



NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 BRIDGE MANAGEMENT UNIT

ATTENTION

TEMP. REPAIRS- DECK REWORKED, BMS., BRGS AND DIAPHS. PAINTED. BM. 4 IN SPAN 3 REPAIRED.

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY GASTON BRIDGE NUMBER 350133 INSPECTION CYCLE 2 YRS
 ROUTE ABERDEEN BLVD. ACROSS I85 M.P. 0

LOCATION 0.5 MI. N. JCT. NC279

SUPERSTRUCTURE REINFORCED CONCRETE DECK ON I-BEAMS

SUBSTRUCTURE E.BTS:RC CAP ON STEEL PILES,INT.BTS:RCP&B ON PILE FOOTINGS

SPANS 1@73'6", 1@75'8", 1@75'10", 1@67'2" COMPOSITE

LONGITUDE 81° 8' 35.38" LATITUDE 35° 15' 59.30"

INSPECTION DATE 08/19/2014 PRESENT CONDITION GOOD

PRESENT POSTING Not Posted NOT POSTED PROPOSED POSTING _____

OTHER SIGNS PRESENT 4 DELINEATORS

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

WEST APPROACH

IDENTIFICATION				CLASSIFICATION			
(1) STATE NAME -NORTH CAROLINA	BRIDGE	350133		SUFFICIENCY RATING =			86.65
(8) STRUCTURE NUMBER(FEDERAL)		00000000710133		STATUS =	Functionally Obsolete		
(5) INVENTORY ROUTE (ON/UNDER) - ON		50000000					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1					
(3) COUNTY CODE	71	(4) PLACE CODE	25580	(112)NBIS BRIDGE SYSTEM -			YES
(6) FEATURE INTERSECTED - I85				(104)HIGHWAY SYSTEM	Is not on NHS		0
(7) FACILITY CARRIED ABERDEEN BLVD.				(26) FUNCTIONAL CLASS -	Collector		17
(9) LOCATION 0.5 MI. N. JCT. NC279				(100)STRAHNET HIGHWAY -	Not a STRAHNET Route		0
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE -	No Parallel Structure		N
(16)LAT 35° 15' 59.30"	(17)LONG	81° 8' 35.38"		(102)DIRECTION OF TRAFFIC -	2-way Traffic		2
(98)BORDER BRIDGE STATE CODE		PCT SHARE		(103)TEMPORARY STRUCTURE -			
(99)BORDER BRIDGE STRUCTURE NO				(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				CONDITION			
(43) STRUCTURE TYPE MAIN: Steel				(58) DECK			8
TYPE - Stringer Mutlibeam or Girder		CODE	302	(59) SUPERSTRUCTURE			8
(44) STRUCTURE TYPE APPR :				(60) SUBSTRUCTURE			7
TYPE -		CODE	0	(61) CHANNEL & CHANNEL PROTECTION			N
(45) NUMBER OF SPANS IN MAIN UNIT			4	(62) CULVERTS			N
(46) NUMBER OF APPROACH SPANS			0				
(107)DECK STRUCTURE TYPE - 1		CODE		LOAD RATING AND POSTING			
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(31) DESIGN LOAD	HS 20 + MOD		6
(A) TYPE OF WEARING SURFACE -		CODE		(63) OPERATING RATING METHOD -	Load Factor		1
(B) TYPE OF MEMBRANE -		CODE		(64) OPERATING RATING -	HS-50		90
(C) TYPE OF DECK PROTECTION -		CODE		(65) INVENTORY RATING METHOD -	Load Factor		1
				(66) INVENTORY RATING -	HS-30		54
				(70) BRIDGE POSTING -	No Posting Required		5
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED			A
				DESCRIPTION -	Open, No Restriction		
AGE AND SERVICE				APPRAISAL			
