NC DEPARTMENT OF TRANSPORTATION

OF TUNET

DIVISION OF HIGHWAYS

ATTENTION: SUPPLEMENTAL INSPECTION / IMPACT DAMAGE / SPAN 2 ONLY/ PAR REQUESTED

# Structure Safety Report

Supplemental Element Inspection

INSPECTION DATE: 11/03/2020

DIVISION: 13	COUNTY:	BUNCOMBE	STRUCT	URE NUMBER:	100387	FREQUENCY:	None
FACILITY CARRIED:	SR1727						
LOCATION: .15 MI.	W.JCT.US	19 BUS.					
FEATURE INTERSEC	CTED: US1	19,23					
LATITUDE: 35° 42	' 41.64"		LONGITUDE:	82° 33' 49.96"			
SUPERSTRUCTURE	:						
SUBSTRUCTURE:							
SPANS: 4 SPANS	S. SEE SP/	AN PROFILE SHEET	FOR SPAN DI	ETAILS			
FRACTURE CR	ITICAL			SCOUR CRITIC	CAL	SCOUR PLAN OF	ACTION
NBI GRADES:	DECK	7 SUPERSTRUC	TURE 5	SUBSTRUCTU	IRE 6	CULVERT N	
POSTED SV: Not F	Posted			POSTED TTS	T: Not Po	sted	

OTHER SIGNS PRESENT: DELINEATORS (4) NARROW BRIDGE (2) 14'-6"

			Sign notice issued for	d		Number Required
		- nite	NO	WEIGHT L	IMIT	0
			NO	DELINEAT	ORS	0
			NO	NARROW BR	RIDGE	0
	Di par (		NO	ONE LANE BE	RIDGE	0
			NO	LOW CLEAR	ANCE	0
			INSF	CTION OF PECTION ECTION HES PLANS	W-E	
LOOKING EAST						
INSPECTED BY ME.RENFRO	SIGNATURE	Mrs Mr	ASSISTED B	BA.WILCOX		

#### NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

12/10/2020

(1) STATE NAME NORTH CAROLINA BRIDGE		100387	SUFFICIENCY RATING	_	66.0
(8) STRUCTURE NUMBER (FEDERAL)	C	0210387	STATUS =	Functional	ly Obsolet
(5) INVENTORY ROUTE (ON/UNDER) ON	131	1017270		CLASSIFICATION	
(2) STATE HIGHWAY DEPARTMENT DISTRICT (3) COUNTY CODE (FEDERAL) 21 (4) PLACE CODE	-	13 71560	(112) NBIS BRIDGE SYSTEM		YE
(6) FEATURE INTERSECTED US19,23	-	11000	(104) HIGHWAY SYSTEM	Inventory Route not on NHS	5
(7) FACILITY CARRIED SR1727			(26) FUNCTIONAL CLASS	Urban Local	1 1
(9) LOCATION .15 MI.W.JCT.US19 BUS.			(100) STRAHNET HIGHWAY	Not a STRAHNET Route	•
		0.0	(101) PARALLEL STRUCTURE	No parallel structure exists	;
(12) BASE HIGHWAY NETWORK (13) LRS INVENTORY ROUTE & SUBROUTE		0	(102) DIRECTION OF TRAFFIC	2-way traffic	:
(16) LATITUDE 35° 42' 41.64" (17) LONGITUDE	82° 33	49.96"	(103) TEMPORARY STRUCTUR	RE	
	T SHARED		(110) DESIGNATED NATIONAL	NETWORK - on national network for trucks	;
(99) BORDER BRIDGE STRUCTURE NUMBER			(20) TOLL	On Free Road	l
STRUCTURE TYPE AND MATERIA			(21) MAINT -		
(43) STRUCTURE TYPE MAIN		Steel	(22) OWNER -		(
TYPE Stringer/Multi-beam or gi	irder CODE	302	(37) HISTORICAL SIGNIFICANO	)E -	
(44) STRUCTURE TYPE APPROACH				CONDITION	
TYPE	CODE		(58) DECK		
(45) NUMBER OF SPANS IN MAIN UNIT		4	(59) SUPERSTRUCTURE		
(46) NUMBER OF SPANS IN APPROACH		0	(60) SUBSTRUCTURE		
(107) DECK STRUCTURE TYPE	CODE	1	(61) CHANNEL & CHANNEL PR	ΟΤΕCTION	
(108)WEARING SURFACE/PROTECTIVE SYSTEM	OODL		(62) CULVERTS	oreonon	
(A) TYPE OF WEARING SURFACE	CODE	3			CODE
(A) TYPE OF WEARING SURFACE (B) TYPE OF MEMBRANE	CODE	3 0	(31) DESIGN LOAD	RATING AND POSTING HS 15	
(C) TYPE OF DECK PROTECTION	CODE	0	(63) OPERATING RATING MET		
	OODL	0	(64) OPERATING RATING -	HS-37	
AGE AND SERVICE		1002			,
(27) YEAR BUILT		1963	(65) INVENTORY RATING METI	HS-22	2
(106) YEAR RECONSTRUCTED		2013	(66) INVENTORY RATING		
(42) TYPE OF SERVICE ON -	Overpass St		(70) BRIDGE POSTING	No Posting Required	
OFF - Highw		61	(41) STRUCTURE OPEN, POST		
(28) LANES ON STRUCTURE 2 LANES UNDER ST	TRUCTURE	4	DESCRIPTION	Open, no restriction	
		7900		APPRAISAL	- CODE
(30) YEAR OF ADT 2016 (109) TRUCK ADT	PCT	7	(67) STRUCTURAL EVALUATIC	DN	
19) BYPASS OR DETOUR LENGTH		0.0	(68) DECK GEOMETRY		
GEOMETRIC DATA			(69) UNDERCLEARANCES, VEI	RT & HORIZ	
(48) LENGTH OF MAXIMUM SPAN (49) STRUCTURE LENGTH		73.0 276.0	(71) WATERWAY ADEQUACY		
(50) CURB OR SIDEWALK: LEFT 1.6 RIGHT		278.0 1.6	(72) APPROACH ROADWAY AL	IGNMENT	
(51) BRIDGE ROADWAY WIDTH, CURB TO CURB		28.0	(36) TRAFFIC SAFETY FEATUR	RES	00
(52) DECK WIDTH OUT TO OUT		33.3	(113) SCOUR CRITICAL BRIDG	ES	
(32) APPROACH ROADWAY WITH (W/ SHOULDERS)		23.0	PROP	OSED IMPROVEMENTS	
	ian CODE	0	(75) TYPE OF WORK	CO	DE
(34) SKEW 41 (35) STRUCTURE FLARE (10) INVENTORY ROUTE MIN VERT CLEAR	D	0 999.9	(76) LENGTH OF STRUCTURE	IMPROVEMENT	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		28.0	(94) BRIDGE IMPROVEMENT C	OST	
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9	(95) ROADWAY IMPROVEMEN	TCOST	
(54) MIN VERT UNDERCLEAR: REFERENCE	Н	14.5	(96) TOTAL PROJECT COST		
	Н	9.3	(97) YEAR OF IMPROVEMENT	COST ESTIMATE	
		18.1	(114) FUTURE ADT	12,800 YEAR OF FUTURE ADT	20-
38) NAVIGATION CONTROL -	CODE	N	(90) INSPECTION DATE	11/20 (91) FREQUENCY	. 2
111) PIER PROTECTION	CODE		(92) CRITICAL FEATURE INSPE		
39) NAVIGATION VERTICAL CLEARANCE	-	0.0	A) FRACTURE CRIT DET	AIL A)	
(116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR		0.0	B) UNDERWATER INSP	B)	
			C) OTHER SPECIAL INSP		
(40) NAVIGATION HORIZONTAL CLEARANCE		0.0	-,	σ,	

