



NC DEPARTMENT OF TRANSPORTATION ATTENTION
 DIVISION OF HIGHWAYS
 BRIDGE MANAGEMENT UNIT

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection - Contract

COUNTY EDGEcombe BRIDGE NUMBER 320050 INSPECTION CYCLE 0 YRS
 ROUTE NC142 ACROSS CONETOE CREEK M.P. 0

LOCATION 0.1 MI E JCT NC111

SUPERSTRUCTURE RC FLOOR ON I-BEAMS & CONCRETE ENCASED I-BEAMS

SUBSTRUCTURE REINF.CONC.FULL HEIGHT ABUTMENTS

SPANS 1@20'1

LONGITUDE 77° 22' 86.14" LATITUDE 35° 54' 26.25"

PRESENT CONDITION FAIR INVENTORY RATING _____

INSPECTION DATE 10/10/2012 OPERATING RATING _____

PRESENT POSTING Not Posted PROPOSED POSTING _____

COMPUTER UPDATE _____ ANALYSIS DATE _____

POSTING LETTER DATE _____ SUFFICIENCY RATING _____

OTHER SIGNS PRESENT 4 DELINEATORS



LOOKING EAST

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	_____

NATIONAL BRIDGE INVENTORY----- STRUCTURE INVENTORY AND APPRAISAL

Run Date: 11/07/2012

IDENTIFICATION

(1) STATE NAME -NORTH CAROLINA BRIDGE **320050**
 (8) STRUCTURE NUMBER(FEDERAL) 00000000650050
 (5) INVENTORY ROUTE (ON/UNDER) - ON 31001420
 (2) STATE HIGHWAY DEPARTMENT DISTRICT 1
 (3) COUNTY CODE 65 (4) PLACE CODE 0
 (6) FEATURE INTERSECTED - CONETOE CREEK
 (7) FACILITY CARRIED NC142
 (9) LOCATION 0.1 MI E JCT NC111
 (11)MILEPOINT 0
 (16)LAT 35° 54' 26.25" (17)LONG 77° 22' 86.14"
 (98)BORDER BRIDGE STATE CODE PCT SHARE
 (99)BORDER BRIDGE STRUCTURE NO

SUFFICIENCY RATING = 83.84
 STATUS = Not Deficient

CLASSIFICATION CODE

(112)NBIS BRIDGE SYSTEM - NO
 (104)HIGHWAY SYSTEM Is not on NHS 0
 (26) FUNCTIONAL CLASS - Major Collector 07
 (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

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN: Steel
 TYPE - Stringer Mutlibeam or Girder CODE 302
 (44) STRUCTURE TYPE APPR :
 TYPE - CODE 000
 (45) NUMBER OF SPANS IN MAIN UNIT 1
 (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

CONDITION CODE

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

LOAD RATING AND POSTING CODE

(31) DESIGN LOAD Unknown 0
 (63) OPERATING RATING METHOD - Load Factor
 (64) OPERATING RATING - HS-55 199
 (65) INVENTORY RATING METHOD - Load Factor
 (66) INVENTORY RATING - HS-36 164
 (70) BRIDGE POSTING - No Posting Required 5
 (41) STRUCTURE OPEN, POSTED ,OR CLOSED A
 DESCRIPTION - Open, No Restriction

AGE AND SERVICE

(27) YEAR BUILT 1950
 (106)YEAR RECONSTRUCTED
 (42) TYPE OF SERVICE : ON - Highway
 UNDER - Waterway CODE 15
 (28) LANES: ON STRUCTURE 2 UNDER STRUCTURE 0
 (29) AVERAGE DAILY TRAFFIC 200
 (30) YEAR OF ADT 2011 (109) TRUCK ADT PCT 7%
 (19) BYPASS OR DETOUR LENGTH 9 MI

