



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

CORRECTED LATITUDE

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Clearance Only - Contract

COUNTY WAKE BRIDGE NUMBER 910260 INSPECTION CYCLE 0 YRS
ROUTE I440 ACROSS US70 M.P. 6

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' 70.52" 35° 50' 7.37"

INSPECTION DATE 06/21/2013 PRESENT CONDITION CLEARANCE ONLY

PRESENT POSTING Not Posted PROPOSED POSTING _____

OTHER SIGNS PRESENT _____



COVER - LOOKING SOUTHBOUND

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	_____

Run Date: 07/16/2013

IDENTIFICATION							
(1) STATE NAME -NORTH CAROLINA	BRIDGE	910260	SUFFICIENCY RATING =	86			
(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' 70.52"	(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	123000						
(30) YEAR OF ADT	2009	(109) TRUCK ADT PCT	16%				
(19) BYPASS OR DETOUR LENGTH	0 MI						
GEOMETRIC DATA							
(48) LENGTH OF MAXIMUM SPAN	71 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	141.1 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	99.9 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		5					
(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		5					
(68) DECK GEOMETRY		9					
(69) UNDERCLEARANCES,VERTI & HORIZ		5					
(71) WATERWAY ADEQUACY		N					
(72) APPROACH ROADWAY ALIGNMENT		7					
(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	246000	(115) YEAR FUTURE ADT	2025				
INSPECTIONS							
(90) INSPECTION DATE		05/16/2012					
(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							

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	US 70 EBL	21000700	16.9		1	20070		14	3	35000	2008	53.3	H	16.45	16.6	12.4	9	1	1	1
3	US 70 WBL	21000700	15.9		1	20070		14	3	35000	2008	57.4	H	15.05	10.8	11.1	9	2	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: 07/16/2013

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 : 123000 2009 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) : 141.1 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

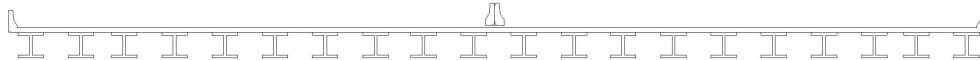
Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
2	US 70 EBL	16.90	16.45	53.30	12.40	16.60
3	US 70 WBL	15.90	15.05	57.40	11.10	10.80

Note: All measurements are in feet.

REMARKS :

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	
Top of Rail to Bottom of Beam		Right Overhang	

Beam Number	Beam Type	Spacing	Comments
1	Steel I Beam	7.250ft	.875 ft.w X 30" h
2	Steel I Beam	6.250ft	.875 ft.w X 30" h.
3	Steel I Beam	7.250ft	1.0 ft. w X 36"
4	Steel I Beam	7.250ft	.958 ft. w X 33" h
5	Steel I Beam	7.250ft	.958 ft. w X 33" h
6	Steel I Beam	7.250ft	.958 ft. w X 33" h
7	Steel I Beam	7.250ft	.958 ft. w X 33" h
8	Steel I Beam	6.917ft	1.0 ft. w X 36"
9	Steel I Beam	7.250ft	.875 ft.w X 30" h.
10	Steel I Beam	7.250ft	.875 ft.w X 30" h.
11	Steel I Beam	7.250ft	.875 ft.w X 30" h.
12	Steel I Beam	7.083ft	.875 ft.w X 30" h.
13	Steel I Beam	7.250ft	1.0 ft. w X 36"
14	Steel I Beam	7.250ft	.958 ft. w X 33" h
15	Steel I Beam	7.250ft	.958 ft. w X 33" h
16	Steel I Beam	7.250ft	.958 ft. w X 33" h
17	Steel I Beam	7.250ft	.958 ft. w X 33" h
18	Steel I Beam	6.083ft	1.0 ft. w X 36"
19	Steel I Beam	7.250ft	.875 ft.w X 30" h.
20	Steel I Beam	ft	.875 ft.w X 30" h.