			n Vertical			đ	cation		fic	aily Traffic	Clearance			See N	lote Be	low	ay		System	Network
Span Number	Facility Carried	Inventory Route	Maximum Minimum Clearance	Milepoint	Base Highway	LRS Inventory Route	Functional Classification	Number of Lanes	Average Daily Traffic	Year of Average Da	Total Horizontal Cl	Reference Feature	Minimum Vertical Underclearance	Rigth Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highwa	Direction of Traffic	National Highway S	National Truck Net
	7	5	10	11	12	13	26	28	29	30	47	54A	54	55	56	69	100	102	104	110
2	US 19 E,US 23 E	21000190	14.5	0.0	1	20019	12	2	18500	2017	41.5	Н	14.5	7.5	19.3	3		1		
2	US 19 E,US 23 E	21000190	14.5		1	20019	12	2	18500	2017	41.5	н	14.5	7.5	19.3	3	0	1		
3	US 19 W,US 23 W	21000190	14.6		1	20019	12	2	18500	2017	43.3	н	14.5	9.3	18.1	3	0	1		
3	US 19 W,US 23 W	21000190	14.6		1	20019	12	2	18500	2017	43.3	н	14.5	9.3	18.1		o	1		

County: BUNCOMBE

Date: 11/03/2020

**Condition Photos** 



SCATTERED CRACKING IN CAP AT INT BENT 1 BENEATH BEAM 1 SPAN 2



DIAPHRAGM 1 BAY 1 SPAN 2 WELD BROKEN LOOSE ON THE BACK SIDE 3" LONG .(PAR)



Date: 11/03/2020

**Condition Photos** 

County: BUNCOMBE

Structure: 100387

BEAM 1 SPAN 2 BEAM SWEPT EASTWARD 1 1/2" (PAR)



BEAM 1 SPAN 2 POINT OF IMPACT 2' LONG X WITH 1/16" INDENTIONS AT 14'-6" OUT FROM INT. BENT 1(PAR)

County: BUNCOMBE

Date: 11/03/2020



DIAPHRAGM 1 BAY 1 SPAN 2 CRACK IN BASE OF DIAPHRAGM 3" LONG X 1/16" WIDE



DIAPHRAGM 1 BAY 1 SPAN 2 BOWED

County: BUNCOMBE

Date: 11/03/2020

**Condition Photos** 



BEAM 2 SPAN 2 POINT OF IMPACT 20" LONG X BOWED UPWARD 1 1/2" LEFT FLANGE AT 4'-3" OUT FROM INT. BENT 1



BEAM 2 SPAN 1 , 12" LONG X 1/16" DEEP SCRAPES ALONG THE BOTTOM FLANGE OF BEAM

County: BUNCOMBE

Date: 11/03/2020

**Condition Photos** 



BEAM 2 SPAN 1 SWEPT EASTWARD 1 1/2" (PAR)

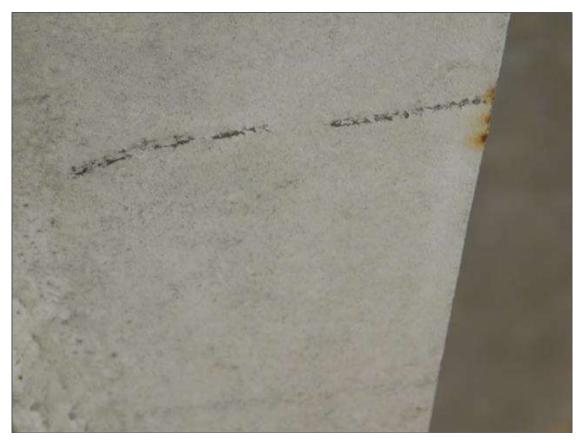


BEAM 2 SPAN 1 SCATTERED SCRAPES BOTTOM FLANGE OF BEAM 2

Date: 11/03/2020



BEAM 3 SPAN 1 SCATTERED SCRAPES ALONG THE WEB OF BEAM 3



BEAM 3 SPAN 1 SCATTERED SCRAPES ALONG THE BOTTOM FLANGE

Date: 11/03/2020



INT. BENT 1 CAP SPALLING BENEATH BEAM 3 AT THE BOTTOM OF CAP 3'-3" LONG X 11" HIGH X 8" DEEP WITH 1 REINFORCING BAR EXPOSED (PAR)



INT. BENT 1 CAP SPALLING BENEATH BEAM 3 AT THE BOTTOM OF CAP 3'-3" LONG X 11" HIGH X 8" DEEP WITH 1 REINFORCING BAR EXPOSED (PAR)