(27) YEAR BUILT			1960	(67) STRUCTURAL EVALUATION			7
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY			4
(42) TYPE OF SERVICE : ON - Highway				(69) UNDERCLEARANCES,VERTI & HORIZ			3
UNDER - Highway		CODE	11	(71) WATERWAY ADEQUACY			N
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE			6	(72) APPROACH ROADWAY ALIGNMENT			8
(29) AVERAGE DAILY TRAFFIC			2100	(36) TRAFFIC SAFETY FEATURES			0111
(30) YEAR OF ADT 2012	(109) TRUCK ADT PCT		12%	(113)SCOUR CRITICAL BRIDGES			N
(19) BYPASS OR DETOUR LENGTH			0 MI	PROPOSED IMPROVEMENTS			
GEOMETRIC DATA				(75) TYPE OF WORK -			CODE
(48) LENGTH OF MAXIMUM SPAN			74 FT	(76) LENGTH OF STRUCTURE IMPROVEMENT			
(49) STRUCTURE LENGTH			292 FT	(94) BRIDGE IMPROVEMENT COST			
(50)CURB OR SIDEWALK: LEFT 1.6 FT RIGHT 1.6 FT			1.6 FT	(95) ROADWAY IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB			28.08 FT	(96) TOTAL PROJECT COST			
(52) DECK WIDTH OUT TO OUT			31.5 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)			24 FT	(114)FUTURE ADT 4200	(115) YEAR FUTURE ADT	2025	
(33) BRIDGE MEDIAN - No Median		CODE	0	INSPECTIONS			
(34) SKEW 15°	(35) STRUCTURE FLARED		0	(90) INSPECTION DATE			08/19/2014
(10) INVENTORY ROUTE MIN VERT CLEAR			999.9 FT	(92) CRITICAL FEATURE INSPECTION :			(93) CFI DATE
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			28.08 FT	A) FRACTURE CRIT DETAIL -	NO		A)
(53) MIN VERT CLEAR OVER BRIDGE RDWY			999.9 FT	B) UNDERWATER INSP -	NO		B)
(54) MIN VERT UNDERCLEAR REF Highway			15.75 FT	C) OTHER SPECIAL INSP	NO		C)
(55) MIN LAT UNDERCLEAR RT REF Highway			6 FT	SCOUR			
(56) MIN LAT UNDERCLEAR LT REF -			7.33 FT	NAVIGATION DATA			
(38) NAVIGATION CONTROL - Not Applicable		CODE	N	(93) CFI DATE			
(111)PIER PROTECTION -		CODE		A) FRACTURE CRIT DETAIL -	NO		A)
(39) NAVIGATION VERTICAL CLEARANCE			0	B) UNDERWATER INSP -	NO		B)
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR			FT	C) OTHER SPECIAL INSP	NO		C)
(40) NAVIGATION HORIZONTAL CLEARANCE			0 FT	SCOUR			

Structure No: 350133

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
	6	5	10	11	12	13	20	26	28	29	30	47	54A	54	55	56	69	100	102	104
2	I 85 N	11000850	18.08	20.20	1	10085		11	3	54500	2012	52.17	H	17.67	8	8.17	9	1	1	1
3	I 85 S	11000851	16.25	20.20	1	10085		11	3	54500	2011	49.33	H	15.75	6	7.33	9	1	1	1

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: 09/16/2014

COUNTY : GASTON DIVISION : 12 DISTRICT : 1 STRUCTURE NUMBER : 350133 LENGTH : 292 FEET

ROUTE CARRIED : ABERDEEN BLVD. FEATURE INTERSECTED : I85

LOCATED : 0.5 MI. N. JCT. NC279 BRIDGE NAME : CITY : GASTONIA

FUNC. CLASS : 17 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 2100 2012 RAIL TYPE : LT 111 RT 111

