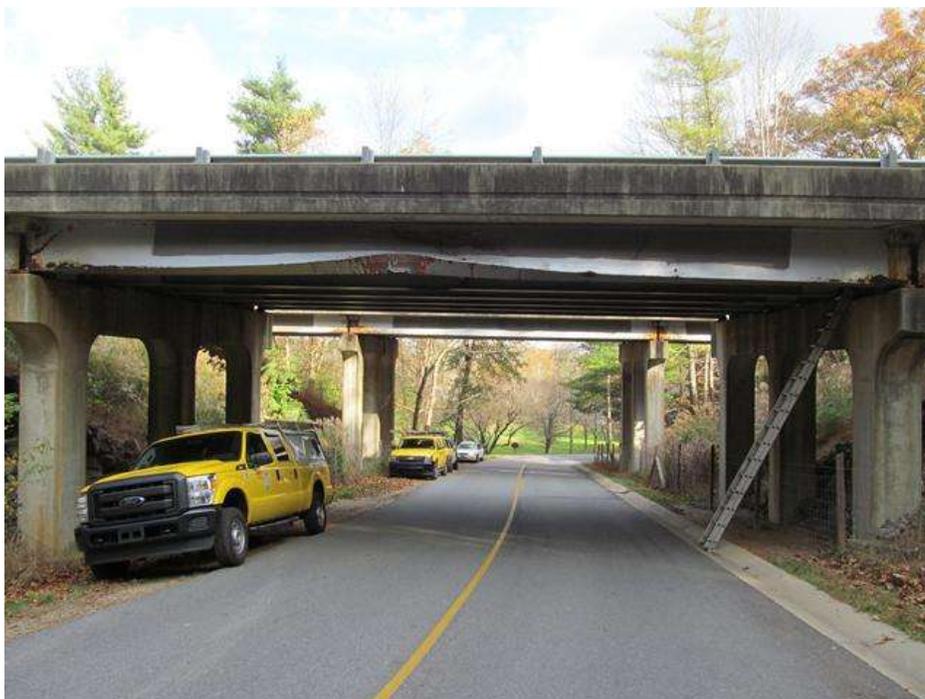
INSPECTION DATE 11/05/2012 OPERATING RATING _____

PRESENT POSTING Not Posted PROPOSED POSTING _____

COMPUTER UPDATE _____ ANALYSIS DATE _____

POSTING LETTER DATE _____ SUFFICIENCY RATING _____

OTHER SIGNS PRESENT LOW CLEARANCES



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	_____

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Damage Inspection Report
 BRIDGE NO. 100369 COUNTY BUNCOMBE ROUTE I-40 EBL OVER BILTMORE ESTATE ROAD
 STRUCTURE TYPE REINFORCED CONCRETE FLOOR ON I-BEAMS
 ROUTE ORIENTATION SPANS 3 @ 45'