Date: 11/03/2020

**Condition Photos** 



INT. BENT 1 CAP SPALLING BENEATH BEAM 3 AT THE BOTTOM OF CAP 3'-3" LONG X 11" HIGH X 8" DEEP WITH 1 REINFORCING BAR EXPOSED (PAR)



INT. BENT 1 CAP SPALL 26" LONG X 9" HIGH X5" DEEP AT 8'-6" FROM EAST END BAY 3 WITH 1 REINFORCING BAR EXPOSED (PAR)

Date: 11/03/2020

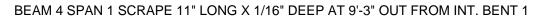
**Condition Photos** 



INT. BENT 1 CAP SPALL 26" LONG X 9" HIGH X5" DEEP AT 8'-6" FROM EAST END BAY 3 WITH 1 REINFORCING BAR EXPOSED (PAR)



COLUMN 3 INT. BENT 1 SPALL 2'-10" HIGH X 2'88" LONG X 7" DEEP AT THE TOP OF NEW SECTION (PAR)

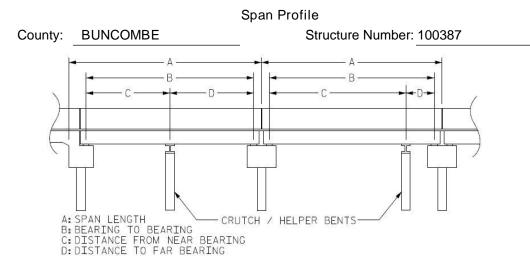






COLUMN 3 INT. BENT 1 SPALL 2'-10" HIGH X 2'88" LONG X 7" DEEP AT THE TOP OF NEW SECTION (PAR)

## Structure Data Worksheet



Span Number	Span Length	Bearing to Bearing	Crutch/ Helper Bent	Distance to Near Bearing	Distance to Far Bearing
1	62.500	61.500			
2	73.500	72.500			
3	73.500	72.500			
4	66.500	65.500			



### EAST CLEARANCE

Route Number: 21000	190	Route Na	ame: l	US 19 E,US 23 E		Reference Feature:	н				
Minimum Vertical Clearance 14.500 feet Maximum Minimum Vertical Clearance 14.500 feet											
Total Horizontal Clearance 41.500       feet       Lateral Clearances: Left: 19.300 feet       Right 7.500       feet											
✓Base Highway Network LRS Inventory Route, Sub Route Number 20019											
Milepost: 0.000	Number	of Lanes:	2	2 ADT: 18500 Year of ADT: 2017 Percentage of Trucks: 12							
✓ National Highway System											
Functional Classification 12 Local Principal Arterial - Other Direction of Traffic: 1 1 - way traffic											

Structure Photos



LOOKING EAST



OVERVIEW OF DAMAGE SPAN 2 INT. BENT1

Date: 11/03/2020

Structure Photos



COLUMN 3 INT. BENT 1 SPALL 2'-10" HIGH X 2'-8" LONG X 7" DEEP AT THE TOP OF NEW SECTION (PAR)



LOW CLEARANCE SIGN WEST OF BRIDGE 300' FUTURE I-26

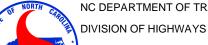
County: BUNCOMBE

Date: 11/03/2020

Structure Photos



LOW CLEARANCE SIGN WEST OF BRIDGE 300' FUTURE I-26



NC DEPARTMENT OF TRANSPORTATION

STRUCTURE MANAGEMENT UNIT

# Structure Safety Report

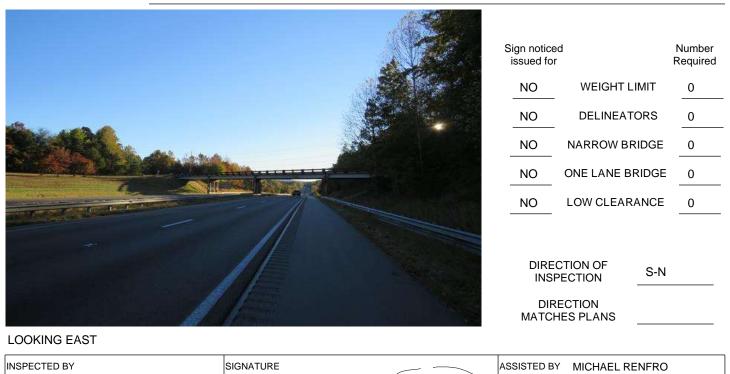
Supplemental Element Inspection

INSPECTION DATE: 10/26/2021

DIVISION: 13	COUNTY:	BURKE	STRUCTURE NUMBER	R: 110129	FREQUE	NCY:	None	
FACILITY CARRIED:	SR1102				MILE POST: 10	0.85		
LOCATION: .1 MI.S.	JCT.SR11	59						
FEATURE INTERSEC	CTED: I-40							
LATITUDE: 35° 43'	5.82"	LON	NGITUDE: 81° 43' 57.5	3"				
SUPERSTRUCTURE	REINFO	ORCED CONCRETE FLOO	OR ON I-BEAMS					
SUBSTRUCTURE: E	.BTS:RC (	CAPS/PPC PILES;INT.BTS	S:RCP&B/PILE FOOTIN	IGS				
SPANS: 4 SPANS	S. SEE SP/	AN PROFILE SHEET FOR	SPAN DETAILS					
FRACTURE CRI	TICAL			TICAL		AN OF	ACTION	
GRADES: (Inspector	/NBI Coding)	DECK 5/5 SUPER	STRUCTURE 6/6	SUBSTRU	JCTURE 5/5	CUL	VERT N/N	
		Not Posted	POSTED T	ST:		Not F	Posted	