BUILT : 1960 BY : SHC PROJ : 8.16315 FED.AID PROJ : DESIGN LOAD : HS 20 + MOD

REHAB : BY : PROJ : ALIGNMENT : LT SKEW : 75 LANES : ON 2 UNDER 6

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

SUPERSTRUCTURE : REINFORCED CONCRETE DECK ON I-BEAMS

SUBSTRUCTURE : E.BTS:RC CAPS/H-PILES,INT.BTS:RC P&B/PILE FOOTINGS

SPANS : 1@73'-6", 1@75'-8", 1@75'-10", 1@67'-2"

BEAMS OR GIRDERS : 4 LINES OF 36" I-BEAMS @ VARIOUS CENTERS

FLOOR : 8"RC/NO SLAB ENCROACHMENT : DECK (OUT TO OUT) : 31.5 FT

CLEAR ROADWAY : 28.08 FT BETWEEN RAILS : 31.25 FT SIDEWALK OR CURB : LT 1.6 FT RT 1.6 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-30 OPE.RTG. : HS-50 CONTR.MEMBER : Int.bmsSpD POSTED : SV TTST DATE

SYSTEM : Primary Muncpal roads over State System GREEN LINE ROUTE : Y

UNDER ROUTES AND CLEARANCES

Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
2	I 85 N	18.08	17.67	52.17	8.17	8
3	I 85 S	16.25	15.75	49.33	7.33	6

Note: All measurements are in feet.

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection
 BRIDGE NO. 350133 COUNTY GASTON ROUTE ABERDEEN BLVD. OVER I85
 STRUCTURE TYPE REINFORCED CONCRETE DECK ON I-BEAMS
 ROUTE ORIENTATION W - E SPANS 1@73'6", 1@75'8", 1@75'10", 1@67'2" COMPOSITE

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				
					b. ALIGNMENT				
					c. SCOUR				
					d. SLOPE PROT., RIP-RAP, DIKES, ETC.				
					50. APPROACH ROADWAY CONDITION			G	
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58					51. APPROACH SLABS			G	
3. RAILING	a. CONCRETE		4	G	52. PAINT SYSTEM CODE I			G	
	b. TIMBER				53. UTILITIES				
	c. ALUMINUM				54. RESPONSE TO LIVE LOAD			G	
	d. STEEL				55. ESTIMATED REMAINING LIFE			30	
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		5	G	63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)			6	
	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					a. DECK	ITEM 58	8		
10. LONGITUDINAL BEAMS OR GIRDERS				F	b. SUPERSTRUCTURE	ITEM 59	8		
11. LONGITUDINAL JOIST OR STRINGERS					c. SUBSTRUCTURE	ITEM 60	7		
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S				G	d. CHANNEL & CHANNEL PROT.	ITEM 61			
13. END DIAP'S, CURTAIN WALLS, & CONN'S				G	71. SI&A FIELD APPRAISAL RATINGS				
14. FLOOR BEAMS AND CONNECTIONS					a. WATERWAY ADAQUACY				
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)				G	b. APPR. RDWY. ALIGNMENT			8	
16. DRAINAGE SYSTEM (ON STRUCTURE)				G					
17. MOVABLE SPAN MACHINERY					72. FIELD SCOUR EVALUATION				
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			G	BOAT				NO
	b. ABUT. & BENT COL'S BREASTWALLS			G	OTHER				NO
	c. ABUT. & INT. BENT PILES								NO
	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)				F					
40. FENDER SYSTEMS					80. INSPECTED BY:				<i>JL Rd</i>
41. DRIFT					81. REVIEWED BY:				

