



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

TEMP REPAIRS: ENCASED PILES AT END BENT 1,
BENT 1 AND BENT 3

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY COLUMBUS BRIDGE NUMBER 230175 INSPECTION CYCLE 2 YRS
ROUTE SR1504 ACROSS DUNN SWAMP M.P. 0

LOCATION 0.2 MI.E.JCT. SR1525

SUPERSTRUCTURE RC DECK/I-BEAMS (BMD 6-1)

SUBSTRUCTURE E.BTS&INT.BTS:RC CAP/TIMBER PILES @ 7'6 CTS.

SPANS 2@18'2 ;2@18'4

LONGITUDE 78° 52' 20.55"

LATITUDE 34° 20' 27.13"

PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 08/13/2012

OPERATING RATING

PRESENT POSTING SV 15 TTST 22 SV 15 TTST 22

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT 4 DELINEATORS



LOOKING EAST (PRINCESS ANN ROAD)

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>

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

Run Date: 09/11/2012

IDENTIFICATION				CLASSIFICATION			
(1) STATE NAME -NORTH CAROLINA	BRIDGE	230175		SUFFICIENCY RATING =		17.07	
(8) STRUCTURE NUMBER(FEDERAL)		00000000470175		STATUS =	Structurally Deficient		
(5) INVENTORY ROUTE (ON/UNDER) - ON		31015040					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		3					
(3) COUNTY CODE	47	(4) PLACE CODE	0	(112)NBIS BRIDGE SYSTEM -		YES	
(6) FEATURE INTERSECTED -	DUNN SWAMP			(104)HIGHWAY SYSTEM	Is not on NHS	0	
(7) FACILITY CARRIED	SR1504			(26) FUNCTIONAL CLASS -	Local	09	
(9) LOCATION	0.2 MI.E.JCT. SR1525			(100)STRAHNET HIGHWAY -	Not a STRAHNET Route	0	
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE -	No Parallel Structure	N	
(16)LAT	34° 20' 27.13"	(17)LONG	78° 52' 20.55"	(102)DIRECTION OF TRAFFIC -	2-way Traffic	2	
(98)BORDER BRIDGE STATE CODE		PCT SHARE		(103)TEMPORARY STRUCTURE -	Temporary Structure/Conditions	T	
(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		5	
TYPE -	Stringer Mutlibeam or Girder	CODE	302	(59) SUPERSTRUCTURE		5	
(44) STRUCTURE TYPE APPR :				(60) SUBSTRUCTURE		3	
TYPE -		CODE	000	(61) CHANNEL & CHANNEL PROTECTION		5	
(45) NUMBER OF SPANS IN MAIN UNIT			4	(62) CULVERTS		N	
(46) NUMBER OF APPROACH SPANS							
(107)DECK STRUCTURE TYPE -	1	CODE		LOAD RATING AND POSTING			
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(31) DESIGN LOAD	Unknown	0	
(A) TYPE OF WEARING SURFACE -		CODE		(63) OPERATING RATING METHOD -	Load Factor		
(B) TYPE OF MEMBRANE -		CODE		(64) OPERATING RATING -	HS-1	101	
(C) TYPE OF DECK PROTECTION -		CODE		(65) INVENTORY RATING METHOD -	Load Factor		
				(66) INVENTORY RATING -	HS-1	101	
				(70) BRIDGE POSTING -	Posting Required	0	
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED		P	
				DESCRIPTION -	Posted for Load		
AGE AND SERVICE				APPRAISAL			
(27) YEAR BUILT			1958	(67) STRUCTURAL EVALUATION		3	
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY		4	
(42) TYPE OF SERVICE : ON -	Highway			(69) UNDERCLEARANCES,VERTI & HORIZ		N	
UNDER -	Waterway	CODE	15	(71) WATERWAY ADEQUACY		7	
(28) LANES: ON STRUCTURE	2	UNDER STRUCTURE	0	(72) APPROACH ROADWAY ALIGNMENT		7	
(29) AVERAGE DAILY TRAFFIC			930	(36) TRAFFIC SAFETY FEATURES		0000	
(30) YEAR OF ADT	2010	(109) TRUCK ADT PCT	6%	(113)SCOUR CRITICAL BRIDGES		U	
(19) BYPASS OR DETOUR LENGTH			8 MI				
GEOMETRIC DATA				PROPOSED IMPROVEMENTS			
(48) LENGTH OF MAXIMUM SPAN			18 FT	(75) TYPE OF WORK -		CODE	
(49) STRUCTURE LENGTH			73 FT	(76) LENGTH OF STRUCTURE IMPROVEMENT			
(50)CURB OR SIDEWALK: LEFT	.75 FT	RIGHT	.75 FT	(94) BRIDGE IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB			24 FT	(95) ROADWAY IMPROVEMENT COST			
(52) DECK WIDTH OUT TO OUT			25.333 FT	(96) TOTAL PROJECT COST			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)			17 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(33) BRIDGE MEDIAN -	No Median	CODE	0	(114)FUTURE ADT	1860	(115) YEAR FUTURE ADT	2025
(34) SKEW	0°	(35) STRUCTURE FLARED	0				
(10) INVENTORY ROUTE MIN VERT CLEAR			999.9 FT	INSPECTIONS			
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			24 FT	(90) INSPECTION DATE		08/13/2012	
(53) MIN VERT CLEAR OVER BRIDGE RDWY			999.9 FT	(92) CRITICAL FEATURE INSPECTION :		(93) CFI DATE	
(54) MIN VERT UNDERCLEAR REF	Not a Highway or Railroad		0 FT	A) FRACTURE CRIT DETAIL -	NO	A)	
(55) MIN LAT UNDERCLEAR RT REF	Not a Highway or Railroad		000 FT	B) UNDERWATER INSP -	NO	B)	
(56) MIN LAT UNDERCLEAR LT REF -			000 FT	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				

