



NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 BRIDGE MANAGEMENT UNIT

ATTENTION

TEMP. REPAIRS TO DECK

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY GASTON BRIDGE NUMBER 350143 INSPECTION CYCLE 2 YRS
 ROUTE 185 ACROSS SOUTH FORK CATAWBA RIVER M.P. 23.80

LOCATION 0.5 MI. N. JCT. NC7

SUPERSTRUCTURE RC DECK ON AP:I-BEAMS,MN:I-BEAMS(CONT),SIP FORMS,APPR.SLABS

SUBSTRUCTURE EBTS:RC CAP & STL.PILES,INTBTS:RC HAMMERHEAD,SPR.&PILE FTGS.

1@66.0',1@57.500',6@61.250',3@80.083',2@65.0'

SPANS

LONGITUDE 81° 4' 41.74"

LATITUDE 35° 15' 51.20"

INSPECTION DATE 05/13/2014

PRESENT CONDITION FAIR

PRESENT POSTING N

NOT POSTED

PROPOSED POSTING

OTHER SIGNS PRESENT NONE

Fracture Critical	<u>No</u>
Temporary Shoring	<u>No</u>
Scour Critical	<u>No</u>
Scour POA	<u>No</u>



SIGN NOTICE
ISSUED FOR

NUMBERED
REQUIRED

<u>No</u>	WEIGHT LIMIT	<u> </u>
<u>No</u>	DELINEATORS	<u> </u>
<u>No</u>	NARROW BRIDGE	<u> </u>
<u>No</u>	ONE LANE BRIDGE	<u> </u>
<u>No</u>	LOW CLEARANCE	<u> </u>

SOUTH APPROACH

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

Run Date: 06/09/2014

IDENTIFICATION

(1) STATE NAME -NORTH CAROLINA BRIDGE **350143**
 (8) STRUCTURE NUMBER(FEDERAL) 00000000710143
 (5) INVENTORY ROUTE (ON/UNDER) - ON 11000850
 (2) STATE HIGHWAY DEPARTMENT DISTRICT 1
 (3) COUNTY CODE 71 (4) PLACE CODE 39880
 (6) FEATURE INTERSECTED - SOUTH FORK CATAWBA RIVER
 (7) FACILITY CARRIED I85
 (9) LOCATION 0.5 MI. N. JCT. NC7
 (11) MILEPOINT 23.8
 (16) LAT 35° 15' 51.20" (17) LONG 81° 4' 41.74"
 (98) BORDER BRIDGE STATE CODE PCT SHARE
 (99) BORDER BRIDGE STRUCTURE NO

SUFFICIENCY RATING = 95.09
 STATUS = Not Deficient

CLASSIFICATION **CODE**

(112) NBIS BRIDGE SYSTEM - YES
 (104) HIGHWAY SYSTEM Is on the NHS 1
 (26) FUNCTIONAL CLASS - Arterial - Interstate 11
 (100) STRAHNET HIGHWAY - Interstate STRAHNET Route 1
 (101) PARALLEL STRUCTURE - No Parallel Structure N
 (102) DIRECTION OF TRAFFIC - 2-way Traffic 2
 (103) TEMPORARY STRUCTURE -
 (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

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN: Steel Continuous
 TYPE - Stringer Multibeam or Girder CODE 402
 (44) STRUCTURE TYPE APPR : Steel
 TYPE - Stringer Multibeam or Girder CODE 302
 (45) NUMBER OF SPANS IN MAIN UNIT 5
 (46) NUMBER OF APPROACH SPANS 9
 (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 6
 (59) SUPERSTRUCTURE 7
 (60) SUBSTRUCTURE 6
 (61) CHANNEL & CHANNEL PROTECTION 7
 (62) CULVERTS N

LOAD RATING AND POSTING **CODE**

(31) DESIGN LOAD HS 20 + MOD 6
 (63) OPERATING RATING METHOD - Load Factor 1
 (64) OPERATING RATING - HS-35 63
 (65) INVENTORY RATING METHOD - Load Factor 1
 (66) INVENTORY RATING - HS-21 37
 (70) BRIDGE POSTING - No Posting Required 5
 (41) STRUCTURE OPEN, POSTED ,OR CLOSED A
 DESCRIPTION - Open, No Restriction

AGE AND SERVICE

(27) YEAR BUILT 1960
 (106) YEAR RECONSTRUCTED 1992
 (42) TYPE OF SERVICE : ON - Highway
 UNDER - Highway - Waterway CODE 16
 (28) LANES: ON STRUCTURE 6 UNDER STRUCTURE 2
 (29) AVERAGE DAILY TRAFFIC 11900
 (30) YEAR OF ADT 2012 (109) TRUCK ADT PCT 16%
 (19) BYPASS OR DETOUR LENGTH 1 MI

APPRAISAL **CODE**

(67) STRUCTURAL EVALUATION 6
 (68) DECK GEOMETRY 9
 (69) UNDERCLEARANCES, VERTI & HORIZ 4
 (71) WATERWAY ADEQUACY 7
 (72) APPROACH ROADWAY ALIGNMENT 8
 (36) TRAFFIC SAFETY FEATURES 1111
 (113) SCOUR CRITICAL BRIDGES 8

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN 78 FT
 (49) STRUCTURE LENGTH 896 FT
 (50) CURB OR SIDEWALK: LEFT 0 FT RIGHT 0 FT
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 105.5 FT
 (52) DECK WIDTH OUT TO OUT 110.83 FT
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 103 FT
 (33) BRIDGE MEDIAN - No Median CODE 3
 (34) SKEW 99° (35) STRUCTURE FLARED 0
 (10) INVENTORY ROUTE MIN VERT CLEAR 999.9 FT
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 52.75 FT
 (53) MIN VERT CLEAR OVER BRIDGE RDWY 999.9 FT
 (54) MIN VERT UNDERCLEAR REF Highway 19.75 FT
 (55) MIN LAT UNDERCLEAR RT REF Highway 6.25 FT
 (56) MIN LAT UNDERCLEAR LT REF - 0 FT