Bridge I&A Form 1(82)H		<h1>FIELD INSPECTION REPORT</h1> <p><u>Bridge Inspeccion & Analysis</u></p>	
State of North Carolina			
Dept. of Transportation			
Division of Highways			
Team Leader derek rickus			
Assisted By eap			
Item No.	Grade		
2a	G	DECK REHAB PHOTO SHOWING CONES ANDCABLE ALONG THE RAILS STILL IN PLACE	
6c	G	joints reworked with compression seals	
10	F	BMS., BEARING AND DIAPHS PAINTED- COATING I	
		IMPACT DAMAGE INSPECTION WAS REQUESTED FOR SPAN 3 OVER I85	
		GIRDER 4 - INITINAL POINT OF IMPACT ON GIRDER 4 IN SPAN 3 WAS 16'-4" FROM FACE OF BENT 3, A GOUGE IN THE FLANGE 2" X 8" X 1"+/- DEEP AND IS BENT UPWARD 1 1/2"+/- IN THE DAMAGED AREA. INDENTIONS IN FLANGE 1/2" X 1/16" AT 16'-3", A 1/2" X 1/16" AT 16'-1" BOTH FROM FACE OF BENT 3. A MARK ON THE OUTSIDE OF WEB FROM 19'-7" TO 45'-0" FROM FACE OF BENT 3. INDENTION IN FLANGE 25" X 1/16" AT 9'-3" FROM FACE OF BENT 3. GIRDER 4 IS 1/2" OUT OF PLUMB TO THE SOUTH AT 35'-100 FROM FACE OF BENT 2.(SEE PHOTOS).	
10A	NO	GIRDER 1 - POINT OF IMPACT ON GIRDER 1 IN SPAN 3 WAS 4'-3" FROM FACE OF BENT 3, A INDENTION IN THE FLANGE 1" X 1/16"+/- . no curved girders	
12	G	diaph from girder 3 to girder 4 repaired at connections	
15	G	painted	
38		not visible	
39	F	BOTH CONCRETE SLOPES SHOW CRACKING UP TO 1/4 INCH WITH VEGETATION GROWING THROUGH CRACKS.	
51	G	COCNCRETE APPROACHES REWORKED.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 350133

County GASTON

Date: 08/19/2014

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
0	No Maintenance Required	NA	0	NO MAINT. AT THIS TIME	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



JOINTS REWORKED



DECK REHAB



PHOTO SHOWING CONES AND CABLE ALONG THE RAILS STILL IN PLACE



COCONCRETE APPROACHES REWORKED.