#### OTHER SIGNS PRESENT: NONE

MICHAEL CARTER



#### NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

01/04/2022

IDENTIFICATION         (1) STATE NAME NORTH CAROLINA       BRIDGE       110129         (3) STRUCTURE NUMBER (FEDERAL)       0230129         (5) INVENTORY ROUTE (ONUNDER) ON       131011020         (2) STATE HORWAY DEPARTMENT DISTRICT       131         (3) COUNTY CODE (FEDERAL)       23         (3) COUNTY CODE (FEDERAL)       23         (4) STRUETURE TRESECTED       140         (7) FACILITY CARRED       SR1102         (11) MILEPOINT       100.9         (12) LASS INVENTORY ROUTE & SUBROUTE       100.9         (13) LASI INVENTORY ROUTE & SUBROUTE       100.9         (14) LASI INVENTORY ROUTE & SUBROUTE       100.9         (15) LASI INVENTORY ROUTE & SUBROUTE       101.9         (16) LATIONE       31° 43° 5.3°         (17) LASI INVENTORY ROUTE & SUBROUTE       101.9         (18) ADREE BRIDGE STATE CODE       PERCENT SHARED         (19) BORDER BRIDGE STATE CODE       PERCENT SHARED         (19) STRUCTURE TYPE AND MATERIAL       (21) MAINT -         (24) STRUCTURE TYPE AND MATERIAL       (21) MAINT -         (24) STRUCTURE TYPE AND MATERIAL       (22) ONNER -         (14) STRUCTURE TYPE AND MATERIAL       (22) ONNER -         (16) NUMBER OF SPANS IN MAIN UNIT       4         (44) STRUCTURE TYPE AN	DE YES 0 166 0 N 2 0 3 01 3 01 5
(8) STRUCTURE NUMBER (FEDERAL)       0230129       STATUS =       Functionally Obs.         (6) INVENTORY ROUTE (ONUNDER) ON       131011020       CLASSIFICATION       CO         (3) COUNTY CODE (FEDERAL)       23       (4) PLACE CODE       44400       (104) HIGHWAY DEPARTMENT DISTRICT       CO         (3) COUNTY CODE (FEDERAL)       23       (4) PLACE CODE       44400       (104) HIGHWAY SYSTEM       Inventory Route not on NHS         (6) FACILITY CARRIED       SR1102       (102) STRAHNET HIGHWAY       Not a STRAHNET Route       (104) HIGHWAY SYSTEM       Inventory Route not on NHS         (12) DAS IGHOWAY DEPART       STRUCTURE       (100) STRAHNET HIGHWAY       Not a STRAHNET Route       (101) PARALLEL STRUCTURE       No parallel structure exists         (13) LES INVENTORY ROUTE & SUBROUTE       0       (102) DIRECTION OF TRAFFIC       2-way traffic         (16) LATITUDE       35° 43° 5.82°       (17) LONGITUDE       81° 43° 57.53°       (100) DESIGNATED NATIONAL NETWORK - on national network for trucks         (98) BORDER BRIDGE STRUCTURE NUMBER       FUNCTURE TYPE AND MATERIAL       Steel       (20) TOLL       On Free Road         (44) STRUCTURE TYPE AND MATERIAL       Steel       (20) TOLL       CONDITION       CO         (44) STRUCTURE TYPE AND MATERIAL       (58) DECK       (58) DECK       (58) DECK       (59) SUPERSTRUC	DE YES 0 16 0 N 2 0 3 01 01 5 DE 5 6
(2) STATE HIGHWAY DEPARTMENT DISTRICT       13         (3) COUNTY CODE (FEDERAL)       23       (4) PLACE CODE       44400         (12) NBIS BRIDGE SYSTEM       Inventory Route not on NHS         (104) HIGHWAY SYSTEM       Inventory Route not on NHS         (105) FEATURE INTERSECTED       I-40         (104) HIGHWAY SYSTEM       Inventory Route not on NHS         (104) HIGHWAY SYSTEM       Inventory Route not on NHS         (105) FEATURE INTERSECTED       I-40         (101) TARLIEL STRUCTURE       Vban Minor Collector         (112) NBIS BRIDGE SYSTEM       (100) FTRAFFIC         (12) BASE HIGHWAY NETWORK       0         (13) LSE INVENTORY ROUTE & SUBROUTE       (101) PARALLEL STRUCTURE         (16) LATITUDE       35* 43' 5.82°         (17) DEDER BRIDGE STRUCTURE NUMBER       (101) DESIGNATED NATIONAL NETWORK - on national network for trucks         (19) BORDER BRIDGE STRUCTURE NUMBER       (20) TOLL         (14) STRUCTURE TYPE AND MATERIAL       (21) MAINT -         (22) OWNER -       (21) MAINT -         (24) STRUCTURE TYPE AND MATERIAL       (22) OWNER -         TYPE       Stringer/Multi-beam or girder CODE       302         (44) STRUCTURE TYPE AND MATERIAL       (22) OWNER -         (17) DECK STRUCTURE TYPE       CODE       (63) DECK	YES 0 166 0 N 2 0 3 01 01 5 DE 5 6
(3) COUNTY CODE (FEDERAL)       23       (4) PLACE CODE       44400         (10) FACILITY CARRIED       140       (104) HIGHWAY SYSTEM       Inventory Route not on NHS         (10) FACILITY CARRIED       SX1102       (26) FUNCTIONAL CLASS       Urban Minor Collector         (11) MILEPOINT       100.9       (100) STRAHNET HIGHWAY       Not a STRAHNET Route       (101) PARALLEL STRUCTURE       No parallel structure exists         (13) LRS INVENTORY ROUTE & SUBROUTE       (101) PARALLEL STRUCTURE       No parallel structure exists       (102) DIRECTION OF TRAFFIC       2-way traffic         (13) LRS INVENTORY ROUTE & SUBROUTE       (101) DESIGNATED NATIONAL NETWORK - on national network for trucks       (20) TOLL       On Free Road         (98) BORDER BRIDGE STATE CODE       PERCENT SHARED       (21) TOLL       On Free Road         (14) STRUCTURE TYPE AND MATERIAL       (22) OWNER -       (21) MAINT -       (22) OWNER -         (14) STRUCTURE TYPE APPROACH       CODE       (58) DECK       (37) HISTORICAL SIGNIFICANCE -       (CONDITION       CO         (14) STRUCTURE TYPE APPROACH       0       (60) SUBSTRUCTURE       (60) SUBSTRUCTURE       (21) MAINT -       (22) OWNER -         (14) STRUCTURE TYPE APPROACH       0       (60) SUBSTRUCTURE       (60) SUBSTRUCTURE       (CO       (107) DECK STRUCTURE TYPE       CODE       (60) SUBSTRUCTURE<	0 16 0 N 2 0 3 01 01 5 DE 5 6