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 23800 (115) YEAR FUTURE ADT 2025

INSPECTIONS

(90) INSPECTION DATE 05/13/2014
 (92) CRITICAL FEATURE INSPECTION : (93) CFI DATE
 A) FRACTURE CRIT DETAIL - NO A)
 B) UNDERWATER INSP - YES 48Mo B) 04/18/2013
 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

Structure No: 350143

County: GASTON

Run Date:

Span Number	Feature Intersected	Inventory Route	Minimum Maximum Vertical Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Numer of Lanes	Average Daily Traffic	Year of Average Daily Traffic	Total Horizontal Clearance	See Note 1							
													Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway Designator	Direction of Traffic	Highway System of Route
3	FACTORY DRIVE	80000000	20.08	00				19	2	500	2012	48.58	H	19.75	6.25		9	0	2	0

Note 1: Items 54, 55, and 56 are not reported FHWA under route data points but are collected for each under route to determine the minimum value for Underclearance Appraisal Item 69. The under route that generates the lowest Underclearance Appraisal value will be reported on the Facility Carried record.

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 06/09/2014

COUNTY : GASTON DIVISION : 12 DISTRICT : 1 STRUCTURE NUMBER : 350143 LENGTH : 896 FEET

ROUTE CARRIED : I85 FEATURE INTERSECTED : SOUTH FORK CATAWBA RIVER

LOCATED : 0.5 MI. N. JCT. NC7 BRIDGE NAME : WILLIAM JAMES PHARR CITY : MCADENVILLE

FUNC. CLASS : 11 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 11900 2012 RAIL TYPE : LT 41 RT 41

BUILT : 1960 BY : SHC PROJ : 8.16315 FED.AID PROJ : I-HR-85-1(75) DESIGN LOAD : HS 20 + MOD

REHAB : 1992 BY : DOH PROJ : 8.T810701 ALIGNMENT : TAN SKEW : 118 LANES : ON 6 UNDER 2

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 57 FT WATER DEPTH : 14 FT

SUPERSTRUCTURE : RC DECK ON APR.:I-BEAMS,MN:CONT.I-BEAMS (S.I.P. METAL FORMS)

SUBSTRUCTURE : E.BTS:RC CAPS/H-PILES;INT.BTS:RC HAMMERHEAD,SPR.&PILE FTGS.

SPANS : 1@31'-6",1@66',1@57'-6",5@61'-3", (1@65',3@80',1@65')CONT.,1@65'

BEAMS OR GIRDERS : 15 LNS I-BMS@VAR.SIZES&CTS,SPAN 1-8,#14(SIMPLE),SP#9-13(CONT.)

FLOOR : 8.25" - 8.5" RC/NO AWS ENCROACHMENT : DECK (OUT TO OUT) : 110.83 FT

CLEAR ROADWAY : 105.5 FT BETWEEN RAILS : 108 FT SIDEWALK OR CURB : LT 0 FT RT 0 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-21 OPE.RTG. : HS-35 CONTR.MEMBER : cntbm(H-L) widenedrs POSTED : SV TTST DATE

SYSTEM : Primary Interstate GREEN LINE ROUTE : Y

UNDER ROUTES AND CLEARANCES

Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
3	FACTORY DRIVE	20.08	19.75	48.58	0	6.25

Note: All measurements are in feet.

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection
 BRIDGE NO. 350143 COUNTY GASTON ROUTE 185 OVER SOUTH FORK CATAWBA RIVER
 STRUCTURE TYPE RC DECK ON AP:I-BEAMS,MN:I-BEAMS(CONT),SIP FORMS,APPR.SLABS
 ROUTE ORIENTATION S - N SPANS