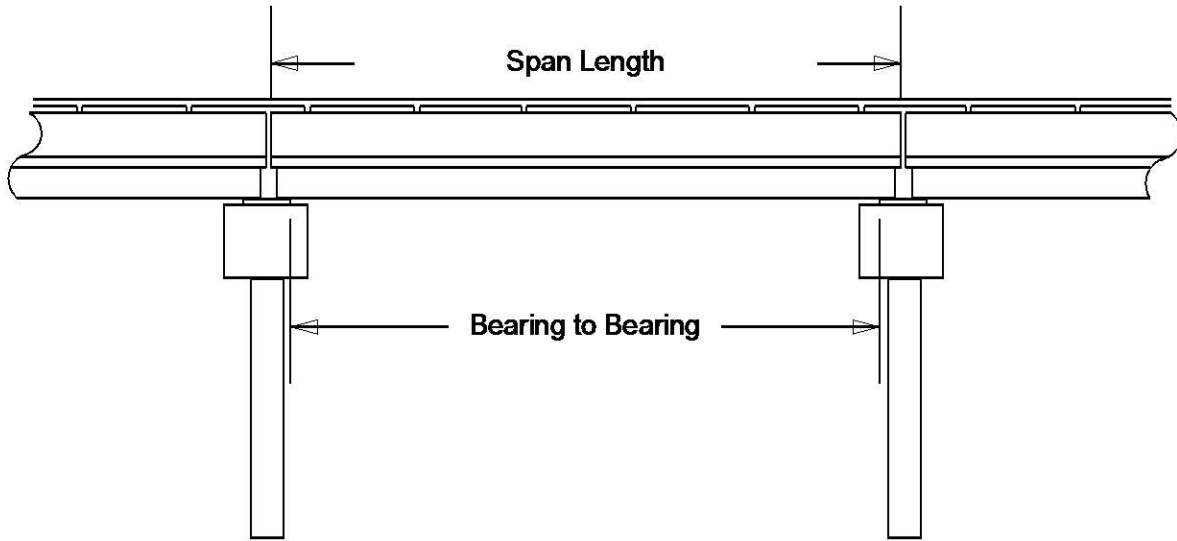


BMS., BEARING AND DIAPHS PAINTED- COATING I

Structure Data Worksheet

Spans

County: GASTON Structure No: 350133 Date: 08/19/2014 Inspected By: dcr



Span No	Span Length	Bearing to Bearing	Comments
1	73.50	71.2'	
2	75.67	74'	
3	75.83	74'	
4	67.17	64.7'	NBIS = 286.5'

Bridge Inspection Field Sketch

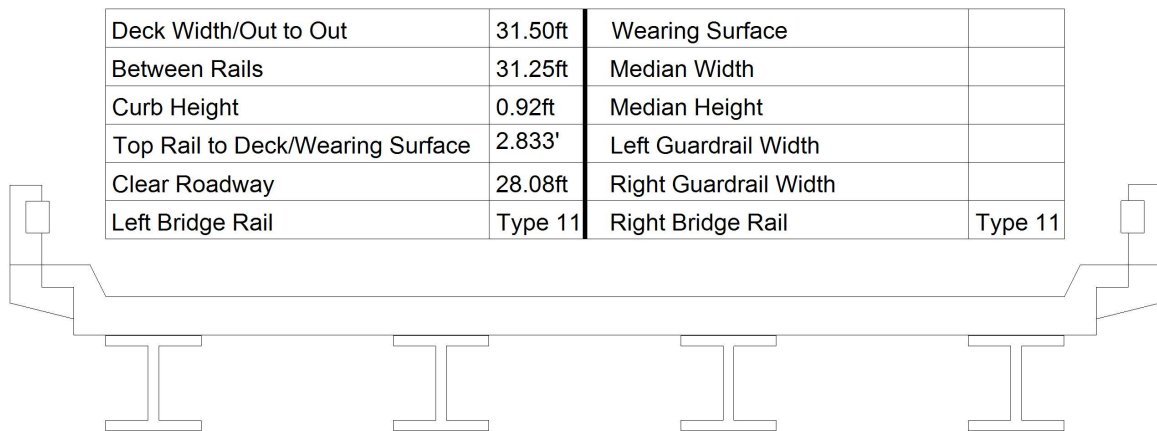


Roadway	24.17ft Wide	2 Paved Lanes	Looking East
Left Shoulder	5.17ft Wide		5.17ft Unpaved
Right Shoulder	7.08ft Wide		7.08ft Unpaved
Left Guardrail	5.17ft from road		
Right Guardrail	7.08ft from road		

VERIFIED BY ERIC PATTERSON ON 8-19-2014

Title APPROACH ROADWAY		Description APPROACH ROADWAY	
Bridge No: 350133	Drawn By: DCR	Date: 8/27/08	File Name: S0286000146

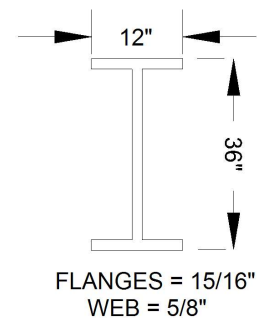
Bridge Inspection Field Sketch



Measurements for Span #	1	SPANS 2 TO 4 SIMILAR	
Deck Thickness	0.67	Left Overhang	2.92
Top of Rail to Bottom of Beam	4.250'	Right Overhang	4.17

Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	8.17ft	
2	Steel I Beam	8.25ft	
3	Steel I Beam	8.25ft	
4	Steel I Beam		

