



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection - Contract

COUNTY WAKE BRIDGE NUMBER 910260 INSPECTION CYCLE 0 YRS
ROUTE 1440 ACROSS US70 M.P. 6.50

LOCATION 1.88 MI.N.E.SR1676

SUPERSTRUCTURE RC FLOOR/I-BEAMS(WIDENED)

SUBSTRUCTURE EBTS:RC CAP/PRESTR.CONC.PILES;BTS:RCP&B/PILE FTGS.

SPANS 2@67';1@70'6;1@45'

LONGITUDE 78° 40' 10.10" LATITUDE 35° 50' 7.05"

INSPECTION DATE 05/08/2014 PRESENT CONDITION GOOD

PRESENT POSTING N PROPOSED POSTING _____

OTHER SIGNS PRESENT NONE



SOUTH APPROACH LOOKING NORTH

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	_____

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

Run Date: 06/30/2014

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	910260		SUFFICIENCY RATING =	97
(8) STRUCTURE NUMBER(FEDERAL)		000000001830260		STATUS =	Not Deficient
(5) INVENTORY ROUTE (ON/UNDER) - ON		11004400			
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1			
(3) COUNTY CODE	183	(4) PLACE CODE	0		
(6) FEATURE INTERSECTED -	US70				
(7) FACILITY CARRIED	I440				
(9) LOCATION	1.88 MI.N.E.SR1676				
(11)MILEPOINT		6.5			
(16)LAT	35° 50' 7.05"	(17)LONG	78° 40' 10.10"		
(98)BORDER BRIDGE STATE CODE		PCT SHARE			
(99)BORDER BRIDGE STRUCTURE NO					
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			4		
(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			
AGE AND SERVICE					
(27) YEAR BUILT			1960		
(106)YEAR RECONSTRUCTED			1993		
(42) TYPE OF SERVICE : ON -	Overpass - Interchange				
UNDER -	Highway	CODE	61		
(28) LANES: ON STRUCTURE	6 UNDER STRUCTURE		6		
(29) AVERAGE DAILY TRAFFIC			135000		
(30) YEAR OF ADT	2012	(109) TRUCK ADT PCT	16%		
(19) BYPASS OR DETOUR LENGTH			0 MI		
GEOMETRIC DATA					
(48) LENGTH OF MAXIMUM SPAN			70 FT		
(49) STRUCTURE LENGTH			250 FT		
(50)CURB OR SIDEWALK: LEFT	0 FT RIGHT		0 FT		
(51) BRIDGE ROADWAY WIDTH CURB TO CURB			136 FT		
(52) DECK WIDTH OUT TO OUT			141.083 FT		
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)			112 FT		
(33) BRIDGE MEDIAN -	No Median	CODE	3		
(34) SKEW	25°	(35) STRUCTURE FLARED	0		
(10) INVENTORY ROUTE MIN VERT CLEAR			999.9 FT		
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			68 FT		
(53) MIN VERT CLEAR OVER BRIDGE RDWY			999.9 FT		
(54) MIN VERT UNDERCLEAR REF	Highway		15.05 FT		
(55) MIN LAT UNDERCLEAR RT REF	Highway		10.8 FT		
(56) MIN LAT UNDERCLEAR LT REF -			11.1 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		
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
CONDITION				CODE	
(58) DECK					7
(59) SUPERSTRUCTURE					7
(60) SUBSTRUCTURE					6
(61) CHANNEL & CHANNEL PROTECTION					N
(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-53				95
(65) INVENTORY RATING METHOD -	Load Factor				1
(66) INVENTORY RATING -	HS-32				57
(70) BRIDGE POSTING -	No Posting Required				5
(41) STRUCTURE OPEN, POSTED ,OR CLOSED					A
DESCRIPTION -	Open, No Restriction				
APPRAISAL				CODE	
(67) STRUCTURAL EVALUATION					6
(68) DECK GEOMETRY					9
(69) UNDERCLEARANCES,VERTI & HORIZ					5
(71) WATERWAY ADEQUACY					N
(72) APPROACH ROADWAY ALIGNMENT					8
(36) TRAFFIC SAFETY FEATURES					1111
(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	270000	(115) YEAR FUTURE ADT			2025
INSPECTIONS					
(90) INSPECTION DATE					05/08/2014
(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					