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	G	
					b. ALIGNMENT	G	
					c. SCOUR	G	
					d. SLOPE PROT., RIP-RAP, DIKES, ETC.		
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58	a. CONCRETE	13	F	50. APPROACH ROADWAY CONDITION			
	b. TIMBER			51. APPROACH SLABS			
	c. STEEL PLANK			52. PAINT SYSTEM CODE A			
	d. OPEN GRID			53. UTILITIES			
3. RAILING	a. CONCRETE		G	54. RESPONSE TO LIVE LOAD			
	b. TIMBER			55. ESTIMATED REMAINING LIFE			
	c. ALUMINUM						
	d. STEEL		G				
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS				G			
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)				60. REGULATORY SIGN NOTICE ISSUED			
6. DECK EXP JTS. OR DEVICES. NO. OF EACH	a. STEEL PL OR FINGER			61. PROMPT-ACTION NOTICE ISSUED			
	b. MISC PREFAB	2	F	62. PRESENTLY POSTED			
	c. COMPRESSION SEAL		G	63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)			
	d. STANDARD JOINTS			64. TOTAL SNOOPER INSP. TIME (HRS)			
	e. OPEN JOINTS			65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)			
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)				G	70. SI&A GENERAL CONDITION RATINGS		
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59							
10. LONGITUDINAL BEAMS OR GIRDERS				G	a. DECK	ITEM 58	6
11. LONGITUDINAL JOIST OR STRINGERS					b. SUPERSTRUCTURE	ITEM 59	7
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S				G	c. SUBSTRUCTURE	ITEM 60	6
13. END DIAP'S, CURTAIN WALLS, & CONN'S				G	d. CHANNEL & CHANNEL PROT.	ITEM 61	7
14. FLOOR BEAMS AND CONNECTIONS					71. SI&A FIELD APPRAISAL RATINGS		
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)				F	a. WATERWAY ADAQUACY		
16. DRAINAGE SYSTEM (ON STRUCTURE)				G	b. APPR. RDWY. ALIGNMENT		
17. MOVABLE SPAN MACHINERY					72. FIELD SCOUR EVALUATION		
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)							
35. TIM SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS			USE OF INSP. ACCESSIBILITY EQUIPMENT			
	b. PILES, POST, SILLS, & BRACING			SNOOPER (CODE S, 4, OR N)		HRS	NO
	c. BULKHEADS, WING'S, & TIE BACKS			LADDER			NO
36. CONC SUB STR.	a. ABUT. & INT. BENT CAPS			F	BUCKET TRUCK		
	b. ABUT. & BENT COL'S BREASTWALLS			G	BOAT		
	c. ABUT. & INT. BENT PILES				OTHER		
	d. BACKWALLS, WING'S, RETAIN. WALLS			G			
	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)				G			
40. FENDER SYSTEMS					80. INSPECTED BY: <i>sdh RL</i>		
41. DRIFT				F	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 DEREK RICKUS			
Assisted By EAP			
Item No.	Grade		
2a	F	<p>BAYS 4, 8, AND 12 ARE CLOSURE POURS BETWEEN THE ORIGINAL AND NEW SECTIONS OF THE BRIDGE. THESE BAYS HAVE HAIRLINE TRANSVERSE CRACKS WITH EFFLORESCENCE AT APPROXIMATELY 3 FOOT SPACING. BAYS 5 TO 7 AND 13 TO 14 HAVE SIP FORMS IN PLACE. THE SMOOTH BOTTOM SLAB IS VISIBLE IN BAYS 1 TO 3 AND 9 TO 11. THESE BAYS HAVE RANDOM HAIRLINE CRACKS WITH EFFLORESCENCE</p> <p>TRANS. CRACKING PRESENT IN SCAT. AREAS OF ALL SPANS.</p> <p>BENT 2 CONCRETE PATCH IN THE CENTER LANE 2' WIDE X 3'4" LONG. THE PATCH IS ALONG THE JOINT. AND BREAKING OUT 1' WIDE X 3.5 LONG. IN THE NBL SPAN 3. CENTER LANE.</p> <p>LARGE CONCRETE PATCHING ALONG BENT 2 IN THE NBL.</p> <p>THERE IS SCAT. LARGE CONCRETE PATCHING IN ALL SPANS OF THE NBL ESPEC. ALONG THE CENTER LANE.</p> <p>CONCRETE PATCHING ALONG THE END SPAN AND THE NORTH APPROACH IN THE NBL.</p>	
3a	G	20' SECTION OF CONCRETE RAIL REPAIRED OVER BENT 5.	
6c	G	11 compression joints	
10A	NO	NO CURVED GIRDERS	
15	F	<p>LOOSE ANCHOR NUTS FOR GIRDERS 14 & 15 @ BENT 2</p> <p>ROCKER BRGS. 9 THRU 13 LEANING OUT OF PLUMB 1 1/4" AT TOP (70 DEGREES F) AT BT. 12</p> <p>THE BEARING PLATES HAVE SURFACE RUST THROUGHOUT AND LIGHT FLAKING RUST AT RANDOM LOCATIONS. THE BEARINGS AT THE ORIGINAL INTERIOR BENTS HAVE LIGHT PACK RUST BETWEEN THE BEARING PLATES.</p>	
52	G	AREAS OF FLAKING PAINT EXIST AT RANDOM ON THE BEAMS AND THE BEARINGS SHOW RUST AT MOST LOCATIONS.	
36a	F	<p>THERE IS A SPALL 3" WIDE X 18" WITH REBAR EXPOSED.</p> <p>THERE IS A 32"LONG X 13" H X 2 1/2" DEEP ON THE SOUTH FACE OF BT.8 UNDER BEAM 2 W/ REBAR EXPOSED.</p> <p>HORIZ. CRACKING ALONG THE THE NORTH FACE OF BENT 2 IN BAY 2 AND 3 ALONG THE TOP. FOR 6' TO 8'</p>	
36b	G	<p>SPALL AT BT. 3 COLUMN 3 AT THE SW CORNER 10" H X 3" WIDE W/REBAR EXPOSED AT 8' FROM GROUNDLINE.</p> <p>THE FOLLOWING NOTE IS TAKEN FROM THE UNDERWATER INSPECTION OF 5/14/2009 :</p> <p>RANDOM IMPACT SPALLS ON UPSTREAM FACES. 1/4" LOSS TO SURFACE CONCRETE WITH 1/4" COARSE AGGREGATE EXPOSED THROUGHOUT.</p>	

Bridge I&A Form 1(82)H		FIELD INSPECTION REPORT <u>Bridge Inspeccion & Analysis</u>	
State of North Carolina Dept. of Transportation Division of Highways			
Team Leader DEREK RICKUS			
Assisted By EAP			
Item No.	Grade		
36e		NOT VISIBLE	
38		NOT VISIBLE	
41	F	DRIFT ALONG BENT 10 5' WIDE X 12' LONG AT BENT 10	
50	F	THE SOUTH APPROACH ALONG THE NORTH BOUND LANES HAS CRACKING ALONG THE END SPAN.	
51	F	LONGITUDINAL CRACK IN THE NORTH APPROACH SLAB IN THE RT. LANE FOR FULL LENGTH. THIS IS TYPICAL OF ALL APPROACH SLABS.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 350143

County GASTON

Date: 05/13/2014

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3326	Maintain Concrete Deck	SF	2	BENT 2 CONCRETE PATCH IN THE CENTER LANE 2' WIDE X 3'4" LONG. THE PATCH IS ALONG THE JOINT. AND BREAKING OUT 1' WIDE X 3.5 LONG. IN THE NBL SPAN 3. CENTER LANE.	
3326	Maintain Concrete Deck	SF	150	TRANS. CRACKING PRESENT IN SCAT. AREAS OF ALL SPANS.	
3348	Maintain Concrete Substructure Components	LF	2	THERE IS A SPALL 3" WIDE X 18" WITH REBAR EXPOSED.	
3348	Maintain Concrete Substructure Components	LF	3	THERE IS A 32"LONG X 13" H X 2 1/2" DEEP ON THE SOUTH FACE OF BT.8 UNDER BEAM 2 W/ REBAR EXPOSED.	
3348	Maintain Concrete Substructure Components	LF	8	HORIZ. CRACKING ALONG THE THE NORTH FACE OF BENT 2 IN BAY 2 AND 3 ALONG THE TOP. FOR 6' TO 8'	
3366	Drift and Debris Removal	HR	20	DRIFT ALONG BENT 10 5' WIDE X 12' LONG AT BENT 10	