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 09/11/2012

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
COLUMBUS	6	3	230175	73	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1504	DUNN SWAMP

LOCATED :	BRIDGE NAME :	CITY :
0.2 MI.E.JCT. SR1525		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	930 2010	LT 241 RT 241

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1958	BMU			Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :		
			TAN.	90	ON 2	UNDER	0

NAVIGATION :			HT. CRN. TO BED :		WATER DEPTH :		
VC 0 FT	HC 0 FT		13 FT		5		FT

SUPERSTRUCTURE :	RC DECK/I-BEAMS (BMD 6-1)
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SUBSTRUCTURE :	E.BTS&INT.BTS:RC CAP/TIMBER PILES @ 7'6 CTS.
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SPANS :	2@18'2 ;2@18'4
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BEAMS OR GIRDERS :	12 LINES W12X16.5 I-BEAMS @ 2'-2.5 CENTERS
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FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
5 RC/NO AWS		25.333 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
24 FT	25.5 FT	LT .75 FT RT .75 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	DATE
HS-1	HS-1	ext.bmC	SV 16	24	09/11/2012

SYSTEM :	GREEN LINE ROUTE :
Secondary S.R. Route	N

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection
 BRIDGE NO. 230175 COUNTY COLUMBUS ROUTE SR1504 OVER DUNN SWAMP
 STRUCTURE TYPE RC DECK/I-BEAMS (BMD 6-1)
 ROUTE ORIENTATION W - E SPANS 2@18'2 ;2@18'4

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	F	
					d. SLOPE PROT., RIP-RAP, DIKES, ETC.		
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58	a. CONCRETE	4	F	50. APPROACH ROADWAY CONDITION			G
	b. TIMBER			51. APPROACH SLABS			
	c. STEEL PLANK			52. PAINT SYSTEM			CODE A F
	d. OPEN GRID			53. UTILITIES			
3. RAILING	a. CONCRETE		G	54. RESPONSE TO LIVE LOAD			G
	b. TIMBER			55. ESTIMATED REMAINING LIFE			15
	c. ALUMINUM						
	d. STEEL						
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			YES
	c. COMPRESSION SEAL			63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)			12
	d. STANDARD JOINTS	3	P	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	5	
10. LONGITUDINAL BEAMS OR GIRDERS			F	b. SUPERSTRUCTURE	ITEM 59	5	
11. LONGITUDINAL JOIST OR STRINGERS				c. SUBSTRUCTURE	ITEM 60	5	
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S				d. CHANNEL & CHANNEL PROT.	ITEM 61	5	
13. END DIAP'S, CURTAIN WALLS, & CONN'S			F				
14. FLOOR BEAMS AND CONNECTIONS				71. SI&A FIELD APPRAISAL RATINGS			
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)			F	a. WATERWAY ADAQUACY		7	
16. DRAINAGE SYSTEM (ON STRUCTURE)			G	b. APPR. RDWY. ALIGNMENT		7	
17. MOVABLE SPAN MACHINERY							
				72. FIELD SCOUR EVALUATION			O
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		F	SNOOPER (CODE S, 4, OR N)		HRS	NO
	c. BULKHEADS, WING'S, & TIE BACKS		F	LADDER			NO
36. CONC SUB STR.	a. ABUT. & INT. BENT CAPS		F	BUCKET TRUCK			NO
	b. ABUT. & BENT COL'S BREASTWALLS			BOAT			NO
	c. ABUT. & INT. BENT PILES			OTHER			YES
	d. BACKWALLS, WING'S, RETAIN. WALLS						
	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)							
40. FENDER SYSTEMS				80. INSPECTED BY:			R.D. Heath
41. DRIFT			F	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 R.D. HEATH			
Assisted By R.L. KISNER			
Item No.	Grade		
2a	F	(RC DECK) THERE IS DECK SCALING WITH EXPOSED AGGREGATE IN ALL SPANS. (PHOTO) THERE IS HAIRLINE MAP CRACKING NOTED AT SPAN 2 IN THE WEST BOUND LANE. (PHOTO) THERE ARE HAIRLINE LONGITUDINAL AND DIAGONAL CRACKS AT SPAN 2 IN THE EAST BOUND LANE. (PHOTO) THERE ARE SEVERAL POPOUTS NOTED IN ALL SPANS THROUGHOUT ALL THE DECK. THERE IS HAIRLINE LONGITUDINAL CRACKING AT SPANS 3, AND 4 IN THE WEST BOUND LANE. THE SPAN 3 DECK EXHIBITS HAIRLINE MAP CRACKING. (PHOTO)	
3a	G	(RC RAILING) THE RIGHT RAIL POST 1 IS CHIPPED AT TOP IN SPAN 3 AT BENT 2. (PHOTO)	
6d	P	THERE IS A SURFACE SPALL IN RAIL END POST AT NORTHEAST CORNER. (PHOTO) (STANDARD JOINTS) THE BENT JOINTS ARE CRACKED, SETTLING, AND ARE LEAKING. (PHOTO)	
7	G	(DECK DEBRIS) THERE IS VEGETATION ALONG RIGHT CURB IN SPAN 1. (PHOTO)	
10	F	(STEEL BEAMS) THE FOLLOWING BEAMS HAVE BEEN REPAIRED: BEAMS 1, 2, AND 11 IN SPAN 2 AT BENT 1 BEAM 12 IN SPAN 3 AT BENT 2 BEAMS 1, 2, AND 3 IN SPAN 3 AT BENT 3 BEAMS 1, 2, AND 3 IN SPAN 4 AT BENT 3 (PHOTO) BEAM 11 IN BAY 10 AT BENT 1 IN SPAN 1 RUST, CORRODED WITH UP TO 3/16" SECTION LOSS IN WEB ADJACENT TO END DIAPHRAGM. MANY BEAMS HAVE RUST AND CORROSION AT THE INTERIOR BENT BEARING AREAS WITH UP TO 1/8" LOSS OF THE WEB SECTION. THERE IS PAINT PEELING AT RANDOM. (PHOTOS) BEAM 7 SPAN 4 AT BENT 3 SECTION LOSS IN BOTTOM FLANGE WITH 1/8" REMAINING BEARING OUT 2" TO 6". (PHOTO) BEAM 1 SPAN 4 BAY 1 PAINT PEELING WITH RUST AND 1/16" PITTING DUE TO MISSING DOWNSPOUT. (PHOTO) BEAM 1 IN SPAN 1 BAY 1 AT END BENT 1 PAINT PEELING AND RUST AT MISSING DOWNSPOUT. (PHOTO)	