APPRAISAL CODE

(67) STRUCTURAL EVALUATION 5
 (68) DECK GEOMETRY 5
 (69) UNDERCLEARANCES,VERTI & HORIZ N
 (71) WATERWAY ADEQUACY 7
 (72) APPROACH ROADWAY ALIGNMENT 7
 (36) TRAFFIC SAFETY FEATURES 0000
 (113)SCOUR CRITICAL BRIDGES U

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN 18 FT
 (49) STRUCTURE LENGTH 20 FT
 (50)CURB OR SIDEWALK: LEFT .7085 FT RIGHT .7085 FT
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 26.583 FT
 (52) DECK WIDTH OUT TO OUT 28.25 FT
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 21 FT
 (33) BRIDGE MEDIAN - No Median CODE 0
 (34) SKEW 20° (35) STRUCTURE FLARED 0
 (10) INVENTORY ROUTE MIN VERT CLEAR 999.9 FT
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 26.583 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

PROPOSED IMPROVEMENTS CODE

(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 400 (115) YEAR FUTURE ADT 2025

INSPECTIONS

(90) INSPECTION DATE 10/10/2012
 (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

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

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 11/07/2012

COUNTY : EDGECOMBE DIVISION : 4 DISTRICT : 1 STRUCTURE NUMBER : 320050 LENGTH : 20 FEET

ROUTE CARRIED : NC142 FEATURE INTERSECTED : CONETOE CREEK

LOCATED : 0.1 MI E JCT NC111 BRIDGE NAME : CITY :

FUNC. CLASS : 07 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 200 2011 RAIL TYPE : LT 141 RT 141

BUILT : 1950 BY : BMU PROJ : FED.AID PROJ : DESIGN LOAD : Unknown

REHAB : BY : PROJ : ALIGNMENT : TAN SKEW : 110 LANES : ON 2 UNDER 0

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 12 FT WATER DEPTH : 4 FT

SUPERSTRUCTURE : RC FLOOR ON I-BEAMS & CONCRETE ENCASED I-BEAMS

SUBSTRUCTURE : REINF.CONC.FULL HEIGHT ABUTMENTS

SPANS : 1@20'1

BEAMS OR GIRDERS : 6 LNS.16.5 ENCASED I-BEAMS;4 LNS.14.875I-BEAMS @ VAR.CTS.

FLOOR : 6RC/2.5 AWS ENCROACHMENT : DECK (OUT TO OUT) : 28.25 FT

CLEAR ROADWAY : 26.583 FT BETWEEN RAILS : 28 FT SIDEWALK OR CURB : LT .7085 FT RT .7085 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-36 OPE.RTG. : HS-55 CONTR.MEMBER : Int. encased bm 4 POSTED : SV TTST DATE

SYSTEM : Primary N.C. Route GREEN LINE ROUTE : Y

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection - Contract
 BRIDGE NO. 320050 COUNTY EDGEcombe ROUTE NC142 OVER CONETOE CREEK
 STRUCTURE TYPE RC FLOOR ON I-BEAMS & CONCRETE ENCASED I-BEAMS
 ROUTE ORIENTATION W - E SPANS 1@20'1

