NC DEPARTMENT OF TRANSI DIVISION OF HIGHWAYS BRIDGE MANAGEMENT UNIT	PORTATION ATTE	NTION VERTICAL CLR. CHECKED							
BRIDGE	Routine Inspection	TION REPOR	Т						
COUNTY GASTON GASTON BRIDGE NUMBER 350034 INSPECTION CYCLE 2 YRS 26.9									
ROUTE NC273 ACROSS 185 M.P. 0									
LOCATION 0.6 MI. N. JCT. NC7 SUPERSTRUCTURE REINFORCED CONCRETE DECK ON I-BEAMS, APPR.SLABS, SIP FORMS SUBSTRUCTURE END BTS:RC CAP & STEEL PILES, INT.BTS:RC P&B W/PILE FOOTINGS									
SPANS 1@34'6" NONCOMP., 1@74'8", 1@74'5", 1@45'10" COMPOSITE									
LONGITUDE 81° 1' 36.49" LATITUDE 35° 15' 25.28"									
INSPECTION DATE 08/05/2014	PR	ESENT CONDITION GOOD							
PRESENT POSTING N	NOT POSTED	PROPOSED POSTING							
OTHER SIGNS PRESENT NONE									



Fracture CriticalNoTemporary ShoringNoScour CriticalNoScour POANo

SIGN NOT		NUMBERED REQUIRED
No	WEIGHT LIMIT	
No	DELINEATORS	
No	NARROW BRIDGE	
No	ONE LANE BRIDGE	
No	LOW CLEARANCE	

SOUTH APPROACH

	IDEI	NTIFICATION	I	
(1) STATE NAME -N	ORTH CAROLINA		BRIDGE	350034
(8) STRUCTURE NU	MBER(FEDERAL)		0000000	00710034
(5) INVENTORY ROU	UTE (ON/UNDER) -	ON		31002730
(2) STATE HIGHWA		1		
(3) COUNTY CODE	71	(4) PLACE CO	DDE	4840
(6) FEATURE INTER	SECTED - 185			
(7) FACILITY CARRI	ED NC273			
(9) LOCATION	0.6 MI. N. JCT. NC	7		
(11)MILEPOINT				0
(16)LAT 35° -	15' 25.28"	(17)LONG	81° 1' 36.49"	
(98)BORDER BRIDG	E STATE CODE		PCT SHARE	
(99)BORDER BRIDG	E STRUCTURE NC)		

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN: Steel		
TYPE - Stringer Mutlibeam or Girder	CODE	302
(44) STRUCTURE TYPE APPR :		
TYPE -	CODE	0
(45) NUMBER OF SPANS IN MAIN UNIT		4
(46) NUMBER OF APPROACH SPANS		0
(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	

AGE AND SERVICE	
(27) YEAR BUILT	1989
(106)YEAR RECONSTRUCTED	
(42) TYPE OF SERVICE : ON - Overpass - Interchange	
UNDER - Highway	CODE 61
(28) LANES: ON STRUCTURE 4 UNDER STRUCTURE	8
(29) AVERAGE DAILY TRAFFIC	24500
(30) YEAR OF ADT 2012 (109) TRUCK ADT PCT	12%
(19) BYPASS OR DETOUR LENGTH	0 MI
GEOMETRIC DATA	
(48) LENGTH OF MAXIMUM SPAN	73 FT
(49) STRUCTURE LENGTH	229 FT
(50)CURB OR SIDEWALK: LEFT 5 FT RIGHT	5 FT
(51) BRIDGE ROADWAY WIDTH CURB TO CURB	92 FT
(52) DECK WIDTH OUT TO OUT	104.42 FT
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)	90 FT
(33) BRIDGE MEDIAN - No Median	CODE 2
(34) SKEW 0° (35) STRUCTURE FLARED	0
(10) INVENTORY ROUTE MIN VERT CLEAR	999.9 FT
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	92 FT
(53) MIN VERT CLEAR OVER BRIDGE RDWY	999.9 FT
(54) MIN VERT UNDERCLEAR REF Highway	16.333 FT
(55) MIN LAT UNDERCLEAR RT REF Highway	12 FT
(56) MIN LAT UNDERCLEAR LT REF -	8.833 FT
NAVIGATION DATA	
(38) NAVIGATION CONTROL - Not Applicable	CODE N
(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 =