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 R.D. HEATH			
Assisted By R.L. KISNER			
Item No.	Grade		
10A	NO	(CURVED GIRDERS) NO CURVED GIRDERS.	
13	F	(END DIAPHRAGMS AND CURTAIN WALLS) THERE IS AN END DIAPHRAGM SPALLED WITH EXPOSED REBAR IN BAY 2 OF SPAN 1 AT BENT 1. (PHOTO) THERE IS AN END DIAPHRAGM SPALLED WITH EXPOSED STEEL IN BAYS 10, AND 11 OF SPAN 3 AT BENT 2. (PHOTO) THERE IS AN END DIAPHRAGM WITH SECTION MISSING ADJACENT TO BEAM 1, BAY 1 AT BENT 3 IN SPAN 4. (PHOTO) THE CURTAIN WALLS ARE GOOD.	
15	F	(BEARING ASSEMBLIES) THE INTERIOR BENT BEARINGS HAVE RUST AND CORROSION. BEAM 2 BEARING AT BENT 1, IN BAY 2 RUST AND SCALING. (PHOTO) ALL INTERIOR BEARINGS ARE SIMILAR.	
16	G	(DRAINAGE SYSTEM) THERE IS A MISSING DOWNSPOUT AT SPAN 4 BAY 1. (PHOTO) THERE IS A MISSING DRAIN DOWNSPOUT AT SPAN 1, BAY 1 AT END BENT 1. (PHOTO) THERE IS A BLOCKED DECK DRAIN AT SPAN 1 ALONG LEFT CURB. (PHOTO)	
52	F	(PAINT SYSTEM) THERE ARE MANY LOCATIONS WITH PEELING ALONG THE BEAMS AND BEARINGS. (PHOTOS)	
35b	F	(TIMBER PILES) THERE ARE A FEW PILES ARE SOFT AT THE LOWER PORTION. PILE 2 AT BENT 2 SPAN 3 FACE 1/4" WIDE VERTICAL CRACK. THERE IS SOME SHALLOW DELAMINATION NOTED AT A FEW PLACES. THERE IS NO CROSSBRACING NOTED AT THE INTERIOR BENTS. THE FOLLOWING PILES ARE ENCASED IN CONCRETE: PILE 2 AT END BENT 1. (PHOTO) PILE 3 AT BENT 1. (PHOTO) PILES 1, 2, AND 3 AT BENT 3. (PHOTO)	