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		G		45. CHANNEL & CHANNEL PROT.	a. WATERWAY	G
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58		a. CONCRETE	F		b. ALIGNMENT	G
		b. TIMBER			c. SCOUR	G
		c. STEEL PLANK		50. APPROACH ROADWAY CONDITION		G
		d. OPEN GRID		51. APPROACH SLABS		
3. RAILING		a. CONCRETE	G	52. PAINT SYSTEM	CODE A	F
		b. TIMBER		53. UTILITIES		
		c. ALUMINUM		54. RESPONSE TO LIVE LOAD		G
		d. STEEL		55. ESTIMATED REMAINING LIFE		16
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS		G				
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		61. PROMPT-ACTION NOTICE ISSUED		NO
		b. MISC PREFAB		62. PRESENTLY POSTED		NO
		c. COMPRESSION SEAL		63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)		4
		d. STANDARD JOINTS		64. TOTAL SNOOPER INSP. TIME (HRS)		0
		e. OPEN JOINTS		65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)		0
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)		F		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				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 ADAQUACY		7
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)				b. APPR. RDWY. ALIGNMENT		7
16. DRAINAGE SYSTEM (ON STRUCTURE)		F				
17. MOVABLE SPAN MACHINERY				72. FIELD SCOUR EVALUATION		O
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)				USE OF INSP. ACCESSIBILITY EQUIPMENT		
35. TIM SUB STR.		a. ABUT. & INT. BENT CAPS & RISERS		SNOOPER (CODE S, 4, OR N)	HRS	NO
		b. PILES, POST, SILLS, & BRACING		LADDER		NO
		c. BULKHEADS, WING'S, & TIE BACKS		BUCKET TRUCK		NO
36. CONC SUB STR.		a. ABUT. & INT. BENT CAPS	F	BOAT		NO
		b. ABUT. & BENT COL'S BREASTWALLS	F	OTHER		NO
		c. ABUT. & INT. BENT PILES				
		d. BACKWALLS, WING'S, RETAIN. WALLS	F			
		e. ABUT. & BENT FOOTINGS & SILLS	G			
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)		F				
40. FENDER SYSTEMS				80. INSPECTED BY:	<i>Matthew Moyer</i>	
41. DRIFT		G		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 MATTHEW MOYER			
Assisted By DRW			
Item No.	Grade		
1	G	LONGITUDINAL CRACK IN ASPHALT WEARING SURFACE SPAN 1	
2a	F	TRANSVERSE CRACK IN ASPHALT WEARING SURFACE ALONG FILL FACE AT ABUTMENTS 1 AND 2 4" DIAMETER X 1/2" DEEP SPALL WITH EXPOSED REBAR IN BOTTOM OF DECK BAY 7 NEAR MIDSPAN	
3a	G	SCALING AND HAIRLINE CRACKS IN FACE OF NORTH AND SOUTH BRIDGE RAILS	
4	G	SCALING AND HAIRLINE CRACKS IN FACE OF NORTH AND SOUTH CURBS	
7	F	DEBRIS AND VEGETATION GROWTH ALONG NORTH AND SOUTH GUTTERS	
10	F	SURFACE RUST ON APPROXIMATELY 15% OF BEAMS SURFACE AREA 11" X 9" DELAMINATION IN BOTTOM OF BEAM 3 AT ABUTMENT 2 5" X 3" X 1" DEEP SPALL AND 9" X 8" DELAMINATION IN BOTTOM OF BEAM 4 AT ABUTMENT 2 LONGITUDINAL AND DIAGONAL HAIRLINE CRACKS IN SOUTH FACE OF BEAM 7 AT ABUTMENT 1 9" X 3" X 2" DEEP SPALL IN BOTTOM OF BEAM 7 AT ABUTMENT 1	
10A	NO	23" X 9" DELAMINATION IN BOTTOM OF BEAM 8 AT ABUTMENT 1 NO CURVED GIRDERS	
52	F	SURFACE RUST ON APPROXIMATELY 15% OF BEAMS SURFACE AREA	
36a	F	SCALING AND HAIRLINE CRACKS IN FACE OF CAP AT ABUTMENTS 1 AND 2	
36b	F	SCALING AND HAIRLINE CRACKS IN FACE OF BREASTWALL AT ABUTMENTS 1 AND 2	

Bridge I&A Form 1(82)H State of North Carolina Dept. of Transportation Division of Highways		FIELD INSPECTION REPORT <u>Bridge Inspeccion & Analysis</u>	
Team Leader MATTHEW MOYER			
Assisted By DRW			
Item No.	Grade		
36d	F	SCALING AND HAIRLINE CRACKS IN FACE OF WINGWALL AT NORTHEAST, NORTHWEST, SOUTHEAST AND SOUTHWEST CORNERS	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 320050