Structure No: 910260

County: WAKE

Run Date:

Span Number	Feature Intersected	Inventory Route	Minimum Maximum Vertical Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Nuner of Lanes	Average Daily Traffic	Year of Average Daily Traffic	Total Horizontal Clearance	See Note 1					STRAHNET Highway Designator	Direction of Traffic	Highway System of Route
													Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade			
	6	5	10	11	12	13	20	26	28	29	30	47	54A	54	55	56	69	100	102	104
2	US70E	21000700	16.9		1	20070		14	3	34500	2011	53.3	H	16.45	16.6	12.4	9	0	1	1
3	US70W	21000700	15.9		1	20070		14	3	34500	2011	57.4	H	15.05	10.8	11.1	9	0	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: 06/30/2014

COUNTY : WAKE DIVISION : 5 DISTRICT : 1 STRUCTURE NUMBER : 910260 LENGTH : 250 FEET

ROUTE CARRIED : I440 FEATURE INTERSECTED : US70

LOCATED : 1.88 MI.N.E.SR1676 BRIDGE NAME : CITY :

FUNC. CLASS : 11 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 135000 2012 RAIL TYPE : LT 41 RT 41

BUILT : 1960 BY : SHC PROJ : 8.14905 FED.AID PROJ : F-637(7) DESIGN LOAD : HS 20 + MOD

REHAB : 1993 BY : DOH PROJ : 6.409007T ALIGNMENT : TAN. SKEW : 65 LANES : ON 6 UNDER 6

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

SUPERSTRUCTURE : RC FLOOR/I-BEAMS(WIDENED)

SUBSTRUCTURE : EBTS:RC CAP/PRESTR.CONC.PILES;BTS:RCP&B/PILE FTGS.

SPANS : 2@67';1@70'6;1@45'

BEAMS OR GIRDERS : SPNS1-3;12LNS 36;8LNS 36,SPN.4:4LNS 36;8LNS 33;8LNS 30 I-BMS

FLOOR : 7.5 RC/NO AWS ENCROACHMENT : DECK (OUT TO OUT) : 141.083 FT

CLEAR ROADWAY : 136 FT BETWEEN RAILS : 138 FT SIDEWALK OR CURB : LT 0 FT RT 0 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-32 OPE.RTG. : HS-53 CONTR.MEMBER : Int Bm B(O) 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
2	US70E	16.90	16.45	53.30	12.40	16.60
3	US70W	15.90	15.05	57.40	11.10	10.80

Note: All measurements are in feet.

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection - Contract

BRIDGE NO. 910260

COUNTY WAKE

ROUTE I440

OVER US70

STRUCTURE TYPE RC FLOOR/I-BEAMS(WIDENED)

ROUTE ORIENTATION S - N

SPANS 2@67';1@70'6";1@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	45. CHANNEL & CHANNEL PROT.	a. WATERWAY	
1. WEARING SURFACE					b. ALIGNMENT	
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58	a. CONCRETE	4	G		c. SCOUR	
	b. TIMBER				d. SLOPE PROT., RIP-RAP, DIKES, ETC.	
	c. STEEL PLANK			50. APPROACH ROADWAY CONDITION		G
	d. OPEN GRID			51. APPROACH SLABS		G
3. RAILING	a. CONCRETE		G	52. PAINT SYSTEM	CODE F	G
	b. TIMBER			53. UTILITIES		
	c. ALUMINUM			54. RESPONSE TO LIVE LOAD		G
	d. STEEL			55. ESTIMATED REMAINING LIFE		27
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)		8
	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)			G	70. SI&A GENERAL CONDITION RATINGS		
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59				a. DECK	ITEM 58	7
10. LONGITUDINAL BEAMS OR GIRDERS			G	b. SUPERSTRUCTURE	ITEM 59	7
11. LONGITUDINAL JOIST OR STRINGERS				c. SUBSTRUCTURE	ITEM 60	6
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	72. FIELD SCOUR EVALUATION		
17. MOVABLE SPAN MACHINERY						
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		YES
	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	G		OTHER		NO
	c. ABUT. & INT. BENT PILES					
	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:	Jenny E. Heave	
41. DRIFT				81. REVIEWED BY:		