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 R.D. HEATH			
Assisted By R.L. KISNER			
Item No.	Grade		
35c	F	(TIMBER BULKHEAD AND WINGWALLS) THE EAST END TURNPILES ARE HOLLOW. (PHOTOS) THE NORTHEAST TURNPILE ALSO INFESTED WITH ANTS. THERE ARE A FEW SMALL AREAS OF SHALLOW DECAY AT THE INTERIOR PORTIONS. THE NORTHEAST EXTERIOR BULKHEAD HAS ONE END DECAYED BOARD. (PHOTO)	
36a	F	THERE IS A NEW WINGWALL AT NORTHWEST CORNER. (RC CAPS) THERE ARE A FEW SPALLED AND DELAMINATED AREAS WITH EXPOSED REBARS ON THE VERTICAL SURFACES.	
41	F	(DRIFT) THERE IS DRIFT AT PILE 4 OF BENT 1. (PHOTO) THERE IS DRIFT AT BENT 2, ALONG SPAN 3 SIDE. (PHOTO)	
45c	F	THERE IS DRIFT DOWNSTREAM SOUTH IN SPAN 3. (PHOTO) (SCOUR) THERE IS LATERAL BANK EROSION NOTED IN SPANS 1, AND 4. (PHOTO) SCOUR NOTED AT UPSTREAM END OF BENT 1 SOUNDING LAST INSPECTION 11.8 ' THIS INSPECTION 15.6' .	
50	G	SEE SCOUR REPORT DATED 5/13/2010. (APPROACH ROADWAY) THE ASPHALT WEARING SURFACE IS SETTLED 1/2" AT WEST BOUND LANE IN THE EAST APPROACH. (PHOTO) THERE ARE 1/8" TRANSVERSE CRACKS IN WEST APPROACH ASPHALT WEARING SURFACE. (PHOTO)	
62	YES	(PRESENTLY POSTED) SV - 15 TONS, TTST - 22 TONS	
73f	YES	(OTHER EQUIPMENT) BOOTS	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 230175

County COLUMBUS

Date: 08/13/2012

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	2	1/8" TRANSVERSE CRACKS IN WEST APPROACH ASPHALT WEARING SURFACE	
2816	Asphalt Surface Repair or Replacement	SY	3	EAST APPROACH ASPHALT WEARING SURFACE SETTLED UP TO 1/2" IN WEST BOUND LANE	
3306	Maintain Concrete Superstructure Components	SF	1	END DIAPHRAGM WITH SECTION LOSS AT BENT 3, SPAN 4 IN BAY 1	
3306	Maintain Concrete Superstructure Components	SF	2	END DIAPHRAGM SPALLED WITH EXPOSED STEEL AT BENT 1, SPAN 1 AT BAY 2	
3306	Maintain Concrete Superstructure Components	SF	3	END DIAPHRAGM SPALLED WITH EXPOSED STEEL IN BAYS 10 & 11 AT BENT 2, SPAN 3	
3310	Maintenance/Repair/Replacement of Standard Bridge Expansion Joints	LF	72	BENT 2 STANDARD JOINT SEAL CRACKED, SETTLING, AND LEAKING (ALL JOINTS ARE SIMILAR)	
3314	Maintain Steel Superstructure Components	LF	2	BEAM 7 IN SPAN 4 AT BENT 3 SECTION LOSS WITH 1/8" REMAINING FROM BEARING OUT 2" TO 6" X 1" WIDE	
3332	Maint Drainage System - Bridge	LF	1	MISSING DRAIN DOWNSPOUT AT SPAN 1, BAY 1 AT END BENT 1	
3332	Maint Drainage System - Bridge	LF	1	MISSING DRAIN DOWNSPOUT IN SPAN 4 BAY 1	
3342	Clean and Paint Structural Steel	SF	1750	BEAM 1 EXTERIOR AT SPAN 2 WITH PAINT PEELING AND RUST, MANY OTHER BEAMS SIMILAR	
3346	Repair / Maintain Timber Wings & Blkhds	SF	8	NORTHEAST CORNER TURNPILE HOLLOW AND INFESTED WITH ANTS	
3346	Repair / Maintain Timber Wings & Blkhds	SF	8	TURNPILE AT SOUTHEAST CORNER HOLLOW	
3366	Drift and Debris Removal	HR	1	DRIFT AT PILE 4 OF BENT 1	
3366	Drift and Debris Removal	HR	4	DRIFT DOWNSTREAM SOUTH IN SPAN 3	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 230175

County COLUMBUS

Date: 08/13/2012

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3366	Drift and Debris Removal	HR	20	DRIFT AT BENT 2, ALONG SPAN 3 SIDE	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