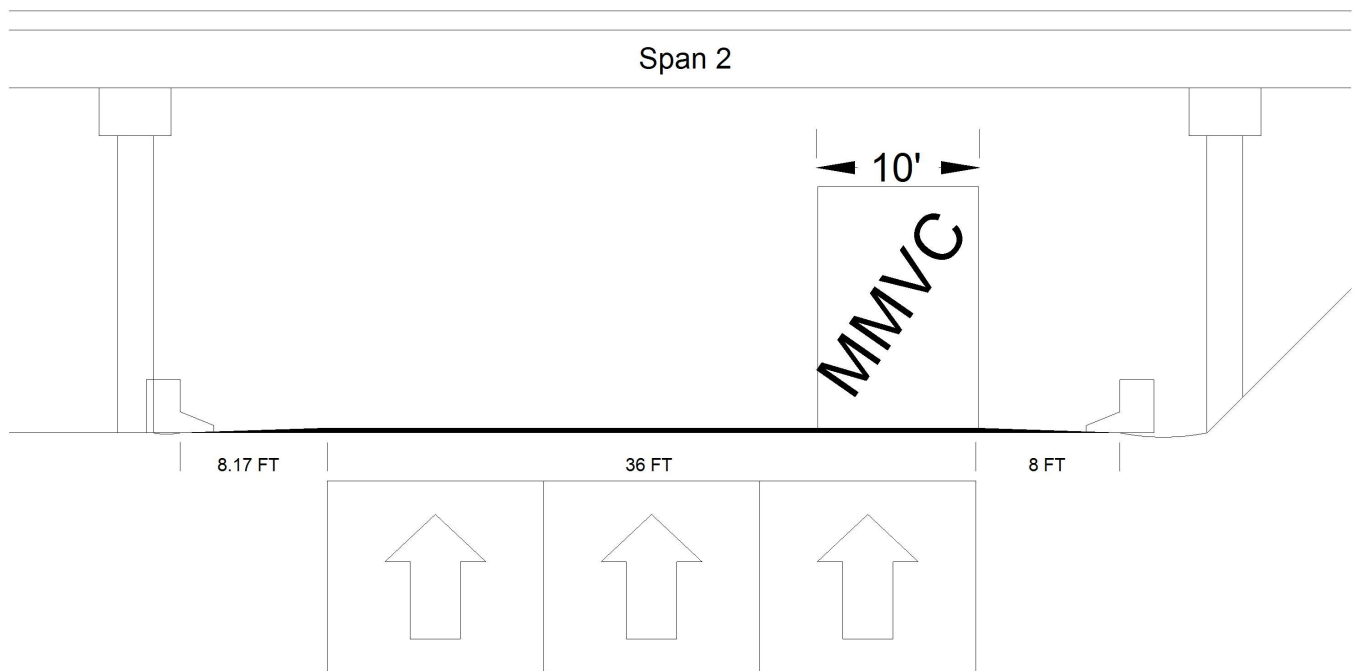
BEAMS (NON-TAPERED FLANGES)



VERIFIED BY ERIC PATTERSON ON 8-19-2014

Title TYPICAL SECTION		Description TYPICAL SECTION	
Bridge No: 350133	Drawn By: DCR	Date: 8/27/08	File Name: S0286000147

Bridge Inspection Field Sketch



Roadway 1		Direction of Traffic	North
Distance to Left Rail	8.17FT	Distance to Right Rail	8FT
Distance to Left Toe of Slope		Distance to Left Bent	9.67FT
Distance to Right Toe of Slope	12.83FT	Distance to Right Bent	9.83FT
MMVC	18.08 Ft at Beam 1, 0 FT from RIGHT EDGE OF RIGHT LANE		
MVC	17.67 Ft at Beam 1, 0 FT from LEFT EDGE OF LEFT LANE		