Bridge I&A Form 1(82)H State of North Carolina Dept. of Transportation Division of Highways		FIELD INSPECTION REPORT <u>Bridge Inspection & Analysis</u>	
Team Leader JEREMY E KEENE			
Assisted By CJP			
Item No.	Grade		
2a	G	MAP CRACKING IN SPAN 1 SHOWN, TYPICAL THROUGHOUT BRIDGE DIAGONAL CRACK IN DECK AT END BENT 1 UP TO 1/8" WIDE, 10' LONG, 25' FROM WEST BARRIER RAIL, TYPICAL ACROSS JOINT HAIRLINE CRACKS IN DECK PERPENDICULAR TO BENT 3 JOINT UP TO 12" LONG ACROSS JOINT TRANSVERSE CRACK WITH EFFLORESCENCE UNDERSIDE OF DECK BAY 2 SPAN 1, TYPICAL THROUGHOUT DECK AND OVERHANGS	
3a	G	IMPACT DAMAGE ON CONCRETE MEDIAN BARRIER RAIL ON SOUTH APPROACH WITH EXPOSED REBAR VERTICAL HAIRLINE CRACK WITH EFFLORESCENCE IN CONCRETE BARRIER RAIL WEST SIDE SPAN 1 SHOWN, TYPICAL THROUGHOUT BRIDGE EXPANSION JOINT COVER PLATE MISSING END BENT 1 WEST SIDE OF MEDIAN BARRIER RAIL IMPACT DAMAGE TO MEDIAN BARRIER RAIL WITH EXPOSED REBAR SPAN 3 AT BENT 3	
6c	G	END BENT 1 JOINT MATERIAL TORN VARIOUS LOCATIONS WITH DEBRIS TYPICAL ALL BENTS AND END BENT 2	
10	G	PAINT PEELING ALL SURFACES OF GIRDER 18 SHOWN, GIRDERS 3-8 AND 13-17 SIMILAR THROUGHOUT BRIDGE. SURFACE RUST ON WEB AND BOTTOM FLANGE AT GIRDER 13 BENT 1, NO SECTION LOSS	
10A	NO	NO CURVED GIRDERS	
52	G	PAINT PEELING ALL SURFACES OF GIRDER 18 SHOWN, GIRDERS 3-8 AND 13-17 SIMILAR THROUGHOUT BRIDGE. SURFACE RUST ON WEB AND BOTTOM FLANGE AT GIRDER 13 BENT 1, NO SECTION LOSS	
36a	F	SPALL IN END BENT 1 CAP BETWEEN GIRDERS 8 AND 9, 8" X 16" X 12", NO EXPOSED REBAR DIAGONAL CRACK IN BENT 2 CAP OVER COLUMN 10, 30" LONG UP TO 1/16" WIDE HAIRLINE VERTICAL CRACK IN BENT 2 CAP UNDER BEAM 2, 12" LONG POST TENSIONING BLOCK CRACKED AT BENT 2 CAP UNDER GIRDER 18 HAIRLINE VERTICAL CRACKS WITH EFFLORESCENCE IN BENT 3 CAP OVER COLUMN 10 FULL DEPTH AND FULL WIDTH OF CAP, SIMILAR OVER COLUMN 1 BENT 3 MAP CRACKING UNDERSIDE OF BENT 3 CAP BELOW GIRDER 18 ADJACENT TO POST TENSIONING BLOCKS CONTINUING INTO COLUMN 9 VERTICAL CRACK BENT 3 CAP UNDER BAY 18 FULL DEPTH AND WIDTH OF CAP UP TO 1/16" WIDE CRACK IN END BENT 2 CAP BETWEEN GIRDERS 18 AND 19 UP TO 1/8" WIDE, TYPICAL THROUGHOUT END BENT 2 MAP CRACKING ADJACENT TO THIRD BATTERED PILE CAP 18" X 12" UP TO 1/16" WIDE	
36d	G	SPALL IN NORTHWEST WINGWALL ADJACENT TO BARRIER RAIL WITH EXPOSED REBAR	

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 JEREMY E KEENE			
Assisted By CJP			
Item No.	Grade		
51	G	LONGITUDINAL CRACK SOUTH APPROACH SLAB FULL LENGTH OF APPROACH SLAB, WITH SPALL, 14' FROM WEST BARRIER RAIL, NORTH APPROACH SIMILAR SPALL IN NORTH APPROACH SLAB, LEFT NORTHBOUND LANE AT END BENT 2 JOINT, 4' X 6" X 1"	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 910260