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

Bridge I&A Form 1(82)H		FIELD INSPECTION REPORT <u>Bridge Inspection & Analysis</u>	
State of North Carolina Dept. of Transportation Division of Highways			
Team Leader MD OSBORNE			
Assisted By ME RENFRO			
Item No.	Grade		
10	P	<p>IMPACT DAMAGE INSPECTION WAS REQUESTED BY TOPSIDE BRIDGE INSPECTION FOR SPAN 2 ON BILTMORE ESTATE ROAD</p> <p>BEAM 6: POINT OF IMPACT ON BEAM 6 IN SPAN 2 WAS 18'-5" FROM FACE OF BENT 1. 2 GOUGES IN FLANGE 1" X 3" AND 1" X 2 1/2" COMPLETEY THROUGH FLANGE. BEAM IS OUT OF PLUMB 24 3/4" +/- AT 18'-5" FROM FACE OF BENT 1. TOP OF FLANGE HAS PULLED AWAY FROM DECK 2" +/- . A 4" +/- CRACK IS RUNNING TOWARD BENT #2 FROM GOUGE AT 18'-5" FROM FACE OF BENT #1. A GOUGE 3/4" X 5 1/2" X 1/8" IN FLANGE AT 18'- 10" FROM FACE OF BENT 1. A GOUGE 1/2" X 3" X 1/16" IN FLANGE AT 17'- 11", ONE 1/4" X 10" X 1/32" AT 14'-10" ALL FROM FACE OF BENT 1. A INDENTION 1" X 1/32" AT 17'-0" FROM FACE OF BENT 1. WEB STIFFNER ON INSIDE OF BEAM 6 AT BENT 1 HAS TORE OPEN, AND BENT OUT OF PLUMB 1" +/- . WEB STIFFNER AT BENT 2 IS BOWED TO THE EAST 2" +/- . THE TOP OF FLANGE OF BEAM 6 AND THE SIP FORMING HAS SEPRATED 1/2". BEAM 6 STARTS TO BOW AT 22" FROM BENT 1 AND 21" FROM BENT 2. THE J CHANNEL HOLDING THE SIP FORMING IN PLACE HAS BROKE THE SPOT WELDS AND DROPED 2" +/- AT BEAM 6. (SEE PHOTOS)</p> <p>BEAM 5: INITINAL POINT OF IMPACT ON BEAM 5 IN SPAN 2 WAS 18'-11" FROM FACE OF BENT 1. THERE ARE 2 GOUGES IN FLANGE 3/4" X 5 1/2" X 1/4" AND 3/4" X 5 1/2" X 1/4" THE FLANGE IS BENT UPWARD 2" AT POINT OF IMPACTAND 3/4" X 2 1/2". (SEE PHOTOS)</p>	
12	P	CONNECTION PLATE OF INTERMEDIATE DIAPHRAGM AT 21'-5" ON BEAM 6 IS MISSING 10 OF 12 DIAPHRAGM BOLTS, THE TWO THAT REMAINS ARE NOT FULLY THREADED. THE WEB OF THE DIAPHRAGM WHERE THE DIAPHRAGM BOLT HOLES ARE IS BENT OUT OF SHAPE (SEE PHOTOS)	
15	P	BEARINGS & ANCHOR BOLTS IN SPAN 3 HAD DAMAGE DUE TO IMPACT: TWO OF THE ANCHOR BOLTS AT BENT 2 ARE BROKE AT 3.9" +/- AND THE INSIDE ANCHOR BOLT AT BENT 1 IS BROKE AT 3.9" +/-	
61	YES	THREE OF THE FOUR ANCHOR BOLTS ARE BROKE, BEAM 6 IS BENT 24 3/4" OUT OF PLUMB, 10 OF THE 12 DIAPHRAGM BOLTS ARE MISSING, CONCRETE DIAPHRAGMS AT BENT #1 AND #2 ARE DAMAGED, TOP OF BEAM 6 IS PULLED AWAT FROM DECK 2"	
73f	YES	UT MACHINE / JIG LIFT/ CLIMBING VEST / MT MACHINE	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 100369

County BUNCOMBE

Date: 11/05/2012

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
 3306	Maintain Concrete Superstructure Components	SF	6	CONCRETE DIAPHRAGMS AT BENT 1 AND BENT 2 ARE ONLY BEING HELD IN PLACE BY REBAR CONCRETE DIAPHRAGM ON THE OUTSIDE BEAM 6 AT BENT 1 CONCRETE DIAPHRAGM AT BENT 1 CONDITIONS FOUND IN CONCRETE DIAPHRAGM ON OUTSIDE OF BEAM AT 6 BENT 2	
 3314	Maintain Steel Superstructure Components	LF	3	THREE OF THE FOUR ANCHOR BOLTS ARE BROKE ANCHOR BOLT AT BENT 1 ON BEAM 6 IS BROKE AT 3.9" ANCHOR BOLT AT BENT 2 ON BEAM 6 IS BROKE AT 3.9"+/- ANCHOR BOLT ON INSIDE OF BEAM 6 AT BENT 2 IS BROKE AT 3.9"+/-	
 3314	Maintain Steel Superstructure Components	LF	45	BEAM 6 IS OUT OF PLUMB 24 3/4" POINT OF IMPACT ON BEAM 6 BEAM 6 OUT OF PLUMB 24 3/4" AT 18'-5" FROM BENT 1 LOOKING AT BEAM 6 FROM BENT 1 LOOKING AT BEAM 6 FROM BENT 2 LOOKING AT THE INSIDE OF BEAM 6 FROM BENT 2	
 3314	Maintain Steel Superstructure Components	LF	4	CONDITIONS IN DIAPHRAGM AT 21'-5" IS 10 OF 12 DIAPHRAGM BOLTS MISSING THE TWO REMAINING DIAPHRAGM BOLTS ARE NOT FULLY THREADED DIAPHRAGM BRACKET BENT OUT OF PLUMB AT BEAM 6	
3306	Maintain Concrete Superstructure Components	SF	2	CONCRETE DIAPHRAGM ON THE OUTSIDE BEAM 6 AT BENT 1	
3306	Maintain Concrete Superstructure Components	SF	3	CONDITIONS FOUND IN CONCRETE DIAPHRAGM ON OUTSIDE OF BEAM AT 6 BENT 2	
3314	Maintain Steel Superstructure Components	LF	3	CONDITIONS FOUND IN WEB STIFFNER ON BEAM 6 AT BENT 1	
3314	Maintain Steel Superstructure Components	LF	45	POINT OF IMPACT ON BEAM 6	
3314	Maintain Steel Superstructure Components	LF	90	TOP OF BEAM 6 PULLED AWAY FROM DECK 2"+/-	