Key

 Priority Maintenance Item

 Critical Finding Item

 Priority Maintenance Level Not Determined



BAYS 4, 8, AND 12 ARE CLOSURE POURS BETWEEN THE ORIGINAL AND NEW SECTIONS OF THE BRIDGE. THESE BAYS HAVE HAIRLINE TRANSVERSE CRACKS WITH EFFLORESCENC



THERE IS A SPALL 3" WIDE X 18" WITH REBAR EXPOSED.



THERE IS A 32"LONG X 13" H X 2 1/2" DEEP ON THE SOUTH FACE OF BT.8 UNDER BEAM 2 W/ REBAR EXPOSED.



DRIFT ALONG BENT 10 5' WIDE X 12' LONG AT BENT 10



HORIZ. CRACKING ALONG THE THE NORTH FACE OF BENT 2 IN BAY 2 AND 3 ALONG THE TOP. FOR 6' TO 8'



THE SOUTH APPROACH ALONG THE NORTH BOUND LANES HAS CRACKING ALONG THE END SPAN.



TRANS. CRACKING PRESENT IN SCAT. AREAS OF ALL SPANS.



BENT 2 CONCRETE PATCH IN THE CENTER LANE 2' WIDE X 3'4" LONG. THE PATCH IS ALONG THE JOINT. AND BREAKING OUT 1' WIDE X 3.5 LONG. IN THE NBL SPAN 3. CE



LARGE CONCRETE PATCHING ALONG BENT 2 IN THE NBL.



THERE IS SCAT. LARGE CONCRETE PATCHING IN ALL SPANS OF THE NBL ESPEC. ALONG THE CENTER LANE.



CONCRETE PATCHING ALONG THE END SPAN AND THE NORTH APPROACH IN THE NBL.

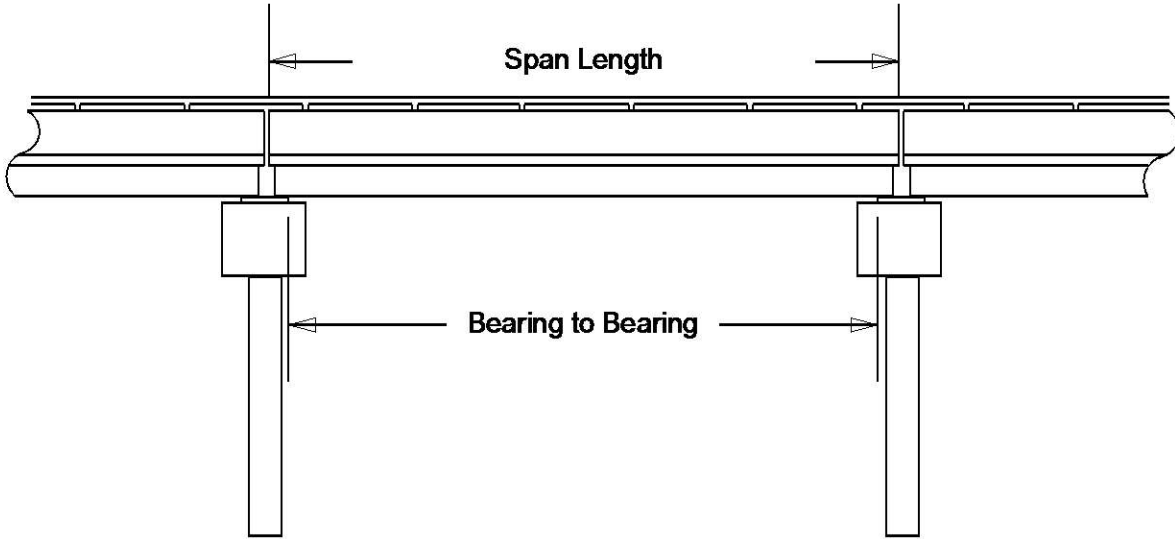


20' SWCTION OF CONCRETE RAIL REPAIRED OVER BENT 5.

Structure Data Worksheet

Spans

County: GASTON Structure No: 350143 Date: 05/13/2014 Inspected By: DCR



Span No	Span Length	Bearing to Bearing	Comments
1	66.000'	63.917'	
2	57.500'	56.167'	
3	61.250'	59.750'	
4	61.250'	59.750'	
5	61.250'	59.667'	
6	61.250'	59.625'	
7	61.250'	59.625'	
8	65.250'	63.458'	
9	80.083'	78.375'	
10	80.083'	78.375'	
11	80.083'	78.417'	
12	65.00	63.333'	
13	65.00	62.958'	NBIS = 865.5'

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 350143 County: GASTON Date: 05/13/2014 By: DCR