97

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	Ν
(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	7
(59) SUPERSTRUCTURE	7
(60) SUBSTRUCTURE	7
(61) CHANNEL & CHANNEL PROTECTION	Ν
(62) CULVERTS	Ν
LOAD RATING AND POSTING	CODE ·
(31) DESIGN LOAD HS 20 + MOD	6
(63) OPERATING RATING METHOD - Load Factor	1
(64) OPERATING RATING - HS-47	85
(65) INVENTORY RATING METHOD - Load Factor	1
(66) INVENTORY RATING - HS-28	51
(70) BRIDGE POSTING - No Posting Required	5
(41) STRUCTURE OPEN, POSTED ,OR CLOSED	А
DESCRIPTION - Open, No Restriction	
APPRAISAL	- CODE
(67) STRUCTURAL EVALUATION	7
(68) DECK GEOMETRY	9
(69) UNDERCLEARANCES, VERTI & HORIZ	5
(71) WATERWAY ADEQUACY	N
(72) APPROACH ROADWAY ALIGNMENT	8
(36) TRAFFIC SAFETY FEATURES	1000
(113)SCOUR CRITICAL BRIDGES	N
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 49000 (115) YEAR FUTURE ADT	2025
(90) INSPECTION DATE	8/05/2014
(92) CRITICAL FEATURE INSPECTION : (93) CFI DATE	

		00/05/2014	
(92) CRITICAL FEATURE INSPECT	FION :	(93) CFI DATE	
A) FRACTURE CRIT DETAIL -	NO	A)	
B) UNDERWATER INSP -	NO	В)	
C) OTHER SPECIAL INSP	NO	C)	
SCOUR			

Structure No: 3	50034
-----------------	-------

County: GASTON

Run Date:

			cal								affic	Ð	ę	See Not	e 1					
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 Tra	Total Horizontal Clearanc	Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STR		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	16.42	26.90	1	10085		11	4	61000	2012	68.83	Н	16.33	12	8.83	9	1	1	1
3	I 85 S	11000850	17.83	26.90	1	10085		11	4	61000	2012	69.08	Н	17.75	12.75	8.33	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

					DA		EXISTIN	G STRU	CTURE		Run Da	te: 09/10	0/2014		
COUN ⁻ GA	TY : STON			DIVI	ISION : 12	DIS	STRICT: 1	STR	UCTURE 3	NUMBE 50034	R :		LENG	TH : 229	FEET
ROUTE	E CARRIED :	NC273				F	EATURE I	NTERSE	CTED :	185					
LOCAT	ED : 0.6 MI. N	. JCT. N	C7			BR	IDGE NAM	E:			CIT		MONT		
FUNC.	CLASS :	SYS	T.ON :	Ş	SYST.UN	IDER :		ADT	& YR :			RAI	L TYPE	:	
	14		FA				NFA		24500	2012		LT	379	RT 37	79
BUILT 19	: 989	BY :	DOH		PROJ		31202	FE	ED.AID PF	ROJ : I-IR-85-1		DESIGN	LOAD :	HS 20 + I	MOD
REHAE	3 :	BY :		PROJ	J:		ALIGNME	NT : TAN	SKE	W : 90	LA	ANES : ON	4	UNDER	8
NAVIG	ATION : VC 0	FT	-	НС	0	FT	HT. CRI	N. TO BE	D : 0	FT		ATER DE	EPTH : 0	I	FT
SUPER	STRUCTURE	: RE	EINFORC	ED CC	ONCRETI	E DECK	ON I-BEAI	MS (S.I.P	METAL	FORMS)				
SUBST	RUCTURE :	E.I	BTS:RC (CAPS/H	H-PILES;	INT.BT	S:RC P&B/	PILE FO	DTINGS						
SPANS	8:	1@	234'-6", 1	@74'-8	8", 1@74	'-5", 1@	45'-10"								
BEAMS	S OR GIRDER	S :	14 LIN	ES 33'	I-BEAM	S @ 7'-5	5" CENTER	S							
FLOOF	R : 8.5" RC/I AWS	NO		ENC	CROACH	MENT :			DEC	CK (OUT	TO OUT)	: 104.42	2 FT		
CLEAR	ROADWAY :			BETV	VEEN RA	ALS :			SI	DEWALK	ORCUR	В:			
	9	2 FT					102 FT				LT	5 F	Т	RT	5 FT
	CL.OVER : 9.9 FT														
INV.RT	G. : HS-28	OPI	E.RTG. : H	S-47	CON	ITR.ME	MBER : int bmCS	9-C14	POSTI SV	ED :	TTST		DATE		
SYSTE Prima	M : ry N.C. Route									G	GREEN LIN	NE ROUT		Y	
UNDEF	R ROUTES AN	D CLEAI	RANCES												
			Vertical	Cleara	ances	Horizo	ontal Clear	ances							
Span	Route Desc	ription	MMVC	M	IVC	Total	Left	Right							