MEASUREMENTS VERIFID BY RL BOWERS 5/3/2012

Title

Typical Section

Description

20 Lines Steel Beams

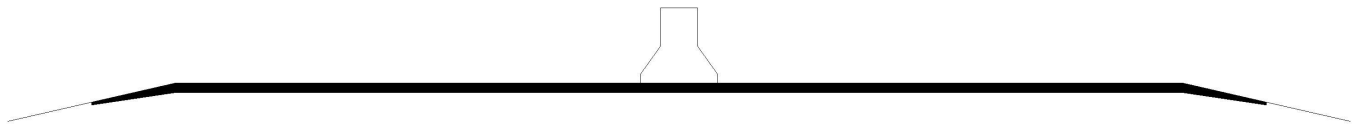
Bridge No: 910260

Drawn By: a. d. osborne

Date: 05/14/2008

File Name: S0234000230

Bridge Inspection Field Sketch



MEASUREMENTS VERIFIED BY RL BOWERS 5/3/2012

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

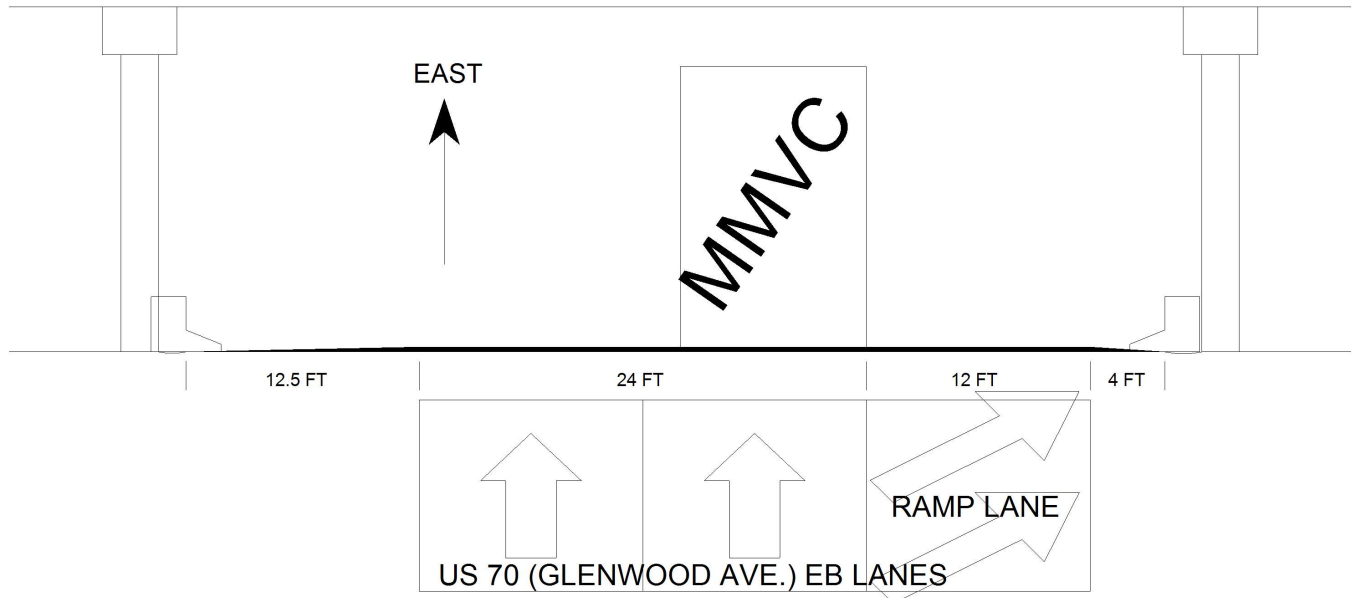
Bridge Inspection Field Sketch

◀ NORTH

I - 440 / INNER AND OUTER BELTLINE

SOUTH ▶

Span 2



Roadway 1		Direction of Traffic	East
Distance to Left Rail	12.5FT	Distance to Right Rail	16FT
Distance to Left Toe of Slope		Distance to Left Bent	14FT
Distance to Right Toe of Slope		Distance to Right Bent	18FT
MMVC	16.5 Ft at Beam 1, 10 FT from RIGHT EDGE OF THRU ROADWAY		
MVC	16.333 Ft at Beam 1, 0 FT from LEFT EDGE OF ROADWAY		