Key

 Priority Maintenance Item

 Critical Finding Item

 Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 100369

County BUNCOMBE

Date: 11/05/2012

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3314	Maintain Steel Superstructure Components	LF	3	10 OF 12 DIAPHRAGM BOLTS MISSING	
3314	Maintain Steel Superstructure Components	LF	1	ANCHOR BOLT AT BENT 1 ON BEAM 6 IS BROKE AT 3.9"	
3314	Maintain Steel Superstructure Components	LF	45	J CHANNEL HOLDING SIP FORMING INPLACE HAS BROKE LOOSE AND DROPED 2"+/-	
3314	Maintain Steel Superstructure Components	LF	3	DIAPHRAGM BRACKET BENT OUT OF PLUMB AT BEAM 6	
3314	Maintain Steel Superstructure Components	LF	1	ANCHOR BOLT AT BENT 2 ON BEAM 6 IS BROKE AT 3.9"+/-	
3314	Maintain Steel Superstructure Components	LF	1	ANCHOR BOLT ON INSIDE OF BEAM 6 AT BENT 2 IS BROKE AT 3.9"+/-	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 100369

County BUNCOMBE

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	6 SF
Location:		
Beams and Girders		Bent/Span No. 2 CONCRETE DIAPHRAGMS
Priority Level	Status	
	Request Awaiting Assignment	
Submitted Date:	Submitted By:	Assisted By:
11/05/2012	MD OSBORNE	ME RENFRO
Details		
CONCRETE DIAPHRAGMS AT BENT 1 AND BENT 2 ARE ONLY BEING HELD IN PLACE BY REBAR CONCRETE DIAPHRAGM ON THE OUTSIDE BEAM 6 AT BENT 1 CONCRETE DIAPHRAGM AT BENT 1 CONDITIONS FOUND IN CONCRETE DIAPHRAGM ON OUTSIDE OF BEAM AT 6 BENT 2		

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	3 LF
Location:		
Beams and Girders		Bent/Span No. 2 ANCHOR BOLTS
Priority Level	Status	
	Request Awaiting Assignment	
Submitted Date:	Submitted By:	Assisted By:
11/05/2012	MD OSBORNE	ME RENFRO
Details		
THREE OF THE FOUR ANCHOR BOLTS ARE BROKE ANCHOR BOLT AT BENT 1 ON BEAM 6 IS BROKE AT 3.9" ANCHOR BOLT AT BENT 2 ON BEAM 6 IS BROKE AT 3.9"+/- ANCHOR BOLT ON INSIDE OF BEAM 6 AT BENT 2 IS BROKE AT 3.9"+/-		

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 100369

County BUNCOMBE

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	45 LF
Location:		
Beams and Girders Bent/Span No. 2 BEAM		
Priority Level		Status
		Request Awaiting Assignment
Submitted Date:	Submitted By:	Assisted By:
11/05/2012	MD OSBORNE	ME RENFRO
Details		
<p>BEAM 6 IS OUT OF PLUMB 24 3/4" POINT OF IMPACT ON BEAM 6 BEAM 6 OUT OF PLUMB 24 3/4" AT 18'-5" FROM BENT 1 LOOKING AT BEAM 6 FROM BENT 1 LOOKING AT BEAM 6 FROM BENT 2 LOOKING AT THE INSIDE OF BEAM 6 FROM BENT 2</p>		

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	4 LF
Location:		
Beams and Girders Bent/Span No. 2 DIAPHRAGM		
Priority Level		Status
		Request Awaiting Assignment
Submitted Date:	Submitted By:	Assisted By:
11/05/2012	MD OSBORNE	ME RENFRO
Details		
<p>CONDITIONS IN DIAPHRAGM AT 21'-5" IS 10 OF 12 DIAPHRAGM BOLTS MISSING THE TWO REMAINING DIAPHRAGM BOLTS ARE NOT FULLY THREADED DIAPHRAGM BRACKET BENT OUT OF PLUMB AT BEAM 6</p>		



CONDITIONS FOUND IN WEB STIFFNER ON BEAM 6 AT BENT 1



POINT OF IMPACT ON BEAM 6



TOP OF BEAM 6 PULLED AWAY FROM DECK 2" +/-



BEAM 6 OUT OF PLUMB 24 3/4" AT 18'-5" FROM BENT 1



10 OF 12 DIAPHRAGM BOLTS MISSING



THE TWO REMAINING DIAPHRAGM BOLTS ARE NOT FULLY THREADED



A 4"+/- CRACK RUNNING OUT FLANGE FROM GOUGE IN BEAM 6



GOUGE IN FLANGE OF BEAM 6 AT 18'-5" FROM BENT 1



GOUGE IN FLANGE OF BEAM 6 AT 18'-10" FROM BENT 1



LOOKING AT GOUGE ON BEAM 6



LOOKING AT BEAM 6 FROM BENT 1



CONCRETE DIAPHRAGM ON THE OUTSIDE BEAM 6 AT BENT 1



CONCRETE DIAPHRAGM AT BENT 1



WEB STIFFNER AT BENT 1 ON BEAM 6 OUT OF PLUMB



CONDITIONS FOUND IN WEB STIFFNER AT BEAM 6 BENT 1



TOP OF BEAM 6 HAS MOVED TO THE SOUTH 1/2" +/-



ANCHOR BOLT AT BENT 1 ON BEAM 6 IS BROKE AT 3.9"