12

12.75

Note: All measurements are in feet.

16.4170

17.8330

16.3330 68.8330 8.8330

17.75 69.0830 8.3330

2

3

l 85 N

1 85 S

BRIDGE I & A FORM1 (90)A	
BRIDGE INSPECTION RECORD	AND SUMMARY

INSPECTION TYPE

Routine Inspection

OVER 185

 BRIDGE NO.
 350034
 COUNTY
 GASTON
 ROUTE
 NC273

 STRUCTURE TYPE
 REINFORCED CONCRETE DECK ON I-BEAMS, APPR.SLABS, SIP FORMS
 ROUTE ORIENTATION S - N

SPANS 1@34'6" NONCOMP., 1@74'8", 1@74'5", 1@45'10" COMPOSITE

	EVALUATION CODES:		(C, 0 - 3) [.]	POOR (P 4): F)	
	INSPECTION ITEM		_ (0, 0 - 3),			ITEM 61)	
	DECK ITEMS		GRADES	45. CHANNEL	a W/47			
1. WEARING				& CHANNEL		GNMENT		
2. DECK NO.	a. CONCRETE	4	G	PROT.	c. SCC			
OF EA TYPE	b. TIMBER			_		PE PROT., RIP-RAP	DIKES, ETC.	
SPN GRADE RATES SI & A				50 APPROAC			, Ditteo, Ero.	F
ITEM 58	d. OPEN GRID			51. APPROAC	-			G
3. RAILING	a. CONCRETE			52. PAINT SYS		CODE		
5. KAILING	b. TIMBER			53. UTILITIES		0002		G
	c. ALUMINUM		G	54. RESPONS	F TO LI			G
	d. STEEL		0	55. ESTIMATE		-		44
	HEELGUARDS, PARAPETS, MEDIA		G	33. ESTIMATE				44
	S (ON OR ATTACHED TO STRUCT		G			GN NOTICE ISSUED		NO
	a. STEEL PL OR FINGER		G			NOTICE ISSUED		NO
6. DECK EXP JTS. OR	b. MISC PREFAB			62. PRESENT				NO
DEVICES		5	G	-				
NO. OF EACH	b. OF EACH c. COMPRESSION SEAL 5 G 63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR) d. STANDARD JOINTS 64. TOTAL SNOOPER INSP. TIME (HRS)		TE UP)(MAN HR)	5				
						, ,		
			0	65. TOTAL TR		CONTROL TIME (MA	N HRS)	
7. DECK DEB	RIS (INCLUDES EXCESS SAND/GF	RAVEL)	G		70 010 4			
					70. SI&A GENERAL CONDITION RATINGS			-
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59			a. DECK		_	ITEM 58	7	
	DINAL BEAMS OR GIRDERS		G	b. SUPERSTR		E	ITEM 59	7
	DINAL JOIST OR STRINGERS			c. SUBSTRUC			ITEM 60	7
	S, X-FRAMES, BRACING & CONN	S	G	d. CHANNEL	& CHAN	NEL PROT.	ITEM 61	
	'S, CURTAIN WALLS, & CONN'S		G					
	EAMS AND CONNECTIONS					&A FIELD APPRAISA	AL RATINGS	
	ASSEMBLIES (INCLUDING MISALI	IGN)	G	a. WATERWA				
	E SYSTEM (ON STRUCTURE)		G	b. APPR. RDV	VY. ALIC	GNMENT		8
17. MOVABLE	SPAN MACHINERY							
				72. FIELD SCO	72. FIELD SCOUR EVALUATION			
	B STR. ITEMS. ITEM 60 (INCLUDE	SCOUR)	1					
35. TIM SUB	a. ABUT. & INT. BENT CAPS & RI	SERS		U	USE OF INSP. ACCESSIBILITY EQUIPMENT		Y EQUIPMENT	
SIR.	b. PILES, POST, SILLS, & BRACIN	١G		SNOOPER (C	PER (CODE S, 4, OR N) HRS			NO
	c. BULKHEADS, WING'S, & TIE B	ACKS		LADDER				NO
STR. b. PILES, POST, SILLS, & BRACING SNOOPER (CODE S, 4, OR N) HRS c. BULKHEADS, WING'S, & TIE BACKS LADDER 36. CONC a. ABUT. & INT. BENT CAPS G BUCKET TRUCK	NO							
SUB STR.	b. ABUT. & BENT COL'S BREAST	WALLS	G	BOAT				NO
	c. ABUT. & INT. BENT PILES			OTHER				NO
	d. BACKWALLS, WING'S, RETAIN	I. WALLS	G					
	e. ABUT. & BENT FOOTINGS & S	ILLS						
37. STEEL	a. ABUT. & INT. BENT CAPS & RI	SERS		SPECIAL INS	PECTIO	N REQUESTED FOR	R	
SUB STR.	b. PILES, BRACING, AND BULKH	EADS						
38. FOUNDAT	ION PILES TYPE MATERIAL			NOTE				
39. SLOPE PF	ROT., RIP-RAP (INCLUDE DRAINAG	GE)	G					
40. FENDER S	SYSTEMS			80. INSPECTE	D BY:		deil fik	
41. DRIFT				81. REVIEWE	סע ר			