1/8" TRANSVERSE CRACKS IN WEST APPROACH ASPHALT WEARING SURFACE



BEAM 1 EXTERIOR AT SPAN 2 WITH PAINT PEELING AND RUST, MANY OTHER BEAMS ARE SIMILAR



PILE 2 AT END BENT 1 ENCASED



PILE 3 AT BENT 1 ENCASED



END DIAPHRAGM SPALLED WITH EXPOSED STEEL AT BENT 1, SPAN 1 AT BAY 2



BEAM 2 BEARING AT BENT 1, IN BAY 2 RUST AND SCALING, ALL INTERIOR BEARINGS ARE SIMILAR



DRIFT AT PILE 4 OF BENT 1



MISSING DRAIN DOWNSPOUT AT SPAN 1, BAY 1 AT END BENT 1



BEAM 1 IN SPAN 1 BAY 1 AT END BENT 1 PAINT PEELING AND RUST AT MISSING DOWNSPOUT



SPAN 1 DECK SCALING, ALL SPANS ARE SIMILAR



BLOCKED DECK DRAIN AT SPAN 1 ALONG LEFT CURB



VEGETATION ALONG RIGHT CURB IN SPAN 1



RIGHT RAIL POST 1 IS CHIPPED AT TOP IN SPAN 3 AT BENT 2



SURFACE SPALL IN RAIL END POST AT NORTHEAST CORNER



HAIRLINE MAP CRACKING IN SPAN 2 WEST BOUND LANE



HAIRLINE LONGITUDINAL AND DIAGONAL CRACKS IN SPAN 2 EAST BOUND LANE



HAIRLINE MAP CRACKING IN SPAN 3 DECK



BENT 2 STANDARD JOINT SEAL CRACKED, SETTLING, AND LEAKING (ALL JOINTS ARE SIMILAR)



EAST APPROACH ASPHALT WEARING SURFACE SETTLED UP TO 1/2" IN WEST BOUND LANE



TURNPILE AT SOUTHEAST CORNER HOLLOW



PILES 1, 2, AND 3 ENCASED AT BENT 3



LATERAL BANK EROSION IN SPAN 4



DRIFT AND SILT ALONG PILE 1 AT BENT 3



DRIFT ALONG BENT 2, SPAN 3 SIDE



SPAN 4 UNDERSIDE, WITH PAINT PEELING AND SURFACE RUST



BEAM 1 IN SPAN 4 BAY 1 PAINT PEELING AND RUST WITH 1/16" PITTING NEAR MISSING DRAIN DOWNSPOUT



MISSING DRAIN DOWNSPOUT IN SPAN 4 BAY 1



DRIFT DOWNSTREAM SOUTH IN SPAN 3



BEAM 7 IN SPAN 4 AT BENT 3 SECTION LOSS WITH 1/8" REMAINING FROM BEARING OUT 2" TO 6" X 1" WIDE



END DIAPHRAGM SPALLED WITH EXPOSED STEEL IN BAYS 10 & 11 AT BENT 2, SPAN 3



END DIAPHRAGM WITH SECTION LOSS AT BENT 3, SPAN 4 IN BAY 1



BEAMS 1,2,AND 3 SIMILAR REPAIRS AT BENT 3, IN SPAN 4



NORTHEAST CORNER TURNPILE HOLLOW AND INFESTED WITH ANTS



END DECAYED EXTERIOR BULKHEAD BOARD AT NORTHEAST CORNER

Structure Data Worksheet

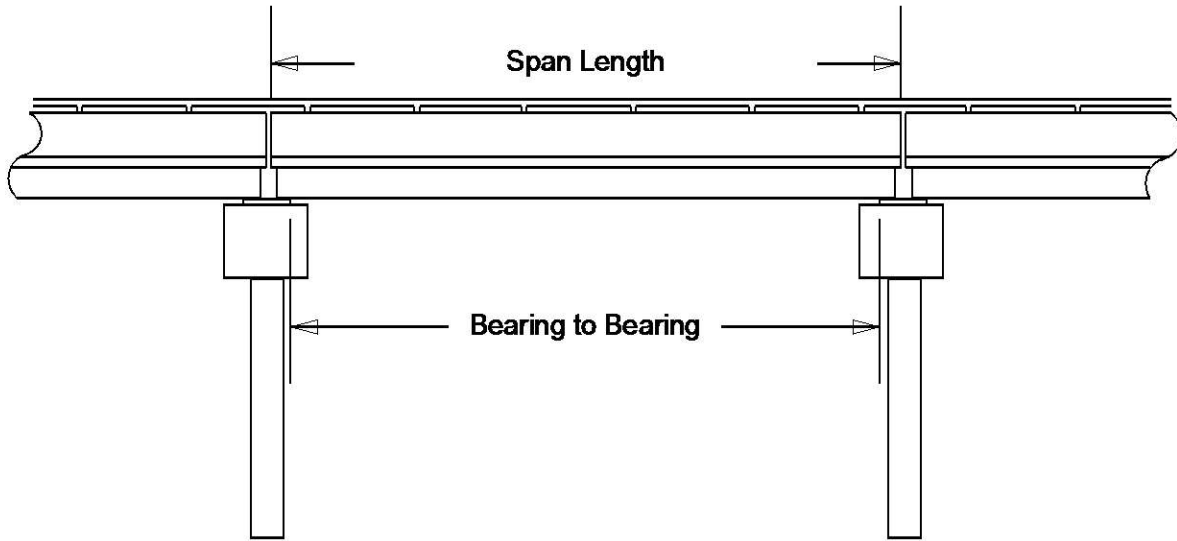
Spans

County: COLUMBUS

Structure No: 230175

Date: 08/13/2012

Inspected By: RDH



Span No	Span Length	Bearing to Bearing	Comments
1	18.167FT.	16.5 FT.	NBIS 69.333 FT.
2	18.167 FT.	17.5 FT.	
3	18.333 FT.	17.667 FT.	
4	18.333 FT.	16.667 FT.	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 230175 County: COLUMBUS Date: 08/13/2012 By: RDH