CODITIONS FOUND IN BEAM 5 AT 18'-11" FROM BENT 1



FLANGE IS BENT UPWARD 2" AT 18'-11" FROM BENT 1



J CHANNEL HOLDING SIP FORMING INPLACE HAS BROKE LOOSE AND DROPE 2"+/-



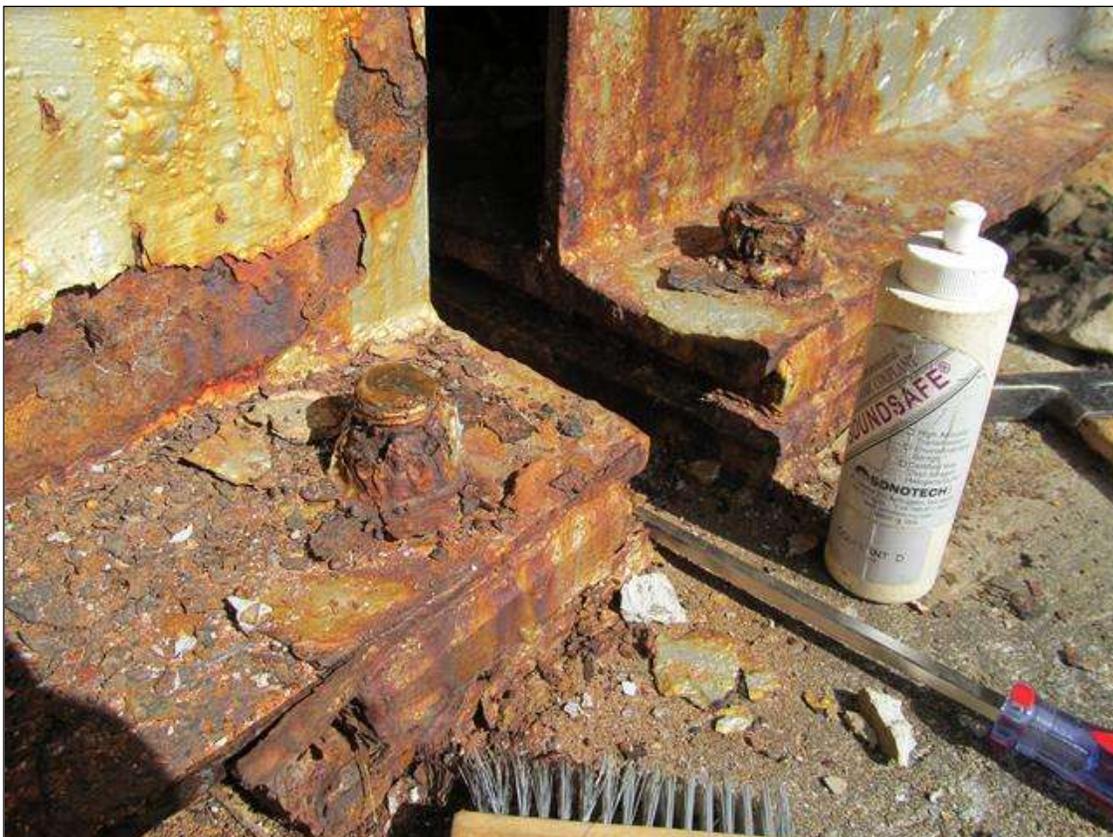
TAC WELD BROKE LOOSE ON J CHANNEL ON SIP FORMING



DIAPHRAGM BRACKET BENT OUT OF PLUMB AT BEAM 6



CONDITIONS FOUND IN CONCRETE DIAPHRAGM ON OUTSIDE OF BEAM AT 6 BENT 2



ANCHOR BOLT AT BENT 2 ON BEAM 6 IS BROKE AT 3.9'+/-



LOOKING AT BEAM 6 FROM BENT 2



ANCHOR BOLT ON INSIDE OF BEAM 6 AT BENT 2 IS BROKE AT 3.9" +/-



WEB STIFFNER ON BEAM 6 AT BENT 2 IS OUT OF PLUMB 1" +/-



LOOKING AT THE INSIDE OF BEAM 6 FROM BENT 2



LOOKING AT CRACK AFTER MT TESTED



LOOKING AT MT TESTING

Bridge Inspection Field Sketch



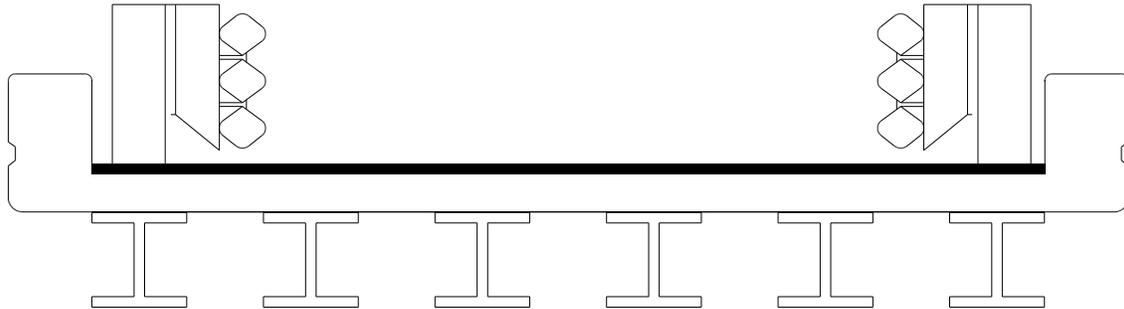
Roadway	24.000ft Wide	2 Paved Lanes	Looking East
Left Shoulder	10.157ft Wide	5.000ft Paved	5.157ft Unpaved
Right Shoulder	10ft Wide	10.000ft Paved	