MILEPOST 20.2

VERIFIED BY ERIC PATTERSON ON 8-19-2014

Title

NORTHBOUND UNDERCLEARANCE

Description

NORTHBOUND UNDERCLEARANCE

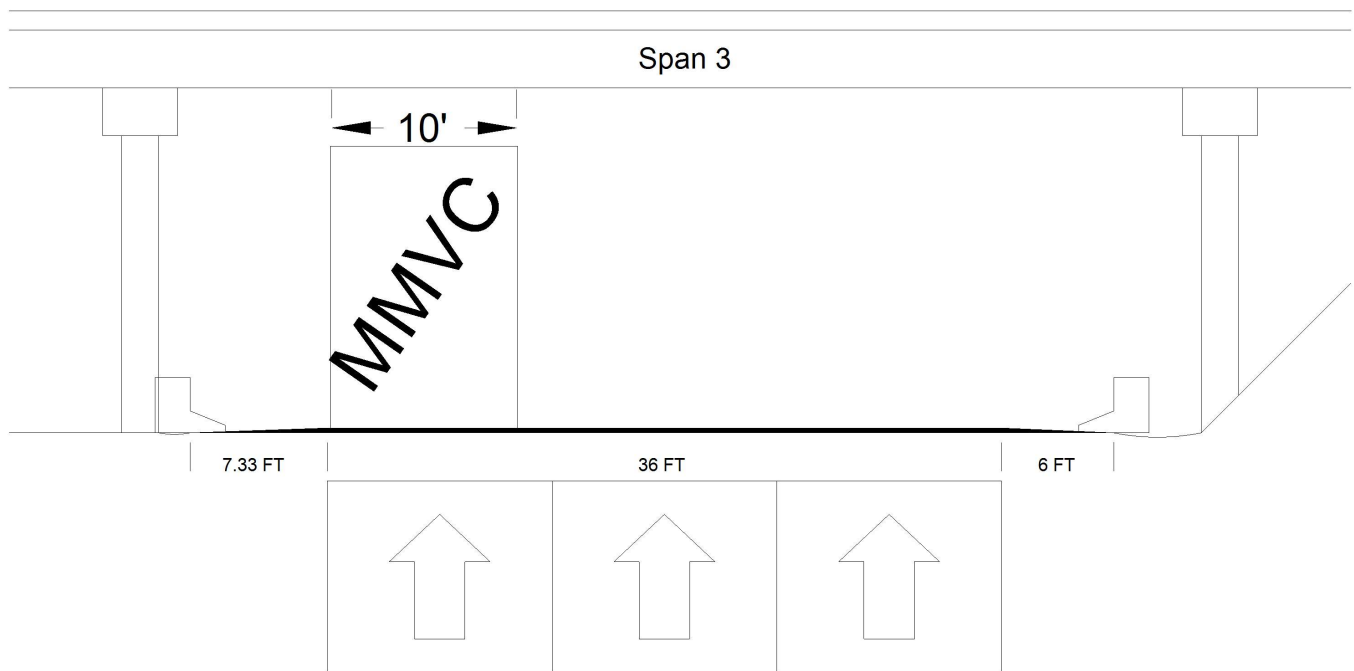
Bridge No: 350133

Drawn By: DCR

Date: 8/27/08

File Name: S0286000148

Bridge Inspection Field Sketch



Roadway 1		Direction of Traffic	South
Distance to Left Rail	7.33FT	Distance to Right Rail	6FT
Distance to Left Toe of Slope		Distance to Left Bent	9FT
Distance to Right Toe of Slope	10.67FT	Distance to Right Bent	7.67FT
MMVC	16.25 Ft at Beam 1, 0 FT from LEFT EDGE OF LEFT LANE		
MVC	15.75 Ft at Beam 1, 0 FT from RIGHT EDGE OF RIGHT LANE		