County WAKE

Date: 05/08/2014

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3312	Maint/Replace/Repair Modular Bridge Joints	LF	50	END BENT 1 JOINT MATERIAL TORN VARIOUS LOCATIONS WITH DEBRIS TYPICAL ALL BENTS AND END BENT 2	
3318	Maint to Concrete Handrail	LF	12	IMPACT DAMAGE ON CONCRETE MEDIAN BARRIER RAIL ON SOUTH APPROACH WITH EXPOSED REBAR IMPACT DAMAGE TO MEDIAN BARRIER RAIL WITH EXPOSED REBAR SPAN 3 AT BENT 3	
3326	Maintain Concrete Deck	SF	10	MAP CRACKING IN SPAN 1 SHOWN, TYPICAL THROUGHOUT BRIDGE	
3348	Maintain Concrete Substructure Components	LF	2	SPALL IN END BENT 1 CAP BETWEEN GIRDERS 8 AND 9, 8" X 16" X 12", NO EXPOSED REBAR	
3353	Maintenance or Repair of Concrete Bridge Approach Slabs	EA	1	LONGITUDINAL CRACK SOUTH APPROACH SLAB FULL LENGTH OF APPROACH SLAB, WITH SPALL, 14' FROM WEST BARRIER RAIL, NORTH APPROACH SIMILAR	
5603	Partial Cleaning and Painting of Structural Steel	SF	200	PAINT PEELING ALL SURFACES OF GIRDER 18 SHOWN, GIRDERS 3-8 AND 13-17 SIMILAR THROUGHOUT BRIDGE.	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



LONGITUDINAL CRACK SOUTH APPROACH SLAB FULL LENGTH OF APPROACH SLAB, WITH SPALL, 14' FROM WEST BARRIER RAIL, NORTH APPROACH SIMILAR



IMPACT DAMAGE ON CONCRETE MEDIAN BARRIER RAIL ON SOUTH APPROACH WITH EXPOSED REBAR



END BENT 1 JOINT MATERIAL TORN VARIOUS LOCATIONS WITH DEBRIS TYPICAL ALL BENTS AND END BENT 2



MAP CRACKING IN SPAN 1 SHOWN, TYPICAL THROUGHOUT BRIDGE



DIAGONAL CRACK IN DECK AT END BENT 1 UP TO 1/8" WIDE, 10' LONG, 25' FROM WEST BARRIER RAIL,
TYPICAL ACROSS JOINT



VERTICAL HAIRLINE CRACK WITH EFFLORESCENCE IN CONCRETE BARRIER RAIL WEST SIDE SPAN 1 SHOWN, TYPICAL THROUGHOUT BRIDGE



EXPANSION JOINT COVER PLATE MISSING END BENT 1 WEST SIDE OF MEDIAN BARRIER RAIL



IMPACT DAMAGE TO MEDIAN BARRIER RAIL WITH EXPOSED REBAR SPAN 3 AT BENT 3



HAIRLINE CRACKS IN DECK PERPENDICULAR TO BENT 3 JOINT UP TO 12" LONG ACROSS JOINT



SPALL IN NORTH APPROACH SLAB, LEFT NORTHBOUND LANE AT END BENT 2 JOINT, 4' X 6" X 1"



PAINT PEELING ALL SURFACES OF GIRDER 18 SHOWN, GIRDERS 3-8 AND 13-17 SIMILAR THROUGHOUT BRIDGE.