Left Guardrail	10.167ft from road		
Right Guardrail	10.000ft from road		

APPROVED & VERIFIED 11/05/12: T.T. WYATT

Title APPR. RDWY.		Description DATA FOR APPR.DWY.	
Bridge No: 100369	Drawn By: T.J.G.	Date: 10/10/2007	File Name: S0110000523

Bridge Inspection Field Sketch

RAIL TYPE IS UNKNOWN; RESEMBLES AN OLD
RAIL TYPE 8 THAT HAS BEEN MODIFIED & RETROFITTED



Deck Width/Out to Out	40.000ft	Wearing Surface	0.2083ft
Between Rails	34.667ft	Median Width	
Curb Height		Median Height	
Top Rail to Deck/Wearing Surface	2.6250ft	Left Guardrail Width	
Clear Roadway	34.667ft	Right Guardrail Width	
Left Bridge Rail	Type 8	Right Bridge Rail	Type 8

Measurements for Span #	2		
Deck Thickness	0.6250	Left Overhang	2.500
Top of Rail to Bottom of Beam	6.000	Right Overhang	2.500

Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	7.000ft	
2	Steel I Beam	7.000ft	
3	Steel I Beam	7.000ft	
4	Steel I Beam	7.000ft	
5	Steel I Beam	7.000ft	
6	Steel I Beam		