Title

Clearance Span 2

Description

Looking East

Bridge No: 910260

Drawn By: RL BOWERS

Date: 5/3/2012

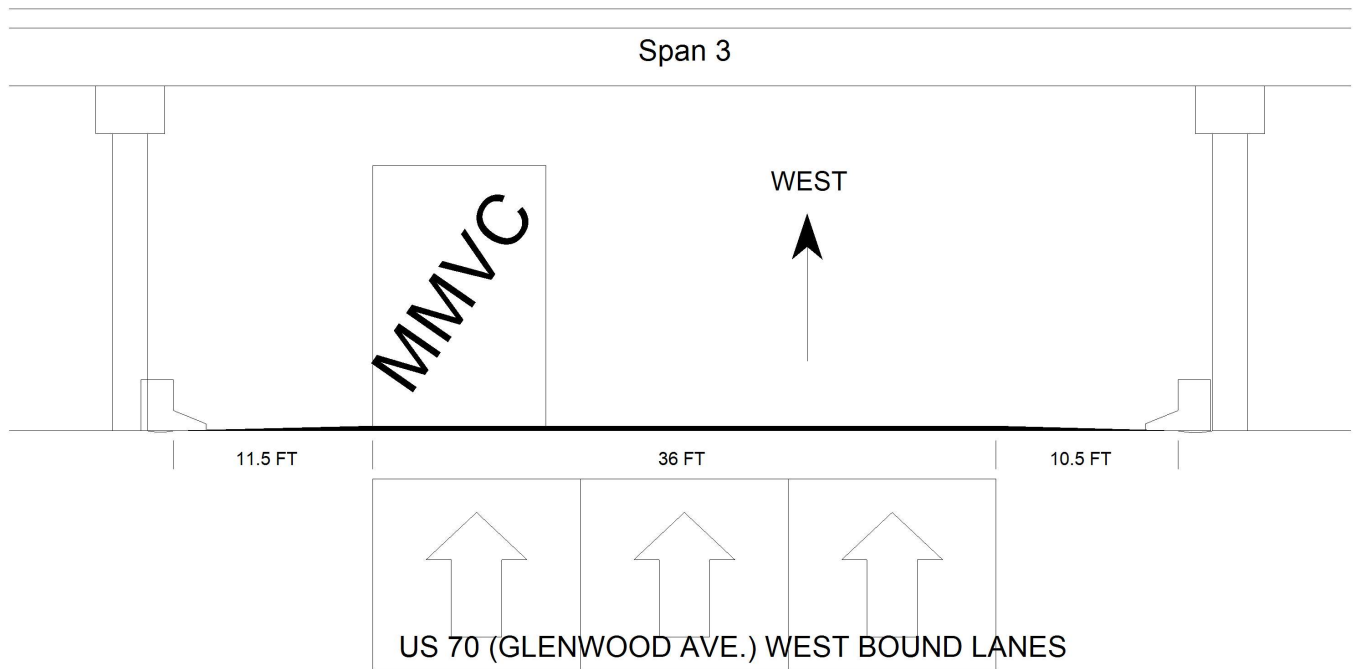
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Bridge Inspection Field Sketch

◀ SOUTH

I-440 / INNER AND OUTER BELTLINE

NORTH ▶



Roadway 1		Direction of Traffic	West
Distance to Left Rail	11.5FT	Distance to Right Rail	10.5FT
Distance to Left Toe of Slope		Distance to Left Bent	13FT
Distance to Right Toe of Slope		Distance to Right Bent	12.5FT
MMVC	15.25 Ft at Beam 1, 10 FT from LEFT EDGE OF ROADWAY		
MVC	14.917 Ft at Beam 1, 0 FT from RIGHT EDGE OF ROADWAY		