County EDGECOMBE

Date: 10/10/2012

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	10	11" X 9" DELAMINATION IN BOTTOM OF BEAM 3 AT ABUTMENT 2 5" X 3" X 1" DEEP SPALL AND 9" X 8" DELAMINATION IN BOTTOM OF BEAM 4 AT ABUTMENT 2 9" X 3" X 2" DEEP SPALL IN BOTTOM OF BEAM 7 AT ABUTMENT 1 23" X 9" DELAMINATION IN BOTTOM OF BEAM 8 AT ABUTMENT 1	
3376	Clean/Wash Bridge Decks	SF	40	DEBRIS AND VEGETATION GROWTH ALONG NORTH AND SOUTH GUTTERS	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



LONGITUDINAL CRACK IN ASPHALT WEARING SURFACE SPAN 1



TRANSVERSE CRACK IN ASPHALT WEARING SURFACE ALONG FILL FACE AT ABUTMENT 2



4" DIAMETER X 1/2" DEEP SPALL WITH EXPOSED REBAR IN BOTTOM OF DECK BAY 7 NEAR MIDSPAN



SURFACE RUST ON APPROXIMATELY 15% OF BEAMS SURFACE AREA, BEAM 9 SHOWN



LONGITUDINAL AND DIAGONAL HAIRLINE CRACKS IN SOUTH FACE OF BEAM 7 AT ABUTMENT 1



9" X 3" X 2" DEEP SPALL IN BOTTOM OF BEAM 7 AT ABUTMENT 1

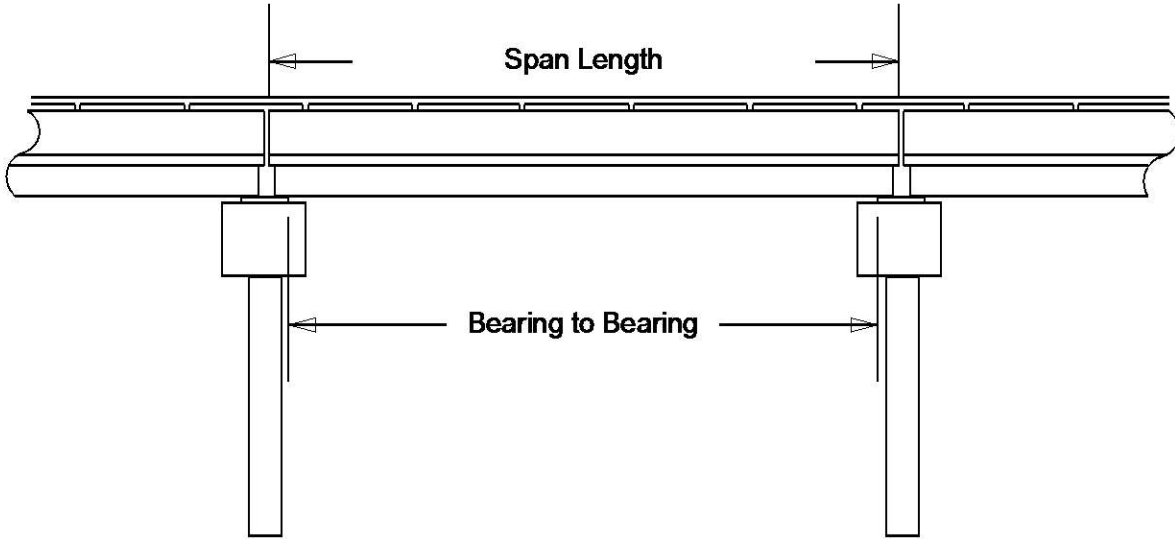


5" X 3" X 1" DEEP SPALL AND 9" X 8" DELAMINATION IN BOTTOM OF BEAM 4 AT ABUTMENT 2

Structure Data Worksheet

Spans

County: EDGECOMBE Structure No: 320050 Date: 10/10/2012 Inspected By: MJM



Span No	Span Length	Bearing to Bearing	Comments
1	20.083 FT.	18	MEASUREMENTS VERIFIED 10-10-2012 MATTHEW MOYER