MILEPOST 20.2

VERIFIED BY ERIC PATTERSON ON 8-19-2014

Title

SOUTHBOUND UNDERCLEARANCE

Description

SOUTHBOUND UNDERCLEARANCE

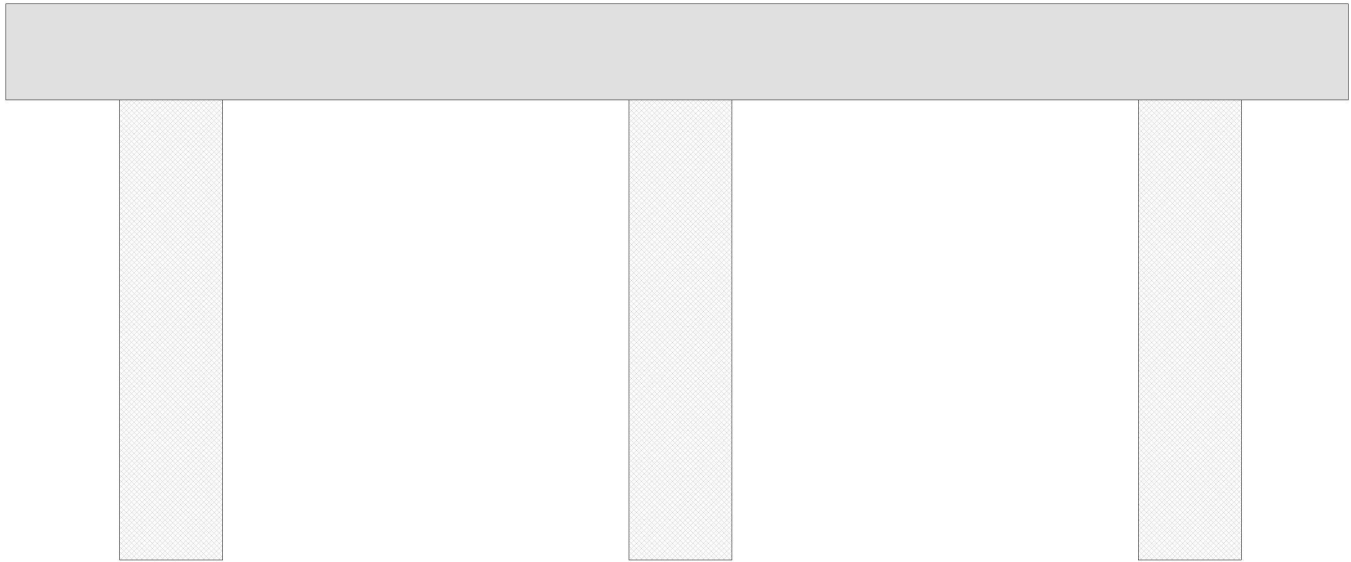
Bridge No: 350133

Drawn By: DCR

Date: 8/27/08

File Name: S0286000149

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.				
32.500 ft.	2.500 ft.	2.333 ft.	4.000 ft.	4.000 ft.	1.833 ft.	1.833 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	12.333 ft.	2.500 ft.	2.500 ft.		Vertical	No	No	No	No
2	Concrete	12.333 ft.	2.500 ft.	2.500 ft.		Vertical	No	No	No	No
3	Concrete		2.500 ft.	2.500 ft.		Vertical	No	No	No	No
VERIFIED BY ERIC PATTERSON ON 8-19-2014										
Bent/Abutment #: 1			Similar Bents: 2,3							

Title				Description			
INTERIOR BENTS				SUBSTRUCTURE DETAILS			
Bridge No:	350133	Drawn By:	DELVIN ADAMS	Date:	8/13/2012	File Name:	S0146031701



GUARDRAIL END FOR ALL FOUR CORNERS



WEST APPROACH



GUARDRAIL ATTACHED TO THE BRIDGE RAIL FOR ALL FOUR CORNERS



GUARDRAIL LOOKING WEST



GUARDRAIL LOOKING EAST



EAST APPROACH



ABUT. 2



BENT 3



BENT 2



LOOKING NORTH



LOOKING SOUTH



BENT 1



ABUT. 1