SPALL IN END BENT 1 CAP BETWEEN GIRDERS 8 AND 9, 8" X 16" X 12", NO EXPOSED REBAR



TRANSVERSE CRACK WITH EFFLORESCENCE UNDERSIDE OF DECK BAY 2 SPAN 1, TYPICAL THROUGHOUT DECK AND OVERHANGS



SURFACE RUST ON WEB AND BOTTOM FLANGE AT GIRDER 13 BENT 1, NO SECTION LOSS



DIAGONAL CRACK IN BENT 2 CAP OVER COLUMN 10, 30" LONG UP TO 1/16" WIDE



HAIRLINE VERTICAL CRACK IN BENT 2 CAP UNDER BEAM 2, 12" LONG



POST TENSIONING BLOCK CRACKED AT BENT 2 CAP UNDER GIRDER 18



HAIRLINE VERTICAL CRACKS WITH EFFLORESCENCE IN BENT 3 CAP OVER COLUMN 10 FULL DEPTH AND FULL WIDTH OF CAP, SIMILAR OVER COLUMN 1 BENT 3



MAP CRACKING UNDERSIDE OF BENT 3 CAP BELOW GIRDER 18 ADJACENT TO POST TENSIONING BLOCKS CONTINUING INTO COLUMN 9



VERTICAL CRACK BENT 3 CAP UNDER BAY 18 FULL DEPTH AND WIDTH OF CAP UP TO 1/16" WIDE



CAP REPAIR BENT 3 NORTH FACE UNDER GIRDER 13 SHOWN, GIRDER 16 SIMILAR



CAP REPAIR BENT 3 NORTH FACE UNDER GIRDER 15

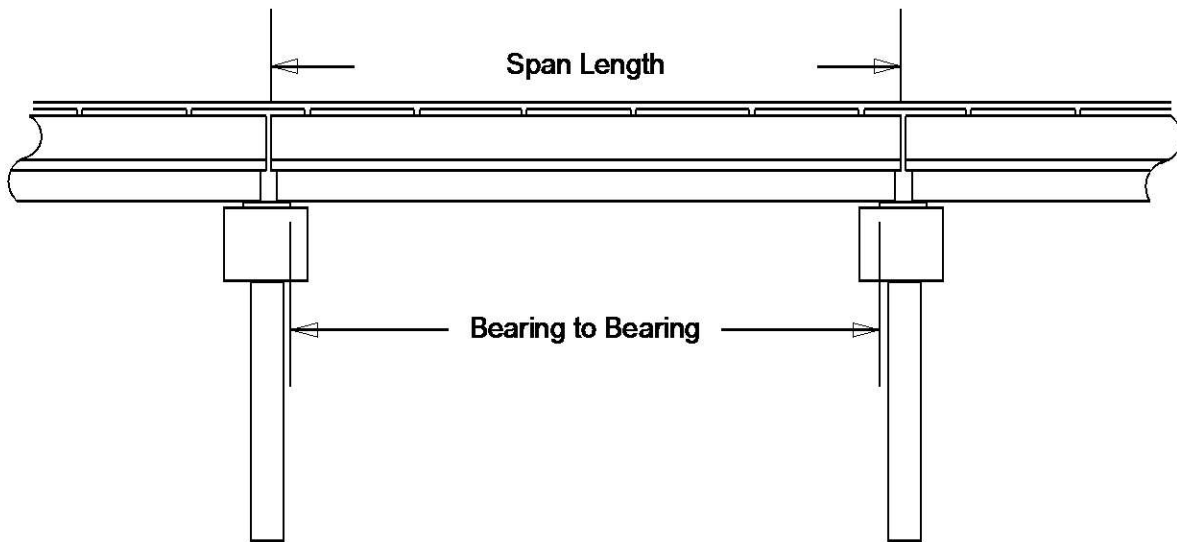


CRACK IN END BENT 2 CAP BETWEEN GIRDERS 18 AND 19 UP TO 1/8" WIDE, TYPICAL THROUGHOUT END BENT 2

Structure Data Worksheet

Spans

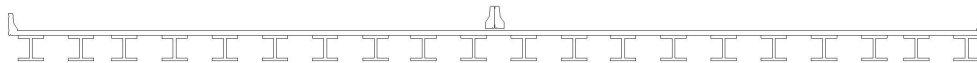
County: WAKE Structure No: 910260 Date: 05/08/2014 Inspected By: JEK



Span No	Span Length	Bearing to Bearing	Comments
1	67	66.0	VERIFIED BY JEK 5/8/2014
2	67	66.0	
3	70.5	69.5	
4	45	44.0	NBIS - 244.00 FT