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 320050 County: EDGEcombe Date: 10/10/2012 By: MJM

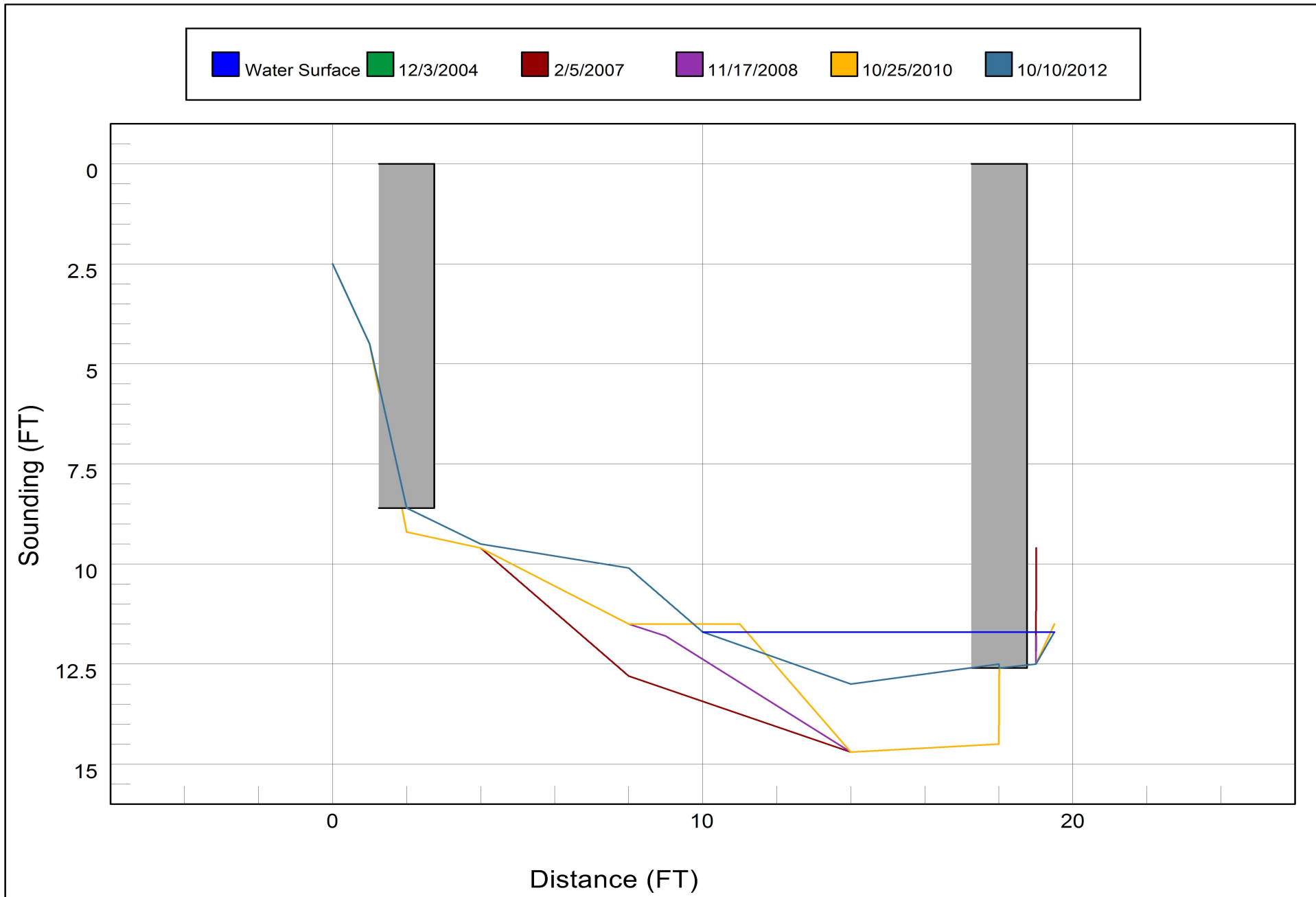
Record sounding from top of rail. Other location if needed: TOP OF RAIL