END BENTS ARE REINF. CONCRETE CAPS ON H-PILES
INT. BENTS ARE REINF. CONCRETE POST & BEAM TYPE
ON PILE FOOTINGS

APPROVED & VERIFIED 11/05/12: T.T. WYATT

Title

DECK SECTION

Description

DATA FOR SUPERSTRUCTURE

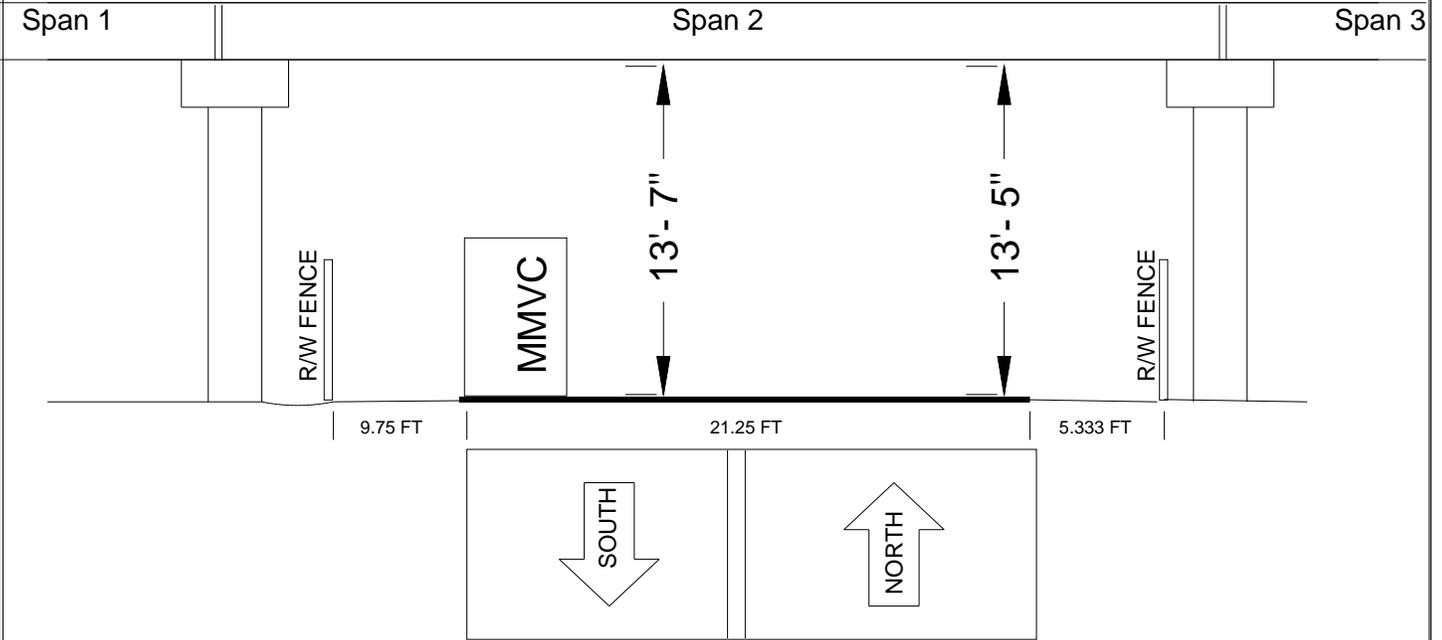
Bridge No: 100369

Drawn By: T.J.G.

Date: 10/10/2007

File Name: S0110000524

Bridge Inspection Field Sketch



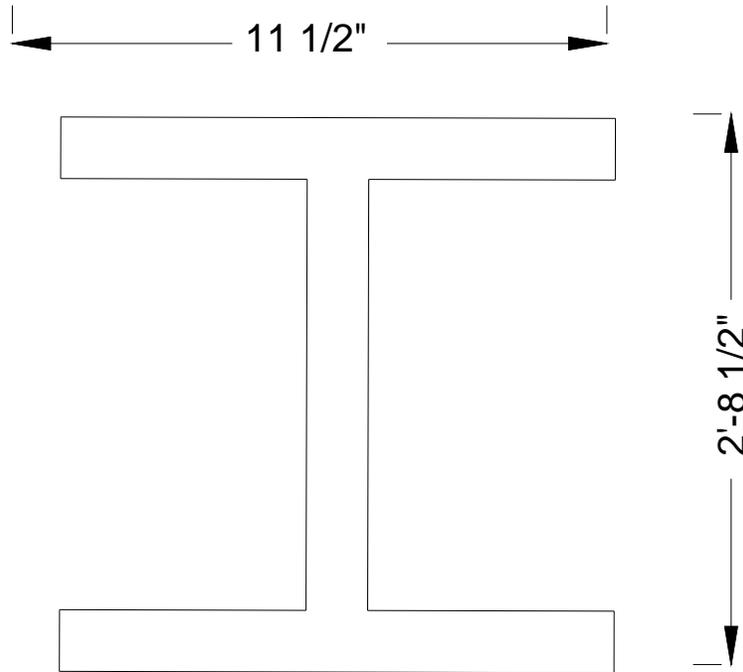
Roadway 1		Direction of Traffic	North South
Distance to Left Rail	9.75FT	Distance to Right Rail	5.333FT
Distance to Left Toe of Slope		Distance to Left Bent	12.4167FT
Distance to Right Toe of Slope		Distance to Right Bent	7.4167FT
MMVC	13.583 Ft at Beam 6, 10 FT from WEST EDGE OF RDWY.		
MVC	13.4167 Ft at Beam 6, 0 FT from EAST EDGE OF RDWY.		

VERIFIED 11/05/12 T.T. WYATT

NOTE: THE HORIZONTAL MEASUREMENTS ALONG THE NORTH BOUND ROADWAY SHOULDER ARE FROM THE ROADWAY EDGE. THERE IS A 0.8333 WIDE CONCRETE GUTTER WITH A CONCRETE CURB ALONG THIS EDGE OF THE ROADWAY.