Bridge Inspection Field Sketch

Deck Width/Out to Out	141.083ft	Between Rails	138ft
Clear Roadway	136ft	Wearing Surface	
Median Width	2ft	Median Height	2.667ft
Curb Height		Left	Right
Sidewalk Width		Left	Right
Clear Roadway (Rail to Median)		Left	68ft
Guardrail Width		Left	1.542ft
Top of Rail to Deck/Wearing Surface		Left	2.667ft
Bridge Rail		Left	Type 4



Measurements for Span #	2		
Deck Thickness	0.625	Left Overhang	3'-1"
Top of Rail to Bottom of Beam		Right Overhang	3'-1"

Beam Number	Beam Type	Spacing	Comments
1	Steel I Beam	7.250ft	W30x173
2	Steel I Beam	6.250ft	W30x173
3	Steel I Beam	7.250ft	W36X150 w/ 10.25"x1.25" COVER PLATE
4	Steel I Beam	7.250ft	W33X141 w/ 10.25"x1.25" COVER PLATE
5	Steel I Beam	7.250ft	W33X141 w/ 10.25"x1.25" COVER PLATE
6	Steel I Beam	7.250ft	W33X141 w/ 10.25"x1.25" COVER PLATE
7	Steel I Beam	7.250ft	W33X141 w/ 10.25"x1.25" COVER PLATE
8	Steel I Beam	6.917ft	W36X150 w/ 10.25"x1.25" COVER PLATE
9	Steel I Beam	7.250ft	W30X173
10	Steel I Beam	7.250ft	W30X173
11	Steel I Beam	7.250ft	W30X173
12	Steel I Beam	7.083ft	W30X173
13	Steel I Beam	7.250ft	W36X150 w/ 10.25"x1.25" COVER PLATE
14	Steel I Beam	7.250ft	W33X141 w/ 10.25"x1.25" COVER PLATE
15	Steel I Beam	7.250ft	W33X141 w/ 10.25"x1.25" COVER PLATE
16	Steel I Beam	7.250ft	W33X141 w/ 10.25"x1.25" COVER PLATE
17	Steel I Beam	7.250ft	W33X141 w/ 10.25"x1.25" COVER PLATE
18	Steel I Beam	6.083ft	W36X150 w/ 10.25"x1.25" COVER PLATE
19	Steel I Beam	7.250ft	W30x173
20	Steel I Beam	ft	W30x173

MEASUREMENTS VERIFIED BY JEK 5/8/2014

Title

Typical Section

Description

20 Lines Steel Beams

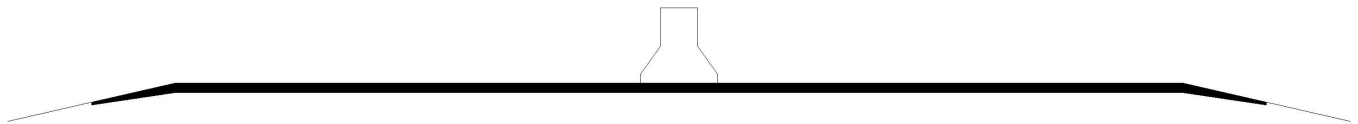
Bridge No: 910260

Drawn By: a. d. osborne

Date: 05/14/2008

File Name: S0234000230

Bridge Inspection Field Sketch



MEASUREMENTS VERIFIED BY JEK 5/8/2014

Left Lanes			
Roadway	36ft Wide	3 Paved Lanes	South Bound
Left Shoulder	10ft Wide	10ft Paved	
Right Shoulder	10ft Wide	10ft Paved	
Left Guardrail			
Right Guardrail			
Median	2ft Wide	2.667ft High	
Right Lanes			
Roadway	36ft Wide	3 Paved Lanes	North Bound
Left Shoulder	10ft Wide	10ft Paved	
Right Shoulder	10ft Wide	10ft Paved	
Left Guardrail			
Right Guardrail			

Title

Approach Roadway

Description

Looking North

Bridge No: 910260

Drawn By: CLS

Date: 03/06/2006

File Name: S0234000231

Bridge Inspection Field Sketch

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Title		Description	
Clearance Span 2		Looking East	
Bridge No: 910260	Drawn By: RL BOWERS	Date: 5/3/2012	File Name: S0234000232

Bridge Inspection Field Sketch

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Title		Description	
Clearance Span 3		Looking West	
Bridge No: 910260	Drawn By: RL BOWERS	Date: 5/3/2012	File Name: S0234000233