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

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.5	TOP OF RAIL			
1	4.5	Top of Cap			
2	8.6	ABUTMENT 1	2	12	ABUTMENT 1
4	9.5				
8	10.1				
10	11.7	Water Surface/Water Edge (WSWE)			
14	13				
18	12.5		18	11.5	ABUTMENT 2
18.01	12.6	ABUTMENT 2			
19	12.5				
19.5	11.7	Water Surface/Water Edge (WSWE)			

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch

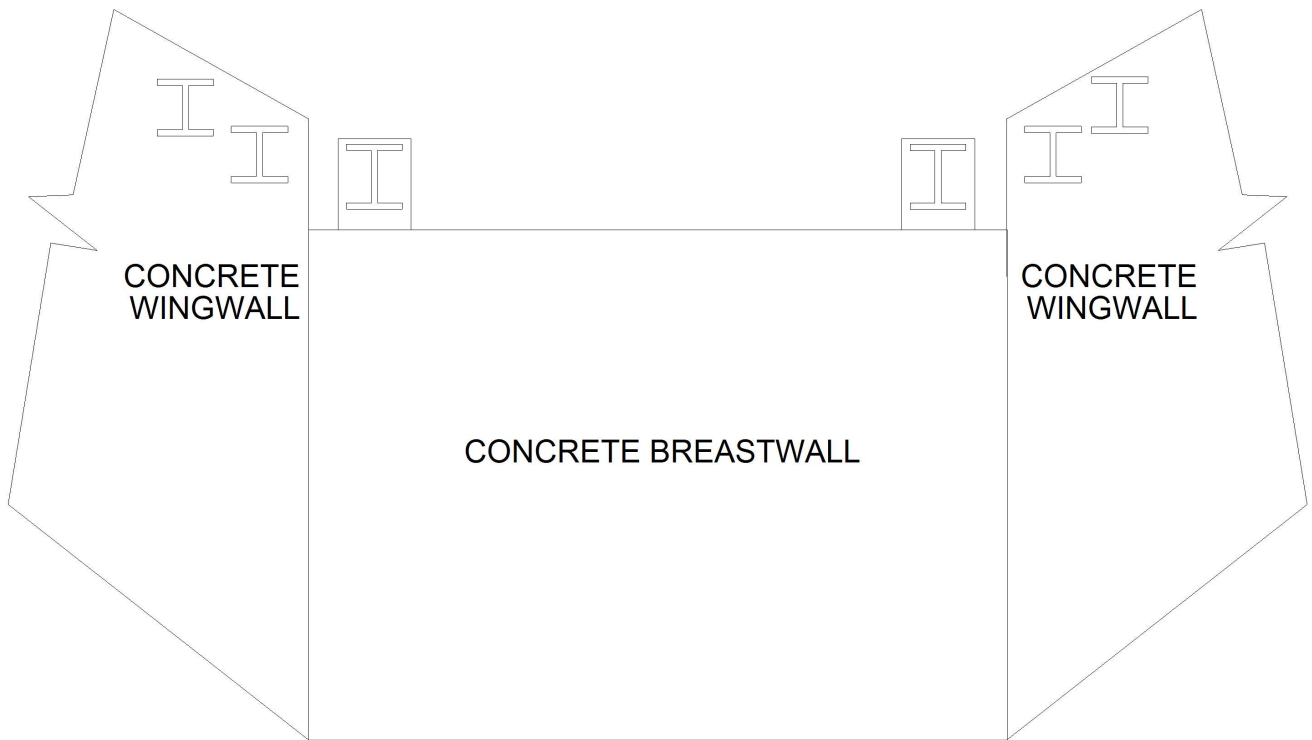


Roadway	21ft Wide	2 Paved Lanes	Looking East
Left Shoulder	6ft Wide		6ft Unpaved
Right Shoulder	6ft Wide		6ft Unpaved
Left Guardrail			
Right Guardrail			