Title		Description	
UNDERCLEARANCES SPAN 2 (B)		UNCLR. DATA SPAN 2 (B)	
Bridge No: 100369	Drawn By: T.J.G.	Date: 10/10/2007	File Name: S0110000525

Bridge Inspection Field Sketch



1/2" WEB

3/4" FLANGE NON TAPERED

APPROVED 11/5/12 BY T.T. WYATT

Title
BEAMS

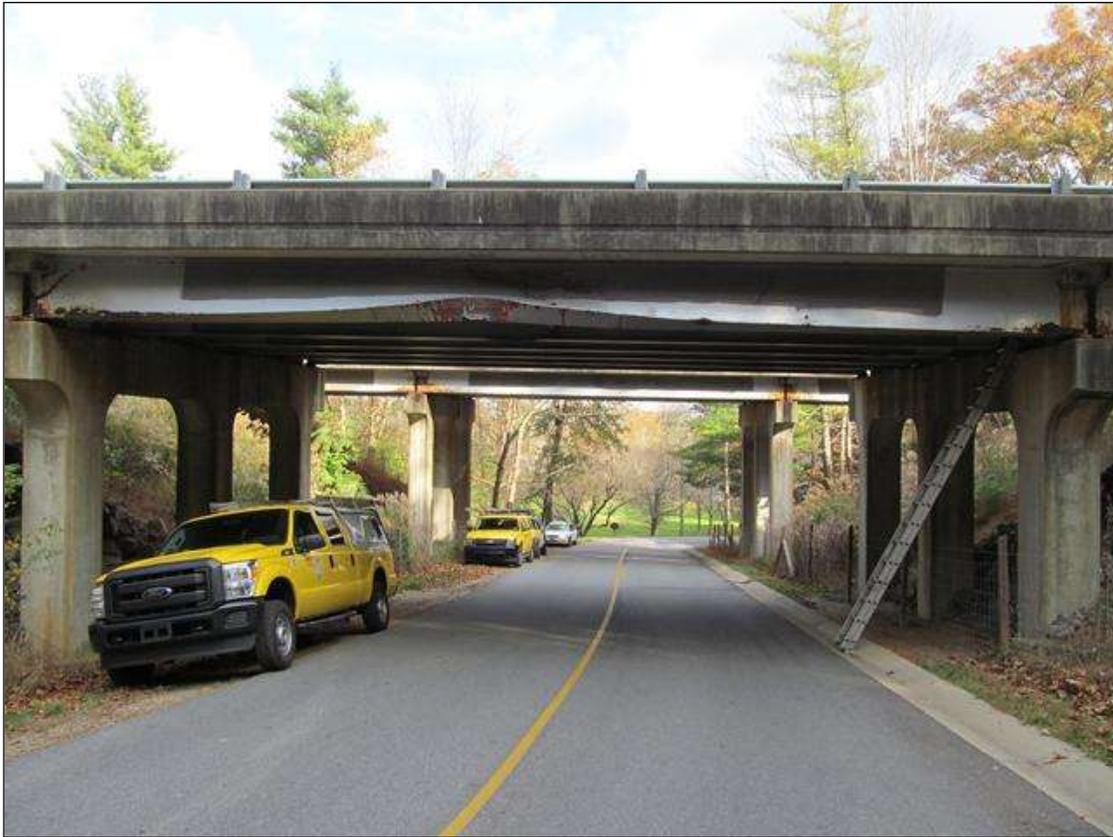
Description
BEAM SIZE

Bridge No: 100369

Drawn By: ME.RENFRO

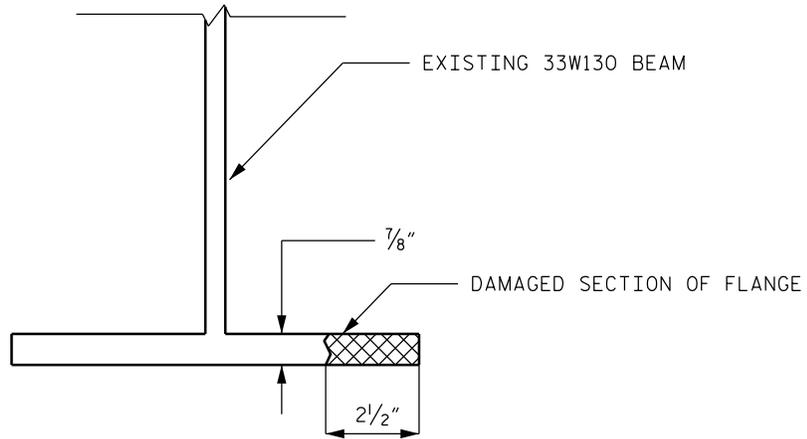
Date: 10/27/2011

File Name: S0110001800

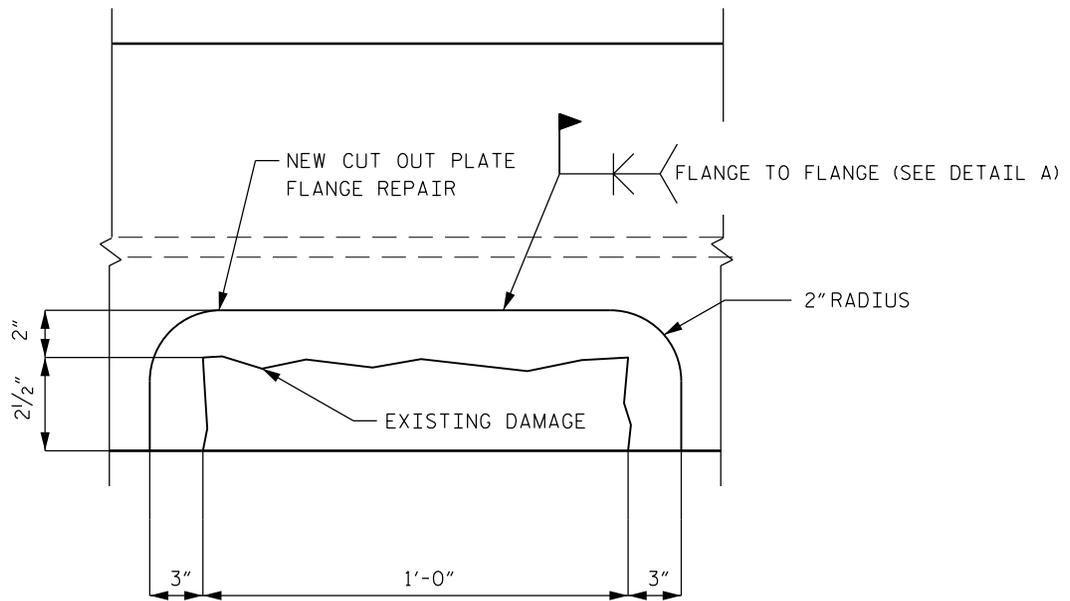


LOOKING NORTH

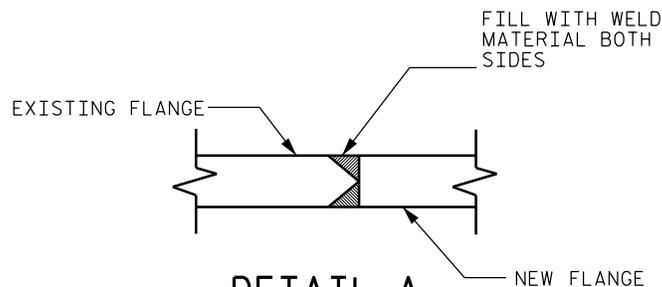
STATE OF NORTH CAROLINA SUBJECT FLANGE REPAIR PROJECT WBS 13B.101111
 DEPARTMENT OF TRANSPORTATION BRIDGE #100369 BUNCOMBE COUNTY
 DIVISION OF HIGHWAYS PREPARED BY RNW DATE 11/12 STATION _____
 HIGHWAY BUILDING CHECKED BY TMS DATE 11/12 STR NO _____ SHEET 1 OF 2
 P. O. BOX 25201
 RALEIGH, NORTH CAROLINA 27611



SECTION



TYPICAL REPAIR WELD DETAIL



DETAIL A

06-NOV-2012 12:14
 S:\PRS\POC\Squad C\Repair Projects\Buncombe 369 - 13B.101111\BUNCOMBE369.dgn
 rnweis

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
HIGHWAY BUILDING