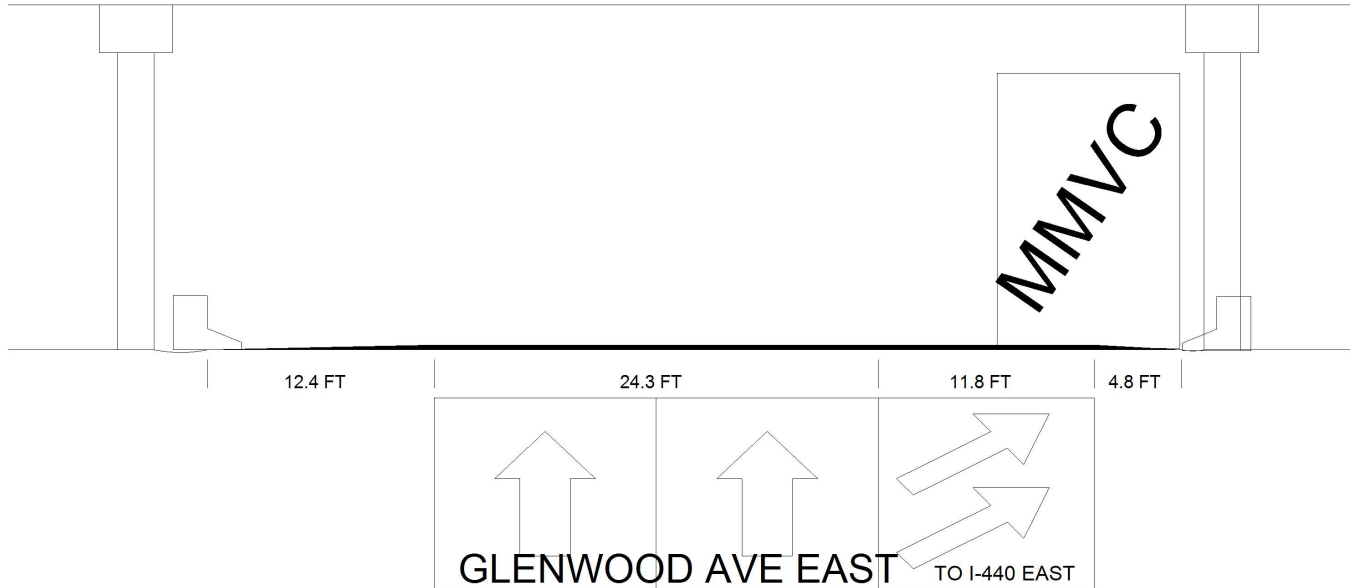
Bridge Inspection Field Sketch

◀ NORTH

I-440 BELTLINE

SOUTH ▶

Span 2



Roadway 1		Direction of Traffic	East
Distance to Left Rail	12.4FT	Distance to Right Rail	16.6FT
Distance to Left Toe of Slope		Distance to Left Bent	15.3FT
Distance to Right Toe of Slope		Distance to Right Bent	17.8FT
MMVC	16.9 Ft at Beam 1, 5 FT from WHITE LINE AT SHOULDER		
MVC	16.45 Ft at Beam 1, 0 FT from YELLOW LINE		