MEASUREMENTS VERIFIED 10-10-2012 MATTHEW MOYER

Title APPROACH ROADWAY		Description APPROACH ROADWAY	
Bridge No: 320050	Drawn By: VMH	Date: 11/17/2008	File Name: S0026000218

Bridge Inspection Field Sketch



TYPICAL ABUTMENT

MEASUREMENTS VERIFIED 10-10-2012 MATTHEW MOYER

Title

SUBSTRUCTURE

Description

SUBSTRUCTURE

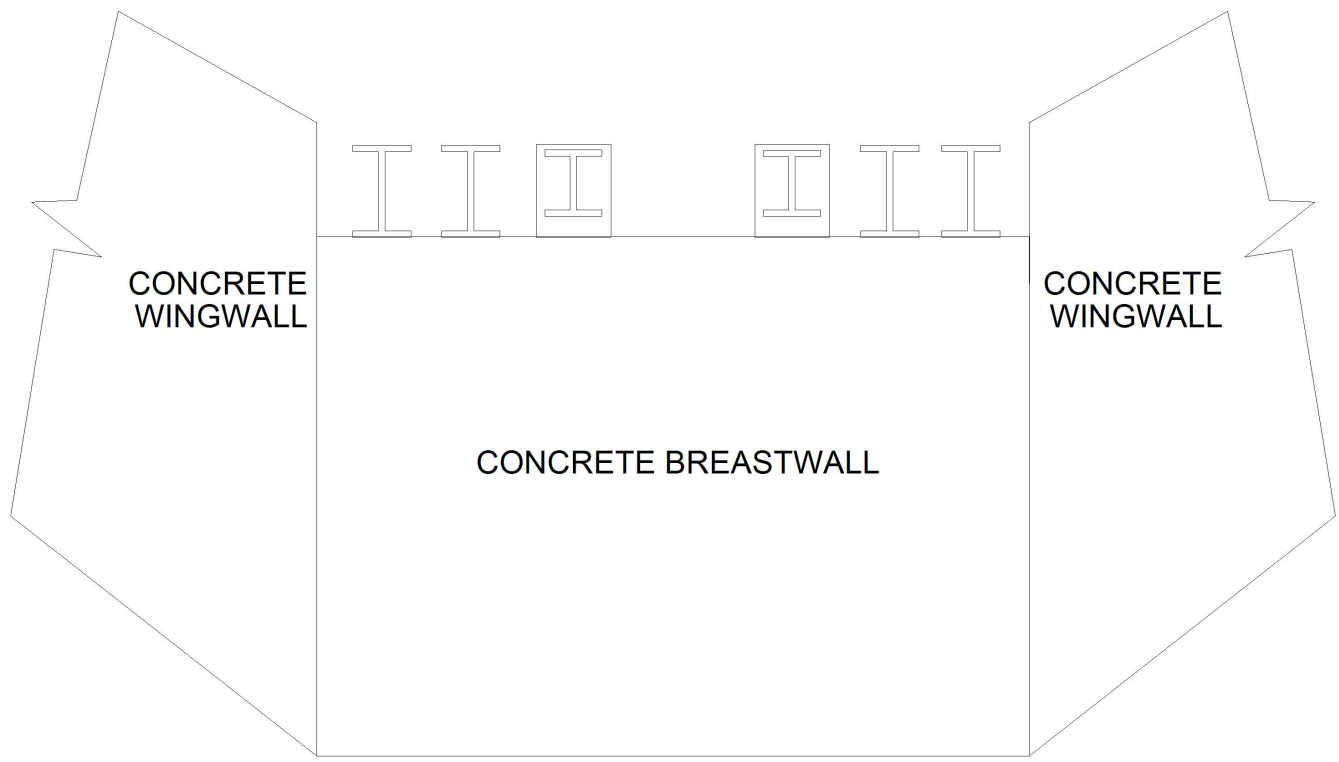
Bridge No: 320050

Drawn By: VMH

Date: 11/17/2008

File Name: S0026000220

Bridge Inspection Field Sketch



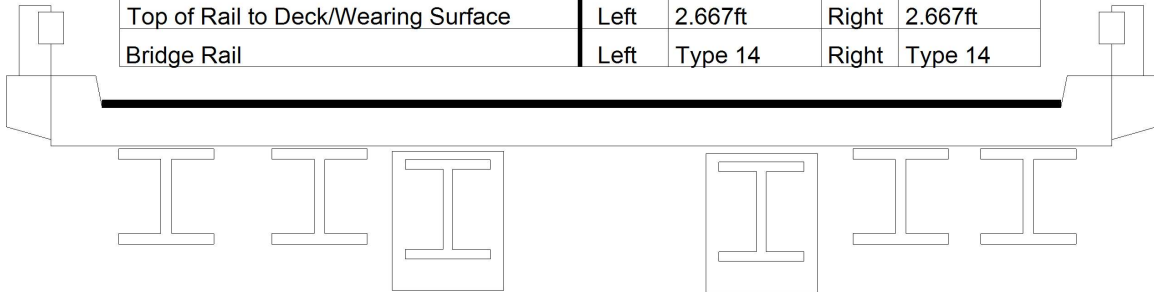
TYPICAL ABUTMENT

MEASUREMENTS VERIFIED 10-10-2012 MATTHEW MOYER

Title SUBSTRUCTURE		Description SUBSTRUCTURE	
Bridge No: 320050	Drawn By: VMH	Date: 11/17/2008	File Name: S0026000228

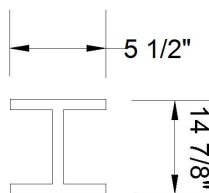
Bridge Inspection Field Sketch

Deck Width/Out to Out	28.25ft	Between Rails	28ft
Clear Roadway	26.583ft	Wearing Surface	0.208ft
Median Width		Median Height	
Curb Height		Left	0.833ft
		Right	0.833ft
Sidewalk Width		Left	
		Right	
Clear Roadway (Rail to Median)		Left	
		Right	
Guardrail Width		Left	
		Right	
Top of Rail to Deck/Wearing Surface		Left	2.667ft