Title

Clearance Span 3

Description

Looking West

Bridge No: 910260

Drawn By: RL BOWERS

Date: 5/3/2012

File Name: S0234000233

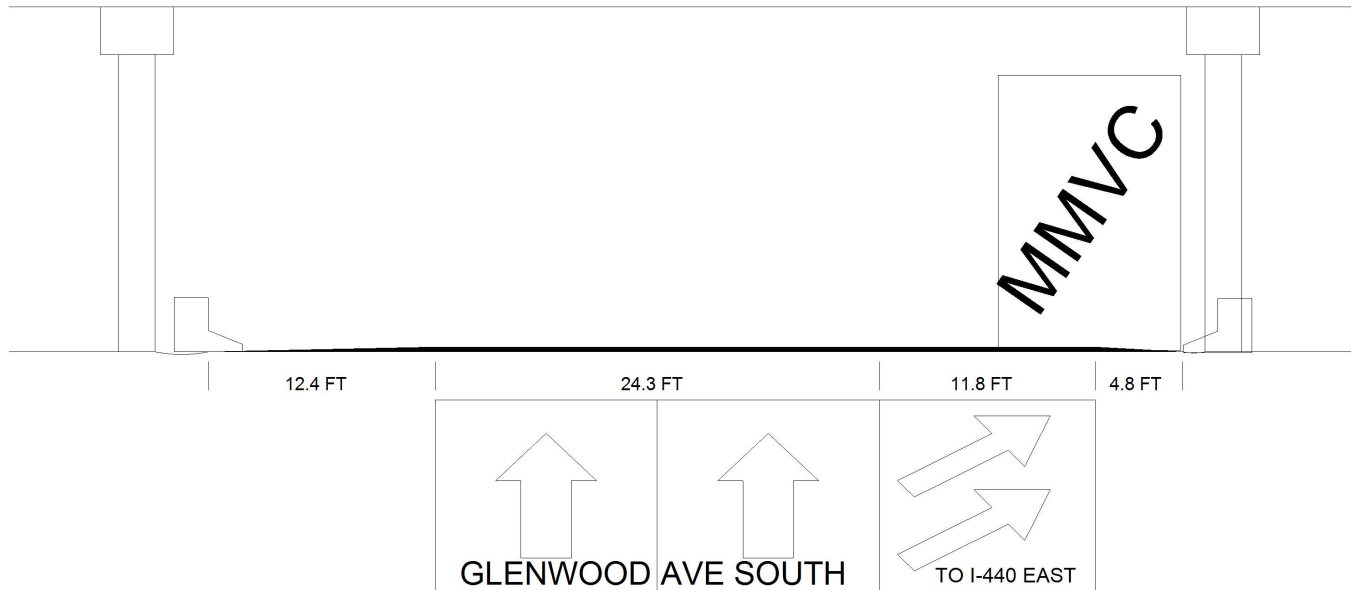
Bridge Inspection Field Sketch

◀EAST

I-440 BELTLINE

WEST▶

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

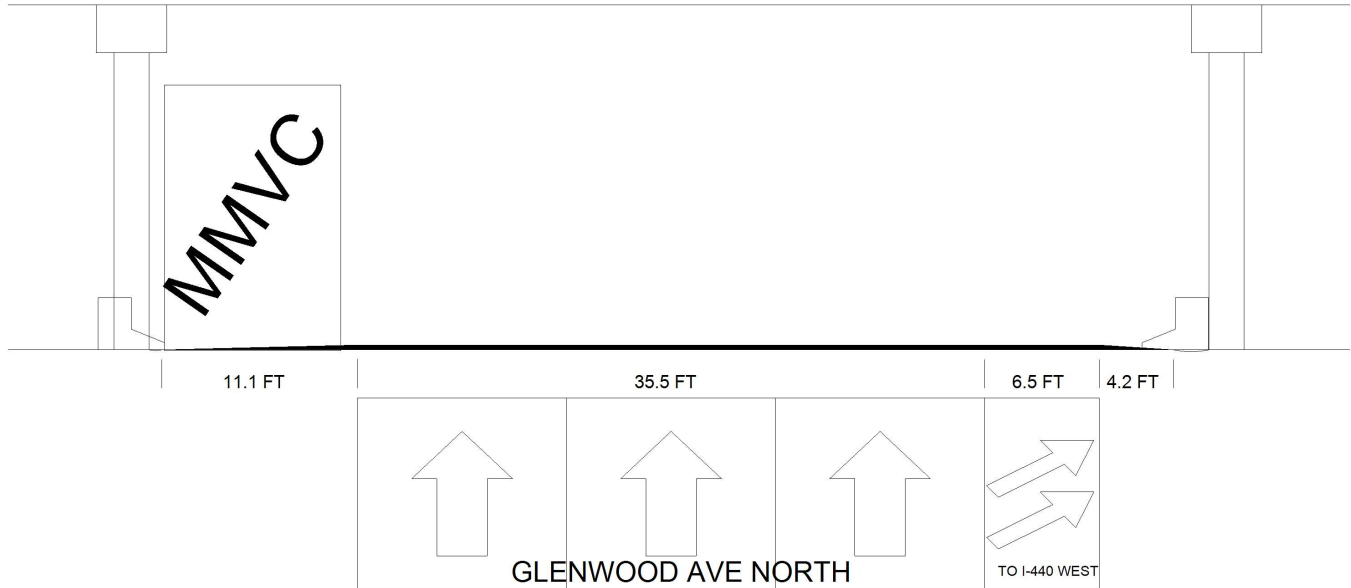
Bridge Inspection Field Sketch

◀ WEST

I-440 BELTLINE

EAST ▶

Span 3



Roadway 1		Direction of Traffic	West
Distance to Left Rail	11.1 FT	Distance to Right Rail	10.8 FT
Distance to Left Toe of Slope		Distance to Left Bent	11.8 FT
Distance to Right Toe of Slope		Distance to Right Bent	12.7 FT
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



COVER - LOOKING SOUTHBOUND



LOOKING NORTHBOUND