LIDAR VERIFIED

Title

260 SPAN 2 LIDAR

Description

CLEARANCE

Bridge No: 910260

Drawn By: TA

Date: 6/21/2013

File Name: S0550000187

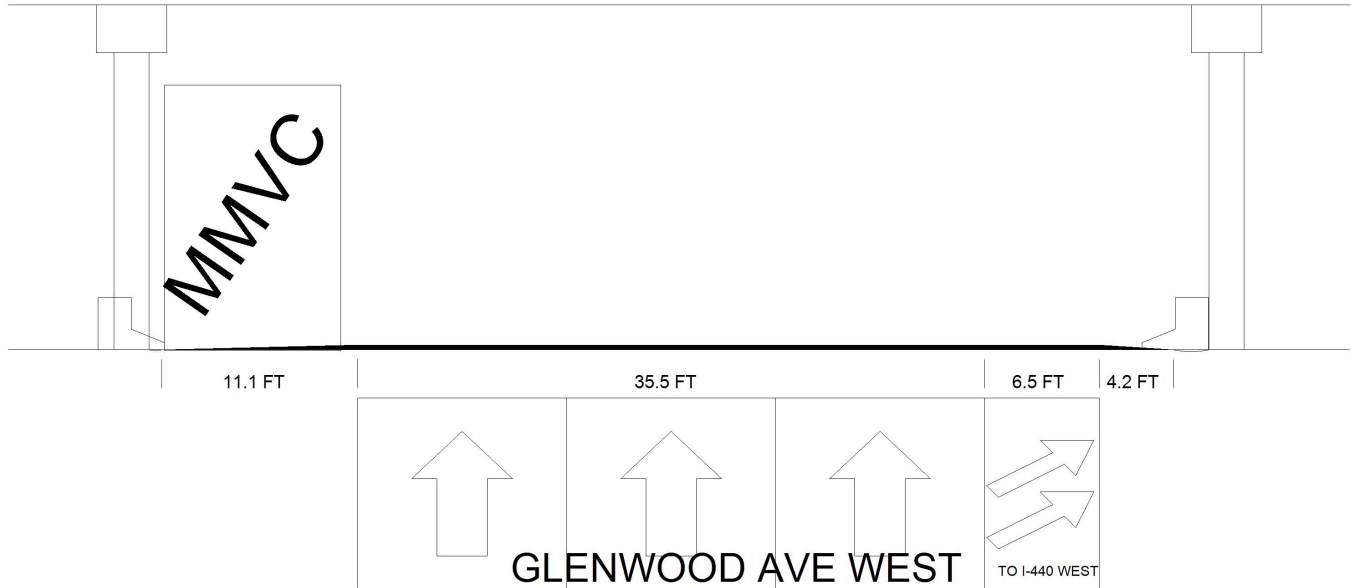
Bridge Inspection Field Sketch

◀ SOUTH

I-440 BELTLINE

NORTH ▶

Span 3



Roadway 1		Direction of Traffic	West
Distance to Left Rail	11.1FT	Distance to Right Rail	10.8FT
Distance to Left Toe of Slope		Distance to Left Bent	11.8FT
Distance to Right Toe of Slope		Distance to Right Bent	12.7FT
MMVC	15.9 Ft at Beam 1, 1 FT from BEHIND YELLOW LINE		
MVC	15.05 Ft at Beam 1, 19 FT from WHITE LINE OF SHOULDER		

LIDAR VERIFIED

Title

260 SPAN 3 LIDAR

Description

CLEARANCE

Bridge No: 910260

Drawn By: TA

Date: 6/21/2013

File Name: S0550000188



BRIDGE PROFILE LOOKING EAST



SOUTH APPROACH LOOKING NORTH



SOUTH APPROACH SLAB, NORTH SIMILAR



SOUTH APPROACH, NORTH SIMILAR



CONCRETE BARRIER RAIL EAST SIDE SHOWN, WEST SIDE SIMILAR



CONCRETE MEDIAN BARRIER RAIL



END BENT 1 JOINT, END BENT 2 AND BENTS SIMILAR



LOOKING WEST FROM BRIDGE



GUARDRAIL ATTACHMENT NORTHWEST CORNER SHOWN, NORTHEAST AND SOUTHEAST SIMILAR



GUARDRAIL TRANSITION SOUTHWEST CORNER, NORTHEAST AND SOUTHEAST SIMILAR



NORTH APPROACH LOOKING SOUTH



LOOKING EAST FROM BRIDGE



BRIDGE PROFILE LOOKING WEST



UNDERSIDE OF SUPERSTRUCTURE



END BENT 1, END BENT 2 SIMILAR



GIRDER 20 END BENT 1 BEARING ASSEMBLY, TYPICAL THROUGHOUT



INTERMEDIATE STEEL DIAPHRAGM, DIAPHRAGM 1 BAY 17 SPAN 1 SHOWN, ALL OTHERS SIMILAR



COVER PLATE SPLICE GIRDER 17 SPAN 1 SHOWN, GIRDERS 3-8 AND 13-18 SIMILAR ALL SPANS.



BENT 1, OTHER BENTS SIMILAR



WIDENED CAP ATTACHMENT



END OF BENT 2 CAP WEST SIDE, OTHERS SIMILAR



NORTHEAST WINGWALL, OTHERS SIMILAR