(6) FEATURE INTERSECTED       1-40       (104) HIGHWAY SYSTEM       Inventory Route not on NHS         (7) FACILITY CARRIED       SR1102       (28) FUNCTIONAL CLASS       Urban Minor Collector         (9) LOCATION       .1 MLS.JCT.SR1159       (100) STRAHNET HIGHWAY       Not a STRAHNET Route         (11) MLEPOINT       100.9       (101) PARALLEL STRUCTURE       No ta STRAHNET Route         (12) DASE HIGHWAY NETWORK       0       (102) DIRECTION OF TRAFFIC       2-way traffic         (13) LRS INVENTORY ROUTE & SUBROUTE       0       (103) TEMPORARY STRUCTURE       (104) PARALLEL STRUCTURE       No parallel structure exists         (19) BORDER BRIDGE STATE CODE       PERCENT SHARED       0       (103) TEMPORARY STRUCTURE       (104) DESIGNATED NATIONAL NETWORK - on national network for trucks         (99) BORDER BRIDGE STRUCTURE NUMBER       Steel       (22) TOLL       On Free Road         TYPE         STRUCTURE TYPE AND MATERIAL       (21) MAINT -         (24) STRUCTURE TYPE AND MATERIAL       (22) OWNER -         (14) STRUCTURE TYPE AND MATERIAL       Steel       (22) OWNER -         (44) STRUCTURE TYPE AND MATERIAL       (22) OWNER -       (21) MAINT -         (14) STRUCTURE TYPE AND MATERIAL       (63) DECK       CONDITION       CO         (14) STRUCTURE TYPE AND MATERIAL	16 0 N 2 0 3 01 5 DE 5 6
(7) FACILITY CARRIED       SR1102       (26) FUNCTIONAL CLASS       Urban Minor Collector         (9) LOCATION       .1 MI.S.JCT.SR1159       (100) STRAHNET HIGHWAY       Not a STRAHNET Route         (11) MILEPOINT       100-9       (101) PARALLEL STRUCTURE       No parallel structure exists         (12) BASE HIGHWAY NETWORK       0       (102) DIRECTION OF TRAFFIC       2-way traffic         (13) LRS INVENTORY ROUTE & SUBROUTE       (103) TEMPORARY STRUCTURE       (103) TEMPORARY STRUCTURE         (98) BORDER BRIDGE STATE CODE       PERCENT SHARED       (110) DESIGNATED NATIONAL NETWORK - on national network for trucks         (99) BORDER BRIDGE STRUCTURE NUMBER       (20) TOLL       On Free Road         (14) STRUCTURE TYPE AND MATERIAL       (21) MAINT -         (43) STRUCTURE TYPE APPROACH       (22) OWNER -         TYPE       Stringer/Multi-beam or girder       CODE         (44) STRUCTURE TYPE APPROACH       (69) SUBSTRUCTURE         TYPE       CODE       (58) DECK         (45) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE         (107) DECK STRUCTURE TYPE       CODE       (60) SUBSTRUCTURE         (107) DECK STRUCTURE TYPE       CODE       (61) CHANNEL & CHANNEL PROTECTION         (108)WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       LOAD RATING AND POSTING       KO	0 N 2 01 01 5 DE 5 6
(11) MILEPOINT       100.9       (101) PARALLEL STRUCTURE       No parallel structure exists         (12) BASE HIGHWAY NETWORK       0       (101) PARALLEL STRUCTURE       No parallel structure exists         (13) LRS INVENTORY ROUTE & SUBROUTE       0       (102) DIRECTION OF TRAFFIC       2-way traffic         (16) LATITUDE       35* 43' 5.82*       (17) LONGITUDE       81* 43' 57.53*       (103) TEMPORARY STRUCTURE         (98) BORDER BRIDGE STATE CODE       PERCENT SHARED       (101) DESIGNATED NATIONAL NETWORK - on national network for trucks         (99) BORDER BRIDGE STRUCTURE TYPE AND MATERIAL       (21) MAINT -       (22) OWNER -         (43) STRUCTURE TYPE AND MATERIAL       Steel       (22) OWNER -         (143) STRUCTURE TYPE APPROACH       (22) OWNER -       CONDITION       CO         (144) STRUCTURE TYPE APPROACH       (58) DECK       CONDITION       CO         (145) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE       CO       (60) SUBSTRUCTURE         (161) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION       (62) CULVERTS         (161) OPE WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       LOAD RATING AND POSTING       HS 15         (A) TYPE OF MEMBRANE       CODE       (63) OPERATING RATING AND POSTING       HS 42       (27) YEAR BUILT       <	N 2 0 3 01 5 DE 5 6
(12) BASE HIGHWAY NETWORK       0       (10) 1 AVAILLE DINOTION C       The parallel structure integration exists         (13) LRS INVENTORY ROUTE & SUBROUTE       (102) DIRECTION OF TRAFFIC       2-way traffic         (13) LRS INVENTORY ROUTE & SUBROUTE       (102) DIRECTION OF TRAFFIC       2-way traffic         (13) LRS INVENTORY ROUTE & SUBROUTE       (102) DIRECTION OF TRAFFIC       2-way traffic         (13) LRS INVENTORY ROUTE & SUBROUTE       (102) DIRECTION OF TRAFFIC       2-way traffic         (13) DESIGNATED NATIONAL NETWORK - on national network for trucks       (103) TEMPORARY STRUCTURE       (104) DESIGNATED NATIONAL NETWORK - on national network for trucks         (99) BORDER BRIDGE STRUCTURE TYPE AND MATERIAL       (21) MAINT -       (21) MAINT -       (21) MAINT -         (43) STRUCTURE TYPE AND MATERIAL       Steel       (21) MAINT -       (22) OWNER -         TYPE       Stringer/Multi-beam or girder       CODE       302       (37) HISTORICAL SIGNIFICANCE -         (44) STRUCTURE TYPE APPROACH       (58) DECK       (45) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE         (46) NUMBER OF SPANS IN APPROACH       0       (60) SUBSTRUCTURE       (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION         (108) WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       LOAD RATING AND POSTING       KC	2 0 01 01 5 DE 5 6
(13) LRS INVENTORY ROUTE & SUBROUTE       (102) DIRECTION OF TRAFFIC       2-way traffic         (13) LRS INVENTORY ROUTE & SUBROUTE       (102) DIRECTION OF TRAFFIC       2-way traffic         (14) LATITUDE       35° 43° 5.82° (17) LONGITUDE       81° 43° 57.53°       (103) TEMPORARY STRUCTURE         (99) BORDER BRIDGE STATE CODE       PERCENT SHARED       (103) TEMPORARY STRUCTURE       On Free Road         (93) STRUCTURE TYPE AND MATERIAL       (21) MAINT -       (22) OWNER -       (21) MAINT -         (43) STRUCTURE TYPE AND MATERIAL       (22) OWNER -       (23) THISTORICAL SIGNIFICANCE -       (44) STRUCTURE TYPE APPROACH       (20) ECK         TYPE       Stringer/Multi-beam or girder       CODE       302       (37) HISTORICAL SIGNIFICANCE -       (24)         (44) STRUCTURE TYPE APPROACH       (60) SUBSTRUCTURE       CONDITION       CO       CO         (45) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE       (60) SUBSTRUCTURE         (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION       (62) CULVERTS         (108) WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       (63) OPERATING AND POSTING       HS 15         (6) TYPE OF MEMBRANE       CODE       (31) DESIGN LOAD       HS 15       CO         (6) TYPE OF DECK PROTECTION       CODE       <	0 3 01 5 DE 5 6