Bridge I&A Form 1(82)H

State of North Carolina Dept. of Transportation FIELD INSPECTION REPORT

Bridge Inspecion & Analysis

Division of Highways

Теа

Assisted By	EAP

am Leader	DEREK	RICKUS

Item No.	Grade	
2a	G	THERE ARE SEVERAL H/L CRACKS EMANATING FROM JOINTS 1' TO 4' INTO THE SPANS IN ALL SPANS. DECK HAS FEW TRANSVERSE CRACKS IN THE ROADWAY SURFACE.
10A	NO	NO CURVED GIRDERS
52		WEATHERED STEEL
36e		NOT VISIBLE
38		NOT VISIBLE
50	F	CHIPPING OF ASPHALT ALONG THE FILLFACES AT BOTH APPROACHES.
1		•

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

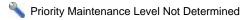
Bridge: 350034

County GASTON

Date: 08/05/2014

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
2816	Asphalt Surface Repair or Replacement	SY	21	CHIPPING OF ASPHALT ALONG THE FILLFACES AT BOTH APPROACHES.	
3326	Maintain Concrete Deck	SF	250	THERE ARE SEVERAL H/L CRACKS EMANATING FROM JOINTS 1' TO 4' INTO THE SPANS IN ALL SPANS. DECK HAS FEW TRANSVERSE CRACKS IN THE ROADWAY SURFACE.	



Condition Photos

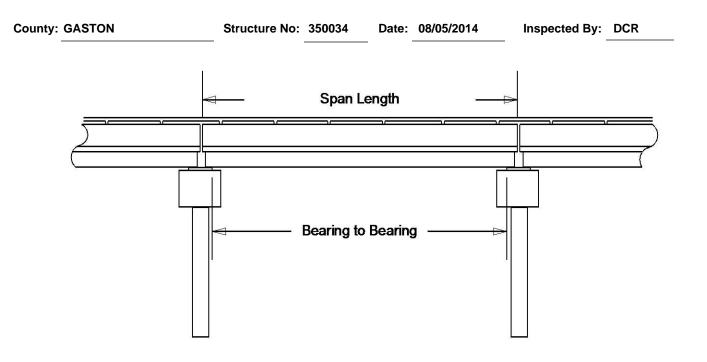


CHIPPING OF ASPHALT ALONG THE FILLFACES AT BOTH APPROACHES.



THERE ARE SEVERAL H/L CRACKS EMANATING FROM JOINTS 1' TO 4' INTO THE SPANS IN ALL SPANS. DECK HAS FEW TRANSVERSE CRACKS IN THE ROADWAY SURFACE.