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

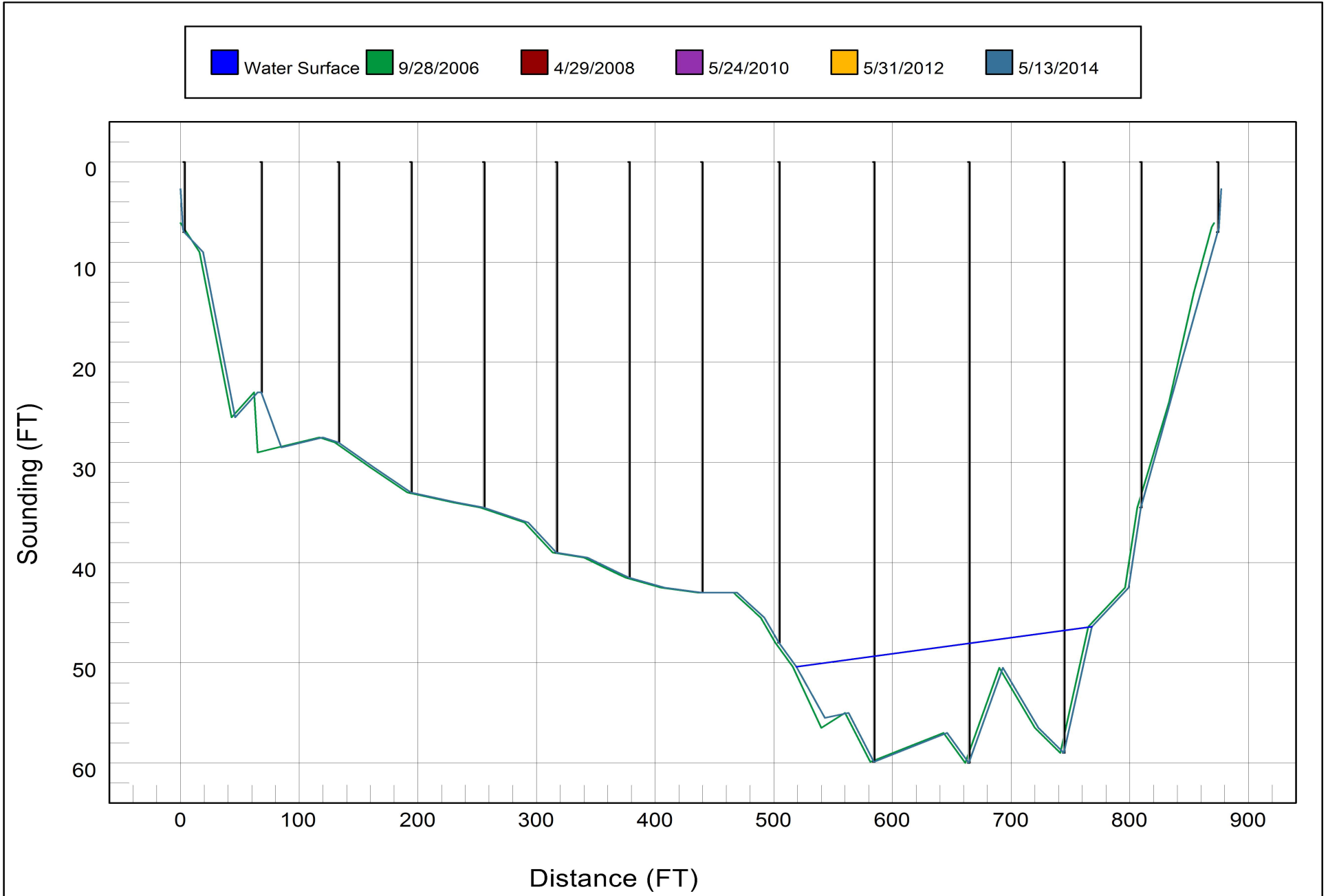
Distance from Highwater Mark to top of rail: _____ Location of Highwater Mark: _____

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.7	FF ABUT 1			
2	6.7	ABUT 1			
3	7	SF ABUTMENT 1	3	7	SF ABUT 1
19	9	CONC SLOPE			
46	25.5	GROUND			
65	23	GROUND			
68	23	PIER 1 DOES NOT EXTEND TO DOWNSTREAM SIDE	68	29.7	PIER 1
85	28.5	GROUND			
120	27.5	GROUND			
133	28	PIER 2	133	29	PIER 2
163	30.5	GROUND			
194.2	33	PIER 3	194.2	32.8	PIER 3
233	34	GROUND			
255.5	34.5	PIER 4	255.5	35.2	PIER 4
293	36	GROUND			
316.7	39	PIER 5	316.7	40.5	PIER 5
343	39.5	GROUND			
369	41	GROUND			
378	41.5	PIER 6	378	40.7	PIER 6
408	42.5	GROUND			
439.3	43	PIER 7	439.3	43.7	PIER 7
469	43	GROUND			
492	45.5	GROUND			
504.3	48	PIER 8	504.3	48.8	PIER 8
519	50.4	WS & WE			