(16) LATITUDE       35° 43` 5.82°       (17) LONGITUDE       81° 43` 57.53°       (103) TEMPORARY STRUCTURE         (98) BORDER BRIDGE STATE CODE       PERCENT SHARED       (101) DESIGNATED NATIONAL NETWORK - on national network for trucks         (99) BORDER BRIDGE STRUCTURE NUMBER       (20) TOLL       On Free Road         (43) STRUCTURE TYPE AND MATERIAL       (22) OWNER -         (43) STRUCTURE TYPE MAIN       Steel       (22) OWNER -         TYPE       Stringer/Multi-beam or girder       CODE       302         (44) STRUCTURE TYPE APPROACH       (37) HISTORICAL SIGNIFICANCE -       CONDITION       CO         TYPE       CODE       (58) DECK       CONDITION       CO         (45) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE       CONDITION       CO         (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION       (103) MEMBRANE       (20) ULVERTS         (A) TYPE OF WEARING SURFACE       CODE       0       (31) DESIGN LOAD       HS 15       CO         (B) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -       Load Factor	3 01 01 5 DE 5 6
(98) BORDER BRIDGE STATE CODE       PERCENT SHARED       (110) DESIGNATED NATIONAL NETWORK - on national network for trucks         (99) BORDER BRIDGE STRUCTURE NUMBER       (20) TOLL       On Free Road         (43) STRUCTURE TYPE AND MATERIAL       (21) MAINT -         (43) STRUCTURE TYPE MAIN       Steel       (22) OWNER -         TYPE       Stringer/Multi-beam or girder       CODE       302       (37) HISTORICAL SIGNIFICANCE -         (44) STRUCTURE TYPE APPROACH       CODE       (58) DECK       CONDITION       CO         TYPE       CODE       CODE       (58) DECK       CO       CO         (45) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE       CO       CO         (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION       (62) CULVERTS         (A) TYPE OF WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       LOAD RATING AND POSTING       HS 15         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -       Load Factor       HS-42	3 01 01 5 DE 5 6
(99) BORDER BRIDGE STRUCTURE NUMBER       (20) TOLL       On Free Road         (43) STRUCTURE TYPE AND MATERIAL       (21) MAINT -       (22) OWNER -         (43) STRUCTURE TYPE MAIN       Steel       (22) OWNER -         TYPE       Stringer/Multi-beam or girder       CODE       302       (37) HISTORICAL SIGNIFICANCE -         (44) STRUCTURE TYPE APPROACH       CODE       CODE       (58) DECK       CO         (45) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE       CO         (46) NUMBER OF SPANS IN APPROACH       0       (60) SUBSTRUCTURE       CO         (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION       CO         (108)WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       LOAD RATING AND POSTING       HS 15       CO         (A) TYPE OF MEMBRANE       CODE       0       (63) OPERATING RATING METHOD -       Load Factor         (A) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor         (27) YEAR BUILT       1956       (55) INVENTORY RATING METHOD -       HS-42	01 01 5 DE 5 6
STRUCTURE TYPE AND MATERIAL       (21) MAINT -         (43) STRUCTURE TYPE MAIN       Steel         TYPE       Stringer/Multi-beam or girder       CODE       302         (44) STRUCTURE TYPE APPROACH       (22) OWNER -       (37) HISTORICAL SIGNIFICANCE -         (44) STRUCTURE TYPE APPROACH       CODE       (58) DECK         (45) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE         (46) NUMBER OF SPANS IN APPROACH       0       (60) SUBSTRUCTURE         (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION         (108)WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       CO         (A) TYPE OF MEMBRANE       CODE       0       (31) DESIGN LOAD       HS 15         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -       HS-42	01 5 DE 5 6
(43) STRUCTURE TYPE AND MATERIAL       Steel       (22) OWNER -         TYPE       Stringer/Multi-beam or girder       CODE       302       (37) HISTORICAL SIGNIFICANCE -         (44) STRUCTURE TYPE APPROACH       CODE       (58) DECK       CONDITION       CO         TYPE       CODE       (59) SUPERSTRUCTURE       CONDITION       CO         (46) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE       (60) SUBSTRUCTURE         (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION       (62) CULVERTS         (108)WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       LOAD RATING AND POSTING       CO         (B) TYPE OF WEARING SURFACE       CODE       0       (31) DESIGN LOAD       HS 15         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -       HS-42	01 5 DE 5 6
TYPE       Stringer/Multi-beam or girder       CODE       302       (37) HISTORICAL SIGNIFICANCE -         (44) STRUCTURE TYPE APPROACH       CODE       (58) DECK       CONDITION       CO         TYPE       CODE       (58) DECK       (59) SUPERSTRUCTURE       CO         (46) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE       CO       CO         (46) NUMBER OF SPANS IN APPROACH       0       (60) SUBSTRUCTURE       (61) CHANNEL & CHANNEL PROTECTION       CO         (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION       CO         (108)WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       CO       CO       CO         (A) TYPE OF WEARING SURFACE       CODE       6       LOAD RATING AND POSTING       CO         (B) TYPE OF MEMBRANE       CODE       0       (33) OPERATING RATING METHOD -       Load Factor         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -       HS-42       CO	5 DE 5 6
(44) STRUCTURE TYPE APPROACH       CODE       (58) DECK         TYPE       CODE       (58) DECK         (45) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE         (46) NUMBER OF SPANS IN APPROACH       0       (60) SUBSTRUCTURE         (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION         (108)WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       (62) CULVERTS         (A) TYPE OF WEARING SURFACE       CODE       0       (31) DESIGN LOAD       HS 15         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -       HS-42	DE 5