		Right	2.667ft
Bridge Rail		Left	Type 14
		Right	Type 14



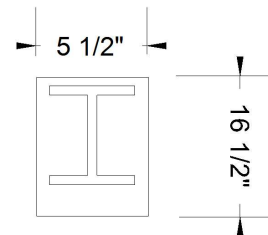
Measurements for Span #	1		
Deck Thickness	0.5	Left Overhang	0.958
Top of Rail to Bottom of Beam	4.5	Right Overhang	0.958

Beam Number	Beam Type	Spacing	Comments
1	Steel I Beam	2.792ft	
2	Steel I Beam	1.5ft	
3	Steel I Beam	3.583ft	
4	Steel I Beam	3.542ft	
5	Steel I Beam	3.542ft	
6	Steel I Beam	3.5ft	
7	Steel I Beam	3.5ft	
8	Steel I Beam	1.5ft	
9	Steel I Beam	2.708ft	
10	Steel I Beam	ft	



FLANGE THICKNESS: 7/16" TAPERED FLANGES

BEAMS 1,2,9 & 10



CONCRETE ENCASED BEAMS 3 - 8

MEASUREMENTS VERIFIED 10-10-2012 MATTHEW MOYER

Title TYPICAL SECTION	Description TYPICAL SECTION
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Bridge No: 320050	Drawn By: VMH	Date: 11/17/2008	File Name: S0026000219
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LOOKING EAST



SOUTH BRIDGE RAIL, NORTH BRIDGE RAIL SIMILAR



LOOKING UPSTREAM (NORTH)



LOOKING DOWNSTREAM (SOUTH)



ABUTMENT 2, ABUTMENT 1 SIMILAR



LOOKING WEST



SUPERSTRUCTURE



UPSTREAM PROFILE



DOWNSTREAM PROFILE