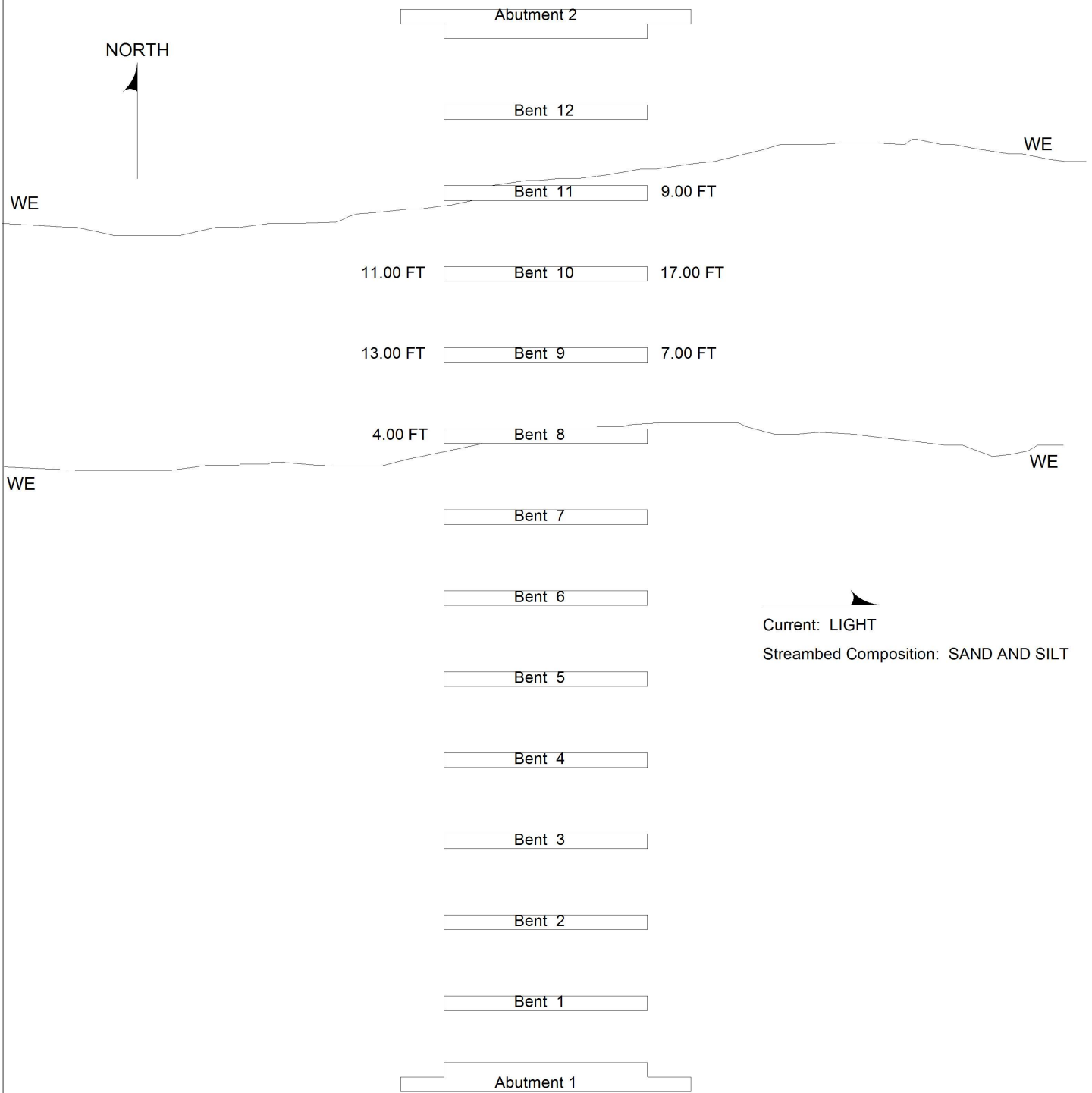
DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
543	55.5	STREAMBED			
563	55	STREAMBED			
584.3	59.9	PIER 9	584.3	59.2	PIER 9
614	58.5	STREAMBED			
646	57	STREAMBED			
664.3	60	PIER 10 / DEEPEST POINT	664.3	59.7	PIER 10
693	50.5	STREAMBED			
723	56.5	STREAMBED			
744.4	59	PIER 11	744.4	59.6	PIER 11
768	46.4	WS & WE			
799	42.5	GROUND			
809.3	34.5	PIER 12	809.3	35.2	PIER 12
874	7	SF ABUTMENT 2	874	7	SF ABUT 2
875	6.7	ABUT 2			
877	2.7	FF ABUT 2			

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch



Title

350143

Description

PLAN VIEW

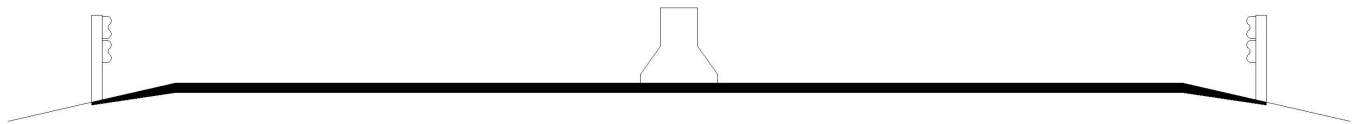
Bridge No: 350143

Drawn By: JOHN HOUSTON

Date: 4/18/2013

File Name: S015000029

Bridge Inspection Field Sketch



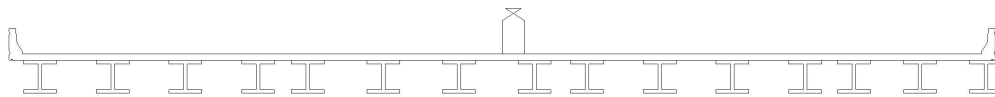
Left Lanes			
Roadway	36.0ft Wide	3 Paved Lanes	North Bound
Left Shoulder	6.5ft Wide	6.50ft Paved	
Right Shoulder	9.5ft Wide	9.50ft Paved	
Left Guardrail	6.50ft from road		
Right Guardrail	9.50ft from road		
Median	2.50ft Wide	5.0ft High	
Right Lanes			
Roadway	36.0ft Wide	3 Paved Lanes	South Bound
Left Shoulder	6.5ft Wide	6.50ft Paved	
Right Shoulder	8.5ft Wide	8.50ft Paved	
Left Guardrail	6.50ft from road		
Right Guardrail	8.50ft from road		

VERIFIED BY ERIC PATTERSON ON 5-12-2014

Title APPROACH ROADWAY		Description LOOKING NORTH	
Bridge No: 350143	Drawn By: DJA	Date: 4/17/2008	File Name: S0298000796

Bridge Inspection Field Sketch

Deck Width/Out to Out	110.83ft	Between Rails	108.00ft
Clear Roadway	105.50ft	Wearing Surface	
Median Width	2.50ft	Median Height	5.00ft
Curb Height		Left	0.33ft
		Right	0.33ft
Sidewalk Width		Left	
		Right	
Clear Roadway (Rail to Median)		Left	52.75ft
		Right	52.75ft
Guardrail Width		Left	1.42ft
		Right	1.42ft
Top of Rail to Deck/Wearing Surface		Left	2.67ft
		Right	2.67ft
Bridge Rail		Left	Type 4
		Right	Type 4



Measurements for Span #	1		
Deck Thickness	0.708	Left Overhang	3.50
Top of Rail to Bottom of Beam	6.667	Right Overhang	3.50