Structure Data Worksheet



Span No	Span Length	Bearing to Bearing	Comments
1	34.500'	32.333'	
2	74.667'	72.792'	
3	74.417'	72.458'	
4	45.833'	44.333'	NBIS = 216'

Spans

Bridge Inspection Field Sketch

Left Lanes								
Roadway	46.00ft Wide	4 Paved Lanes	South Bound					
Right Shoulder	2ft Wide	2.00ft Paved						
Left Guardrail								
Right Guardrail								
Median	4.00ft Wide							
	Riç	ght Lanes						
Roadway	36.00ft Wide	3 Paved Lanes	North Bound					
Right Shoulder	2ft Wide	2.00ft Paved						
Left Guardrail								
Right Guardrail								

VERIFIED BY ERIC PATTERSON ON 8-4-2014

Title		Descri	ption	
APPROACH ROADWAY		APPR	DACH ROADWAY	
Bridge No: 350034	Drawn By: DJA		Date:8/20/2008	File Name:S0286000104

Bridge Inspection Field Sketch

Deck Width/Out to Out	104.42ft	Wearing Surface	
Between Rails	102.00ft	Median Width	4.00ft
Curb Height	0.58ft	Median Height	
Top Rail to Deck/Wearing Surface	4.08ft	Left Guardrail Width	
Clear Roadway	92.00ft	Right Guardrail Width	
Left Bridge Rail	Type 36	Right Bridge Rail	Type 36



Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	7.42ft	
2	Steel I Beam	7.42ft	
3	Steel I Beam	7.42ft	
4	Steel I Beam	7.42ft	
5	Steel I Beam	7.42ft	
6	Steel I Beam	4.17ft	
7	Steel I Beam	4.17ft	
8	Steel I Beam	8.25ft	
9	Steel I Beam	8.25ft	
10	Steel I Beam	8.25ft	
11	Steel I Beam	8.25ft	
12	Steel I Beam	8.25ft	
13	Steel I Beam	8.25ft	
14	Steel I Beam		

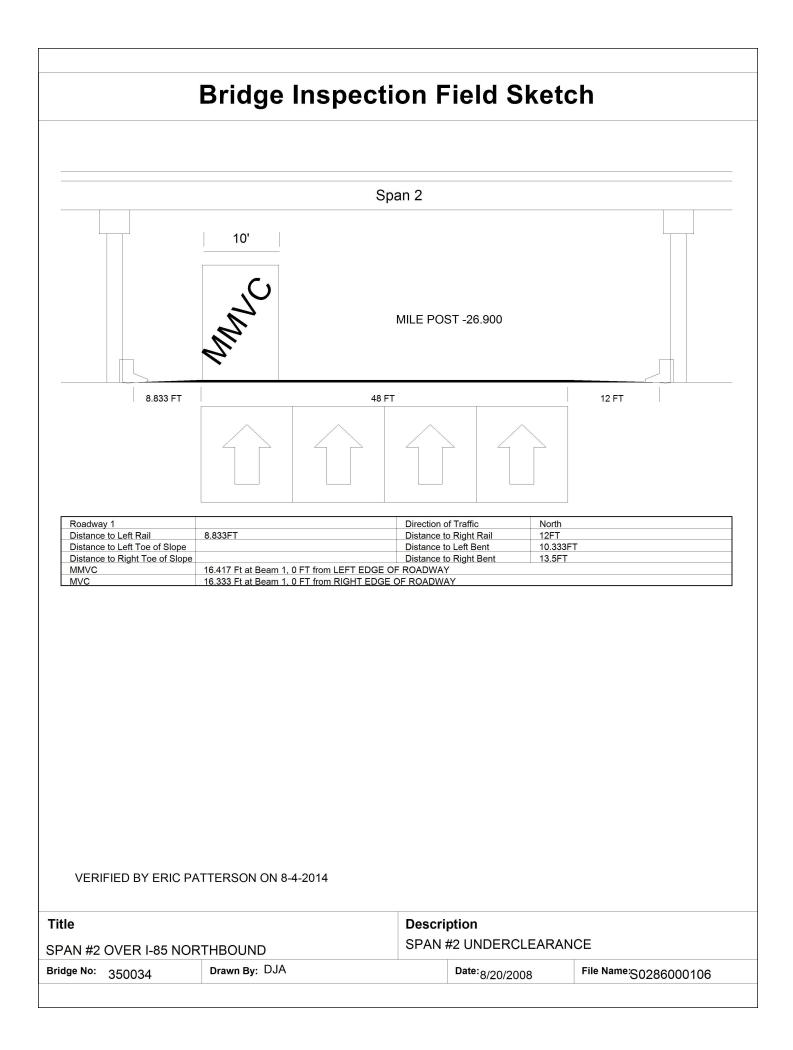
NOTE: 4 LINES OF PVC PIPE IN BAY 13

10" X 27"