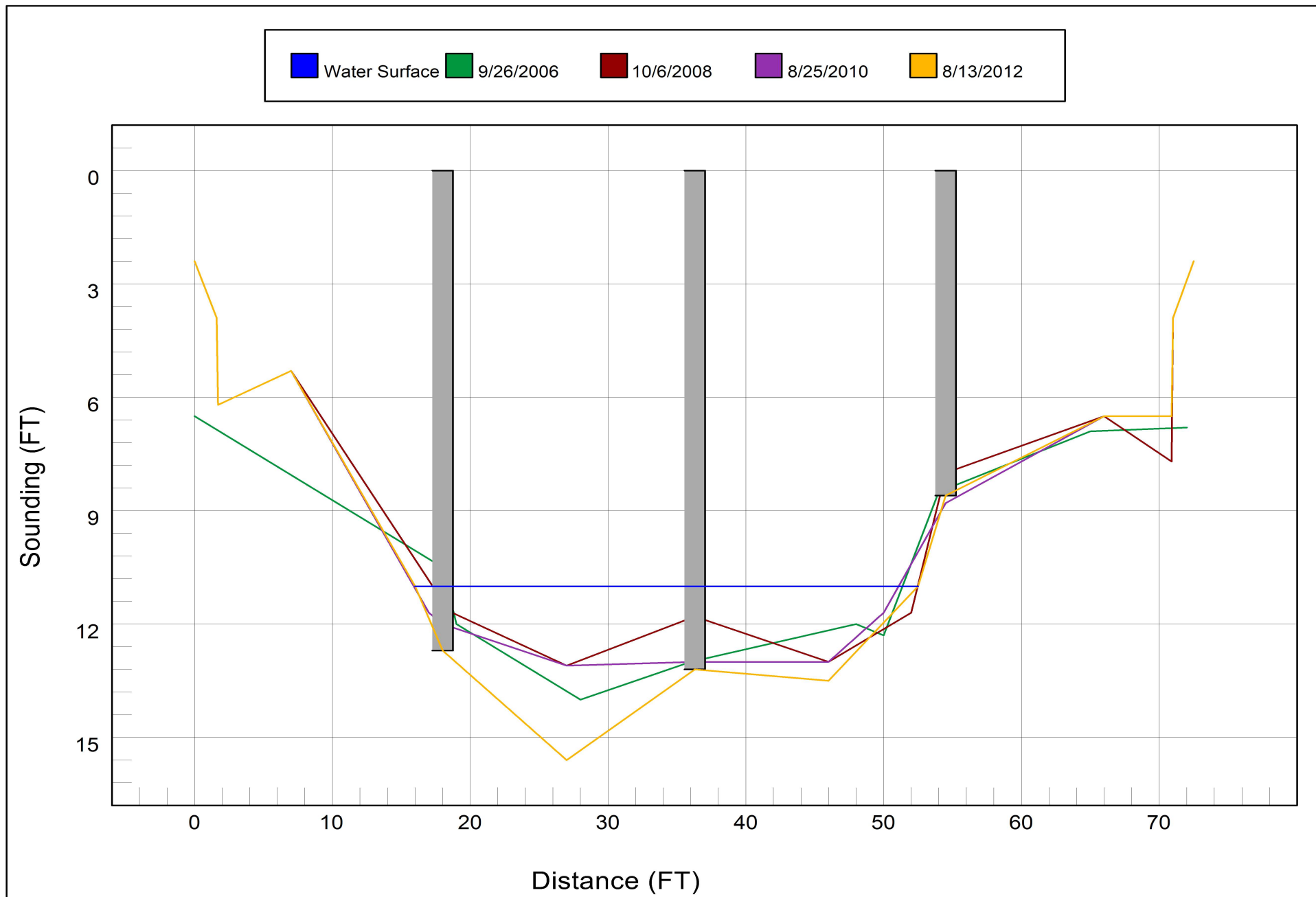
Record sounding from top of rail. Other location if needed: TOP OF RAIL

Distance from Highwater Mark to top of rail: 3.9 Location of Highwater Mark: TOP OF CAP

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.4	TOP OF BULKHEAD			
1.6	3.9	Top of Cap			
1.7	6.2	GROUND AT CAP	1.7	6.4	GROUND AT CAP
7	5.3				
16	11	WSWE (SOUTH)			
18	12.7	BENT 1	18	15.6	BENT 1
27	15.6				
36.3	13.2	BENT 2	36.3	11.9	BENT 2
46	13.5				
52.5	11	WSWE			
54.5	8.6	BENT 3	54.5	12.6	BENT 3
66	6.5				
70.9	6.5	GROUND AT CAP	70.9	6.7	GROUND AT CAP
71	3.9	Top of Cap			
72.5	2.4	TOP OF BULKHEAD			

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch



Roadway	17 ft. 4 in. WIDE	2 Paved Lanes	Looking East
Left Shoulder	4ft Wide		4ft Unpaved
Right Shoulder	4ft Wide		4ft Unpaved
Left Guardrail			
Right Guardrail			