Beam Number	Beam Type	Spacing	Comments
1	Steel I Beam	8.167ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
2	Steel I Beam	8.167ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
3	Steel I Beam	8.167ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
4	Steel I Beam	5.570ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
5	*SEE NOTE BELOW Steel I Beam	8.500ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
6	*SEE NOTE BELOW Steel I Beam	8.500ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
7	*SEE NOTE BELOW Steel I Beam	8.500ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
8	Steel I Beam	5.917ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
9	Steel I Beam	8.167ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
10	Steel I Beam	8.167ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
11	Steel I Beam	8.167ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
12	Steel I Beam	5.500ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
13	Steel I Beam	7.417ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
14	Steel I Beam	7.417ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"
15	Steel I Beam	ft	36" H X 12" W, FLANGE 7/8", WEB 1/2"

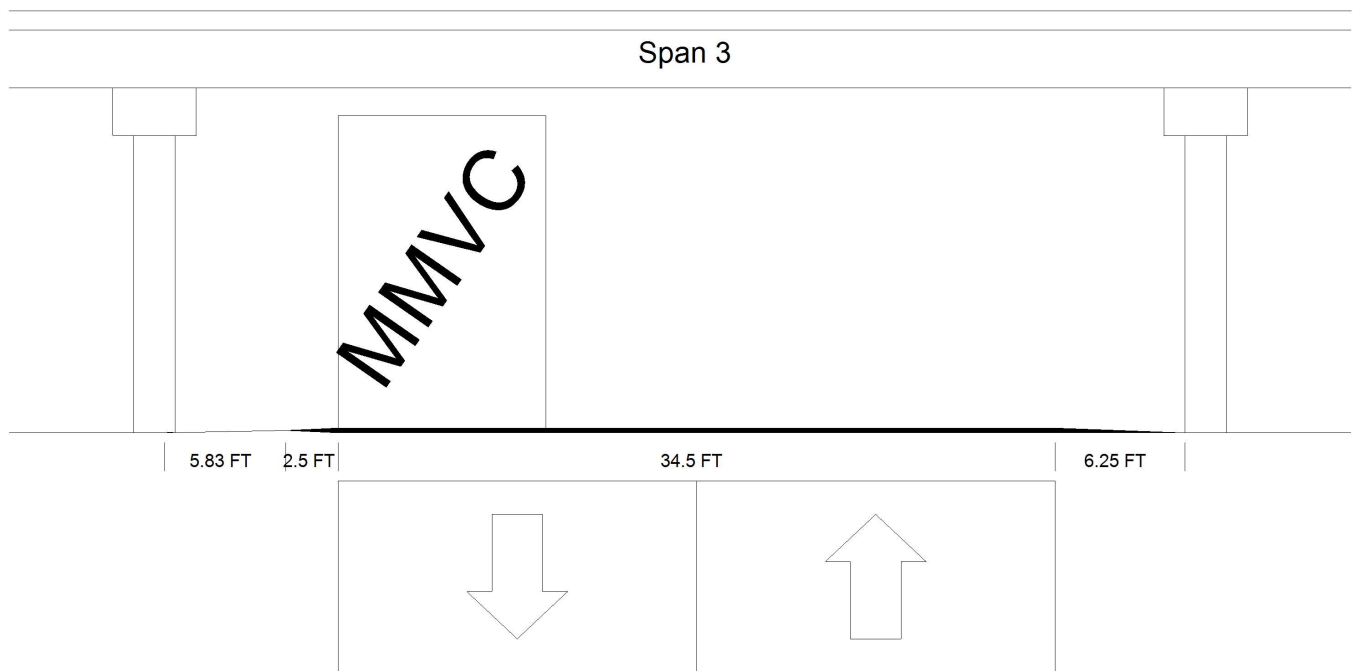
NOTE: NORTHBOUND I-85 HAS 12 SPANS AND SOUTHBOUND I-85 HAS 13 SPANS

BEAM NOTE: SPAN #1 SOUTHBOUND HAS 7 BEAMS, BEAMS #1-4 ARE SAME AS OTHER SPANS,
BEAMS 4-7 ARE 33" H X 11 1/2" W, FLANGE 13/16, WEB 1/2"

VERIFIED BY ERIC PATTERSON ON 5-12-2014

Title DECK DIMENSIONS		Description TYPICAL SECTION	
Bridge No: 350143	Drawn By: DJA	Date: 4/17/2008	File Name: S0298000797

Bridge Inspection Field Sketch



Roadway 1		Direction of Traffic	East West
Distance to Left Rail		Distance to Right Rail	
Distance to Left Toe of Slope		Distance to Left Bent	7.83FT
Distance to Right Toe of Slope		Distance to Right Bent	6.25FT
MMVC	20.08 Ft at Beam 15, 1 FT from LEFT EDGE OF ROADWAY LOOKING WEST		
MVC	19.75 Ft at Beam 15, 0 FT from RIGHT EDGE OF ROADWAY LOOKING WEST		

VERIFIED BY ERIC PATTERSON ON 5-12-2014

Title UNDERCLEARANCE	Description SPAN #3 OVER PRIVATE ROAD
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Bridge No: 350143	Drawn By: DJA	Date: 4/17/2008	File Name: S0298000798
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Bridge Inspection Field Sketch

SEAL EXPOSURES

BENT	COLUMN	NE	SE	SW	NW
9	2	COVERED	14"	11"	17"

FOOTING EXPOSURES

BENT	COLUMN	NE	SE	SW	NW
11	4	COVERED	11"	14"	7"