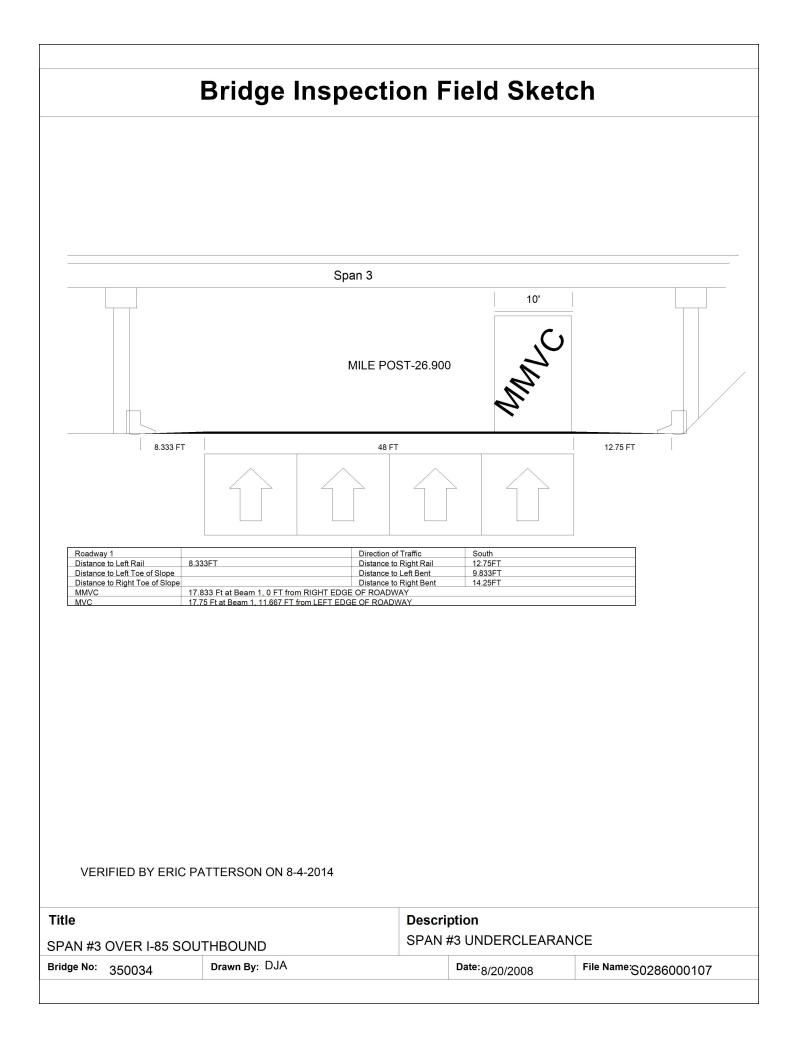


VERIFIED BY ERIC PATTERSON ON 8-4-2014

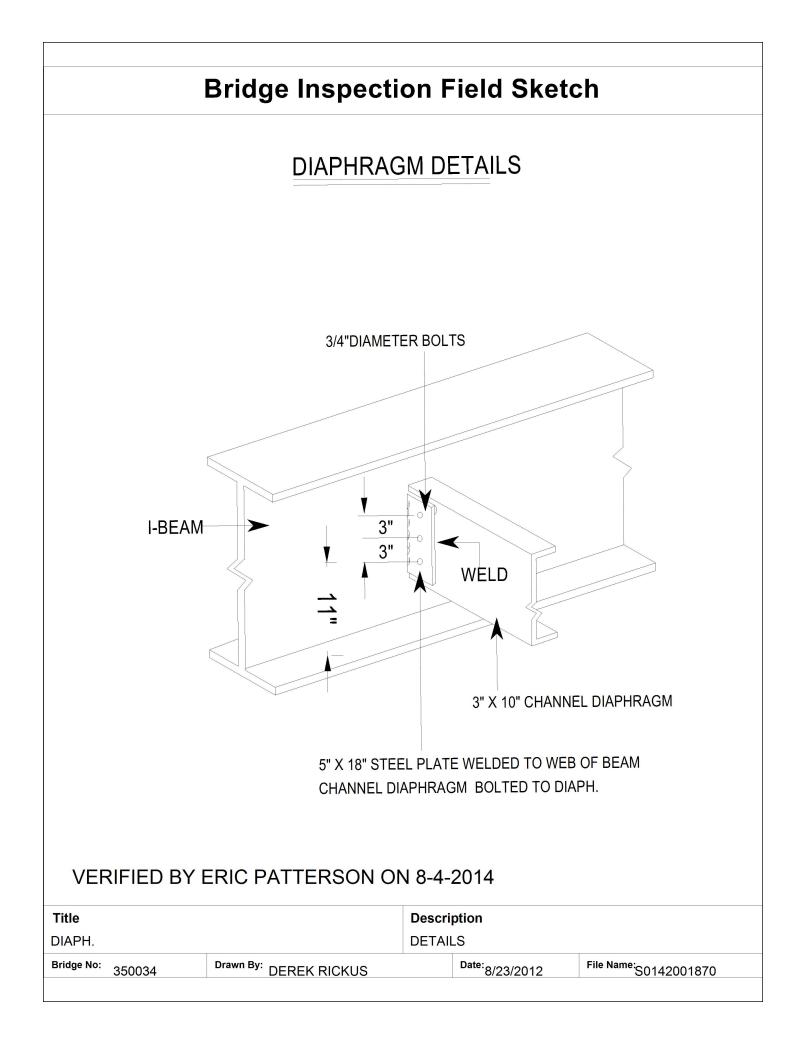
Title		Descri	ption	
TYPICAL SECTION		TYPIC	AL SECTION	
Bridge No: 350034	Drawn By: DJA	·	Date: 8/20/2008	File Name: \$0286000105











Bridge Inspection Field Sketch

Cap Inforn Length	nation Width	Height	Material Left Over		Place Cono Right Ove		l eft Ra	eam to Fr	nd of Cap.	Riah	t Beam to Er	nd of Cap
101.167 ft.	3.500 ft.	3.500 ft.	5.333		5.333	1.1		33 ft.	id of Cap.		.833 ft.	id of Cap.
Subcap In			Material									
Length	Width	Height	Left Over	hang	Right Ove	rhang	Left Pi	le to Splic	ce.			
Sill Inform	ation		Material									
Length	Width	Height										
Pile # Ma	aterial	Spacing	Width/Dia.	Height	Length	Orie	ntation	Driven?	Replacem	nent?	Removed?	Collar?
1 Co	oncrete	16.5 ft.	3.0 ft.			Ver	ical	No	No		No	No
	oncrete	16.5 ft.	3.0 ft.			Ver		No	No		No	No
	oncrete	16.5 ft.	3.0 ft.			Ver		No	No		No	No
	oncrete	10.0 ft.	3.0 ft.			Ver		No	No		No	No
	oncrete	15.5 ft.	3.0 ft.			Ver		No	No		No	No
	oncrete oncrete	15.5 ft.	3.0 ft. 3.0 ft.			Ver Ver		No No	No No		No No	No
		BY ER		TER	SON C							No
	ment #: 1		Similar E	Bents:	BENTS 2	AND 3						
<u> 3ent/Abuti</u>						-						
Bent/Abuti le						Desc	ription	0				
	TURE					Desc DET/	-	I				

Structure Photos



SOUTH APPROACH



LOOKING SOUTH

Structure Photos



LOOKING NORTH



NORTH APPROACH

Structure 350034

County GASTON

Structure Photos



ABUT. 2



UTILITY UNDER BAY 13

Structure 350034

County GASTON

Structure Photos



BENT 2



LOOKING SOUTH

Structure Photos



BENT 3



BENT 1

Structure 350034

County GASTON

Date: 08/05/2014

Structure Photos



LOOKING NORTH



ABUT. 2