P. O. BOX 25201
RALEIGH, NORTH CAROLINA 27611

SUBJECT FLANGE REPAIR
BRIDGE #100369

PROJECT WBS 13B.101111
BUNCOMBE COUNTY

PREPARED BY RNW DATE 11/12 STATION _____
CHECKED BY TMS DATE 11/12 STR NO _____ SHEET 2 OF 2

NOTES:

USE STEEL IN ACCORDANCE WITH STANDARD SPECIFICATIONS.

FLANGE REPAIR DETAILS AND DIMENSIONS PROVIDED IN PLANS MAY BE MODIFIED BASED ON FIELD CONDITIONS BY THE ENGINEER. EXISTING DIMENSIONS ARE FROM BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

MECHANICALLY CLEAN RUST & SCALE & EXISTING PAINT TO AT LEAST 3" BEYOND REPAIR AREA LIMITS.

DETERMINE CUT-TO-FIT STEEL FLANGE SECTION NEEDED TO REPAIR SECTION LOSS.

INSTALL CUT-TO-FIT FLANGE SECTION, FULLY WELD ALONG SIDES OF FLANGE.

IN ACCORDANCE WITH SPECIAL PROVISIONS, AFTER REPAIR GRIND ALL WELDS FLUSH, THOROUGHLY CLEAN AREA TO REMOVE DEBRIS AND OILS FROM REPAIR PROCESS.

ALL WELDS WILL BE INSPECTED AND TESTED BY NCDOT MATERIALS AND TEST UNIT IN ACCORDANCE WITH CURRENT AWS BRIDGE WELDING CODE AND STANDARD SPECIFICATIONS.

FOR "REPAIR OF DAMAGED STEEL BEAMS", SEE SPECIAL PROVISIONS.