TYPE       CODE       (58) DECK         (45) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE         (46) NUMBER OF SPANS IN APPROACH       0       (60) SUBSTRUCTURE         (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION         (108)WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       (62) CULVERTS         (A) TYPE OF WEARING SURFACE       CODE       6       LOAD RATING AND POSTING       CO         (B) TYPE OF MEMBRANE       CODE       0       (31) DESIGN LOAD       HS 15       CO         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor         AGE AND SERVICE       (64) OPERATING RATING -       HS-42         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -	5 6
(45) NUMBER OF SPANS IN MAIN UNIT       4       (59) SUPERSTRUCTURE         (46) NUMBER OF SPANS IN APPROACH       0       (60) SUBSTRUCTURE         (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION         (108)WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       (62) CULVERTS         (A) TYPE OF WEARING SURFACE       CODE       6       LOAD RATING AND POSTING       CO         (B) TYPE OF MEMBRANE       CODE       0       (31) DESIGN LOAD       HS 15       CO         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor       HS 42         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -       HS 42	6
(46) NUMBER OF SPANS IN APPROACH       0       (60) SUBSTRUCTURE         (107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION         (108)WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       (62) CULVERTS         (A) TYPE OF WEARING SURFACE       CODE       6       LOAD RATING AND POSTING       CO         (B) TYPE OF MEMBRANE       CODE       0       (31) DESIGN LOAD       HS 15       CO         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor       HS 42         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -       HS 42	
(107) DECK STRUCTURE TYPE       CODE       1       (61) CHANNEL & CHANNEL PROTECTION         (108)WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS       (62) CULVERTS         (A) TYPE OF WEARING SURFACE       CODE       6       LOAD RATING AND POSTING       CO         (B) TYPE OF MEMBRANE       CODE       0       (31) DESIGN LOAD       HS 15       CO         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor         AGE AND SERVICE       (64) OPERATING RATING -       HS-42         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -	5
(108)WEARING SURFACE/PROTECTIVE SYSTEM       (62) CULVERTS         (A) TYPE OF WEARING SURFACE       CODE       6       LOAD RATING AND POSTING       CO         (B) TYPE OF MEMBRANE       CODE       0       (31) DESIGN LOAD       HS 15       HS 15         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor       HS-42         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -       HS-42	
(A) TYPE OF WEARING SURFACE       CODE       6       LOAD RATING AND POSTING       CO         (B) TYPE OF MEMBRANE       CODE       0       (31) DESIGN LOAD       HS 15       CO         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor       Load Factor         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -       HS-42	N
(B) TYPE OF MEMBRANE       CODE       0       (31) DESIGN LOAD       HS 15         (C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor        AGE AND SERVICE	N
(C) TYPE OF DECK PROTECTION       CODE       0       (63) OPERATING RATING METHOD -       Load Factor         AGE AND SERVICE       (64) OPERATING RATING -       HS-42         (27) YEAR BUILT       1956       (65) INVENTORY RATING METHOD -       HS-42	
AGE AND SERVICE         (64) OPERATING RATING -         HS-42           (27) YEAR BUILT         1956         (65) INVENTORY RATING METHOD -         HS-42	3
(27) YEAR BUILT 1956 (65) INVENTORY RATING METHOD -	1
	75
(106) YEAR RECONSTRUCTED 0. (66) INVENTORY RATING HS-25	1
	45
(42) TYPE OF SERVICE ON - Highway (70) BRIDGE POSTING No Posting Required	5
OFF - Highway CODE 11 (41) STRUCTURE OPEN, POSTED, OR CLOSED	A
(28) LANES ON STRUCTURE 2 LANES UNDER STRUCTURE 4 DESCRIPTION Open, no restriction	
(29) AVERAGE DAILY TRAFFIC 2000 APPRAISAL CO	DE
(30) YEAR OF ADT 2019 (109) TRUCK ADT PCT 6 (67) STRUCTURAL EVALUATION	5
(19) BYPASS OR DETOUR LENGTH 7.0 (68) DECK GEOMETRY	5
GEOMETRIC DATA (69) UNDERCLEARANCES, VERT & HORIZ	3
(48) LENGTH OF MAXIMUM SPAN 69.0 (71) WATERWAY ADEQUACY	Ν
(49) STRUCTURE LENGTH         272.0         (72) APPROACH ROADWAY ALIGNMENT           (50) CURB OR SIDEWALK: LEFT         1.6         1.6	8
(50) CORD OR SIDEWARK, LET T 1.0 RIGHT 1.0 (36) TRAFFIC SAFETY FEATURES (36) TRAFFIC SAFETY FEATURES	0111
(52) DECK WIDTH OUT TO OUT 33.5 (113) SCOUR CRITICAL BRIDGES	Ν
(32) APPROACH ROADWAY WITH (W/ SHOULDERS) 25.0 PROPOSED IMPROVEMENTS	
(33) BRIDGE MEDIAN No median CODE 0 (75) TYPE OF WORK CODE	
(34) SKEW       42       (35) STRUCTURE FLARED       0       (76) LENGTH OF STRUCTURE IMPROVEMENT         (10) INVENTORY ROUTE MIN VERT CLEAR       999.9       991.9	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 28.0 (94) BRIDGE IMPROVEMENT COST	
(53) MIN VERT CLEAR OVER BRIDGE RDWY 999.9 (95) ROADWAY IMPROVEMENT COST	
(54) MIN VERT UNDERCLEAR: REFERENCE H 14.8 (96) TOTAL PROJECT COST	
(55) MIN LAT UNDERCLEARANCE RT: REFERENCE H 11.0 (97) YEAR OF IMPROVEMENT COST ESTIMATE	
(56) MIN LAT UNDERCLEARANCE LT: 12.8 (114) FUTURE ADT 12.8 (114) FUTURE ADT 10.8 10.	2040
NAVIGATION DATA          INSPECTION           (38) NAVIGATION CONTROL -         CODE         N         (90) INSPECTION DATE         08/21         (91) FREQUENCY	24
(111) PIER PROTECTION CODE (92) CRITICAL FEATURE INSPECTION (93) CFI DATE	
(39) NAVIGATION VERTICAL CLEARANCE 0.0 A) FRACTURE CRIT DETAIL A)	
(116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR 0.0 B) UNDERWATER INSP B)	
(40) NAVIGATION HORIZONTAL CLEARANCE 0.0 C) OTHER SPECIAL INSP C)	