MEASUREMENTS VERIFIED BY RLK 8/13/12

MEASUREMENTS VERIFIED BY RLK 8/25/10

Title

APPROACH ROADWAY

Description

LOOKING EAST

Bridge No: 230175

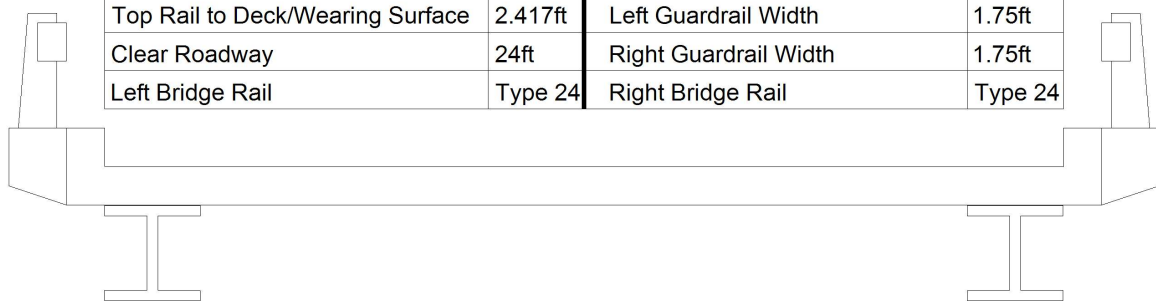
Drawn By: SLK

Date: 06/07/2006

File Name: S0326000036

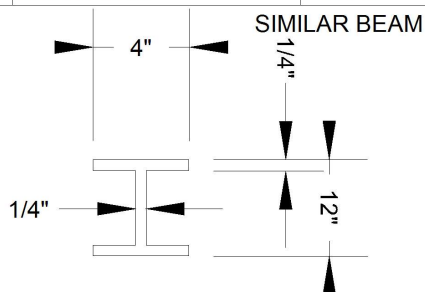
Bridge Inspection Field Sketch

Deck Width/Out to Out	25.333ft	Wearing Surface	
Between Rails	25.5ft	Median Width	
Curb Height	0.75ft	Median Height	
Top Rail to Deck/Wearing Surface	2.417ft	Left Guardrail Width	1.75ft
Clear Roadway	24ft	Right Guardrail Width	1.75ft
Left Bridge Rail	Type 24	Right Bridge Rail	Type 24



Measurements for Span #	1	ALL SPANS SIMILAR	
Deck Thickness	0.417	Left Overhang	0.521
Top of Rail to Bottom of Beam	3.833	Right Overhang	0.521

Beam No	Beam Type	Spacing	Comments
1	Steel I Beam		
2	Steel I Beam	2.21 ft.	
3	Steel I Beam	2.21 ft.	
4	Steel I Beam	2.21 ft.	
5	Steel I Beam	2.21 ft.	
6	Steel I Beam	2.21 ft.	
7	Steel I Beam	2.21 ft.	
8	Steel I Beam	2.21 ft.	
9	Steel I Beam	2.21 ft.	
10	Steel I Beam	2.21 ft.	
11	Steel I Beam	2.21 ft.	
12	Steel I Beam	2.21 ft.	



MEASUREMENTS VERIFIED BY RLK 8/13/12
MEASUREMENTS VERIFIED BY RLK 8/25/10

Title

SUPERSTRUCTURE

Description

SIMILAR SECTION

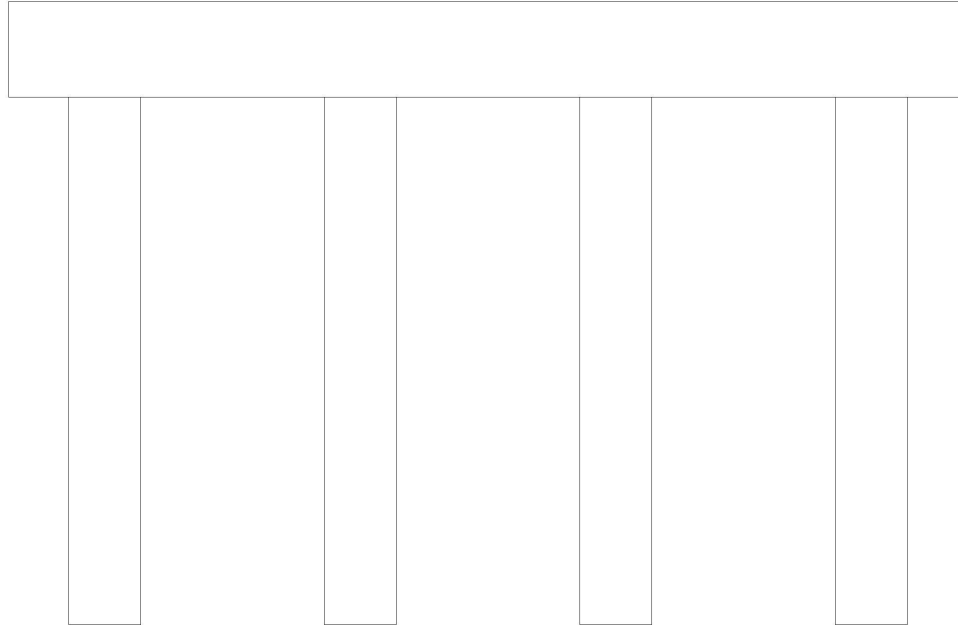
Bridge No: 230175

Drawn By: SLK

Date: 06/08/2006

File Name: S0326000037

Bridge Inspection Field Sketch



Bent #	1		
Cap - Pre-Cast			
Cap Size	27.5ft Long	2ft Wide	2ft High
Left Overhang	2.5ft	Lt Cap/Beam Overhang	1.33ft
Right Overhang	2.5ft	Rt Cap/Beam Overhang	1.33ft