Title

SEAL AND FOOTING EXPOSURES

Description

SEAL AND FOOTING EXPOSURES

Bridge No: 350143

Drawn By: JOHN HOUSTON

Date: 4/18/2013

File Name: S0150000719

Bridge Inspection Field Sketch



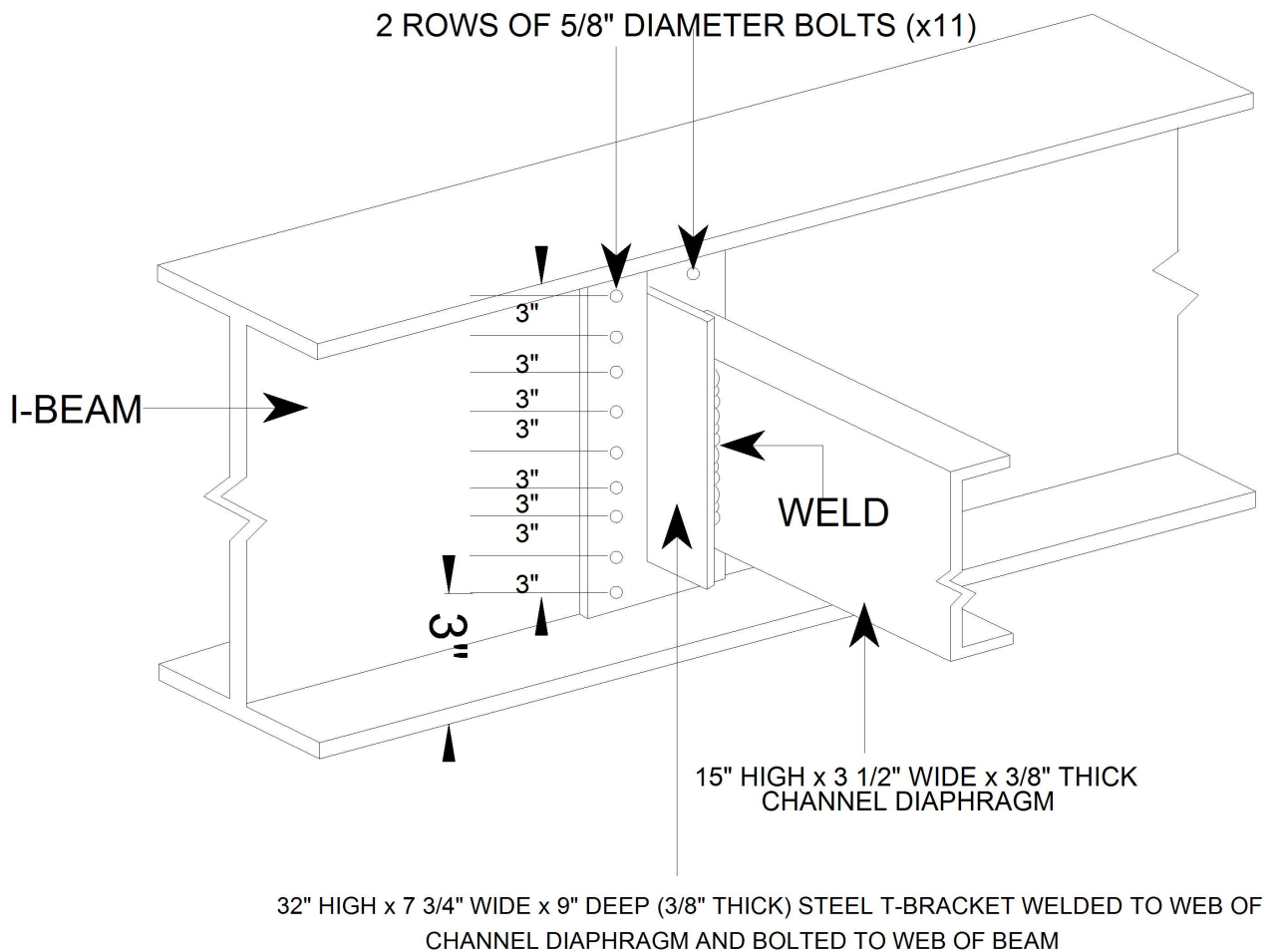
Cap Information			Material Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
105.000 ft.	3.500 ft.	2.000 ft.	12.333 ft.	10.000 ft.	2.000 ft.	2.000 ft.				
Subcap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information			Material							
Length	Width	Height								
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Concrete	29.667 ft.	5.000 ft.	3.500 ft.		Vertical	No	No	No	No
2	Concrete	30.500 ft.	5.667 ft.	3.500 ft.		Vertical	No	No	No	No
3	Concrete	24.667 ft.	5.000 ft.	3.500 ft.		Vertical	No	No	No	No
4	Concrete		5.667 ft.	3.500 ft.		Vertical	No	No	No	No
VERIFIED BY ERIC PATTERSON ON 5-12-2014										
Bent/Abutment #: 2			Similar Bents: 3,4,5,6,7,8,9,10,11,12							

Title INTERIOR BENTS			Description SUBSTRUCTURE DETAILS			
Bridge No: 350143	Drawn By: DELVIN ADAMS		Date: 5/30/2012		File Name: S0146031669	

Bridge Inspection Field Sketch

DIAPHRAGM DETAILS

LOCATIONS : 1/3 POINTS OF SPANS



VERIFIED BY ERIC PATTERSON ON 5-12-2014

Title
INTERMEDIATE DIAPHRAGMS

Description
DIAPHRAGM DETAILS

Bridge No: 350143

Drawn By: DELVIN ADAMS

Date: 5/30/2012

File Name: S0146031670



BENT 1



ABUT. 1



BENT 2



BENT 3



BENT 4



BENT 5



BENT 6



BENT 7



BENT 8



BENT 9



BENT 10



UPSTREAM



SOUTH APPROACH



GUARDRAIL LOOKING SOUTH



GUARDRAIL LOOKING NORTH



GUARDRAIL ATTACHED TO THE BRIDGE RAIL FOR ALL FOUR CORNERS



NORTH APPROACH



GUARDRAIL END FOR ALL FOUR CORNERS



ABUT. 2



BENT 11



BENT 12



DOWNSTREAM



LOOKING DOWNSTREAM



LOOKING UPSTREAM