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	7.5		12 IN.		Vertical
2	Wood or Timber	Pile Bent	7.5		12 IN.		Vertical
3	Wood or Timber	Post and Pedestal	7.5		12 IN.		Vertical
4	Wood or Timber	Pile Bent			12 IN.		Vertical

NOTE: R.C. REPAIR JACKETS AT PILE 2 AT EBT 1, P 3 AT BT 1, P 1,2, AND 3 AT BT3
NOTE: NO CROSSBRACING

MEASUREMENTS VERIFIED BY RLK 8/25/10 MEASUREMENTS VERIFIED BY RLK 8/13/12

Title		Description	
SUBSTRUCTURE		SIMILAR END / INTERIOR BENT	
Bridge No:	230175	Drawn By: SLK	Date: 06/08/2006
		File Name:	S0326000038



LOOKING EAST (PRINCESS ANN ROAD)



LOOKING EAST



NORTH SIDE, LOOKING EAST



NORTH END OF BENT 1 CAP



BENT 1



UPSTREAM NORTH, THRU SPAN 2



END BENT 1



END BENT 1



BENT 1 STANDARD JOINT



LOOKING WEST, OFF BRIDGE



LOOKING EAST, OFF BRIDGE



UPSTREAM NORTH



DOWNSTREAM SOUTH



LOOKING WEST



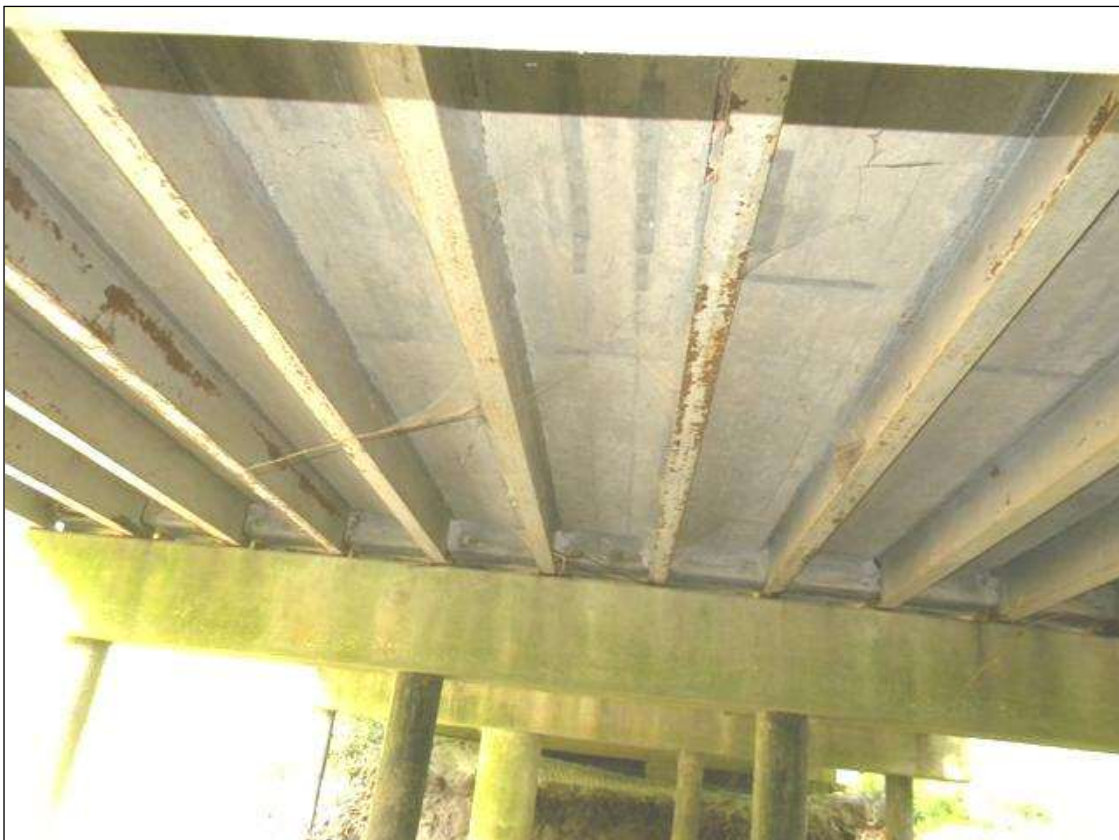
LOOKING WEST



SOUTH SIDE, LOOKING WEST



END BENT 2



SPAN 3 UNDERSIDE, ALL SPANS ARE SIMILAR



DOWNSTREAM SOUTH, THRU SPAN 3