			Vertical				on			Traffic	arance			See N	ote Be	low			System	¥
Span Number	Facility Carried	Inventory Route	Maximum Minimum V Clearance	Milepoint	Base Highway	LRS Inventory Route	Functional Classification	Number of Lanes	Average Daily Traffic	Year of Average Daily	Total Horizontal Clear	Reference Feature	Minimum Vertical Underclearance	Rigth Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway	Direction of Traffic	National Highway Sys	National Truck Network
	7	5	10	11	12	13	26	28	29	30	47	54A	54	55	56	69	100	102	104	110
2	I 40 EBL	11000400	14.8	100.9	1	10040	11	2	17000	2015	43.0	н	14.8	11.0	12.8	3		1		
2	I 40 E	11000400	14.8	100.9	1	10040	11	2	17000	2015	43.0	н	14.8	11.0	12.8	3	1	1		
3	I 40 W	11000400	15.8	100.9	1	10040	11	2	17000	2015	48.3	н	15.4	10.0	13.6	4	1	1		
3	I 40 W	11000400	15.8	100.9	1	10040	11	2	17000	2015	48.3	н	15.4	10.0	13.6	4		1		

#### **Condition Photos**





#### **Condition Photos**



County: BURKE

Date: 10/26/2021

#### **Condition Photos**



County: BURKE

Date: 10/26/2021

**Condition Photos** 





Span 2 Beam 1: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2021 : Initial point of impact on beam 1 19'-7" from face of bent 1. Beam 1 is out of plumb 2" in the direction of traffic FOR THE LENGTH OF 20' and indention in cover plate 3' X 2" in the impact area. An indention in flange 8" X 1/4" at 21'-3", A 8" X 1/4" at 22'-11", a 5" X 1/16" at 17'-4", a 29" X 1/2" at 27'-0" all from face of bent 1. Indentions in flange cover plate 6" X 1/16" at 23'-4", a 6" X 1/16" at 22'-9", a 8" X 1/32" at 21'-6", a 8" X 1/16" at 21'-1", a 8" X 1/16" at 18'-9", a 6" X 1/32" at 16'-4", a 1" X 1/32" at 25'-5" all from face of bent 1. Gouges in flange cover plate 1" X 4" X 1/16" at 21'-1" and 3/4" X 3" X 1/16" at 27'-2" from face of bent 1.

County: BURKE

Date: 10/26/2021

**Condition Photos** 





Span 2 Beam 2: SUPPLEMENTAL INSPECTION 2021: Point of impact on beam 2 West approach slab 27'-6" from face of bent 1. Gouges in flange cover plate 1/2" X 14" X 1/16" and a indention in flange cover plate 6" X 1/32", a indention in flange 1 1/2" X 1/16" all in the impact area.

#### **Condition Photos**



Span 2 Beam 3: SUPPLEMENTAL INSPECTION 2021: Point of impact on beam 3 West approach slab 26'-1" from face of bent 1. Beam 1 is out of plumb 2 1/2" +/- in the direction of traffic and a indention in cover plate 3" X 1/2" and a 2" X 1/2" in the impact area.



Span 2 Beam 3: SUPPLEMENTAL INSPECTION 2021: Point of impact on beam 3 West approach slab 26'-1" from face of bent 1. Beam 1 is out of plumb 2 1/2" +/- in the direction of traffic and a indention in cover plate 3" X 1/2" and a 2" X 1/2" in the impact area.

County: BURKE

Date: 10/26/2021



Span 2 Beam 4: SUPPLEMENTAL INSPECTION 2021: SCATTERED SCRAPS THROUGHOUT ON BOTTOM COVER PLATE

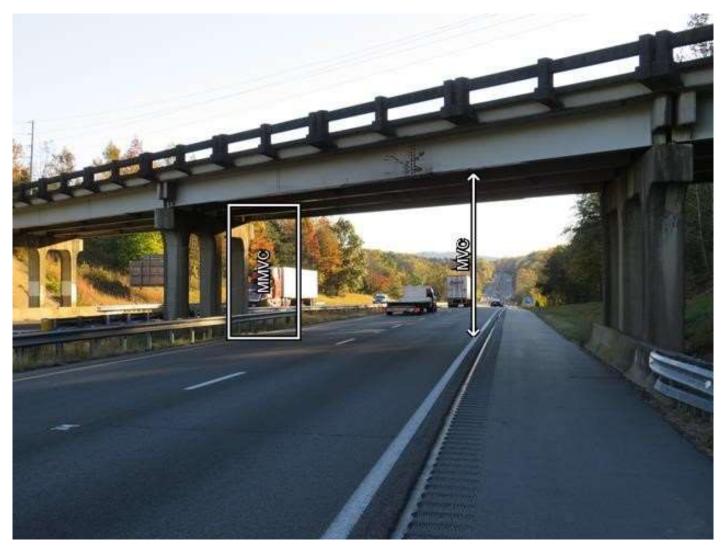
County: BURKE

Date: 10/26/2021

### Structure Photos



EAST CLEARANCE



EAST CLEARANCE

Route Number: 110004	400	Route Name: I 40 EBL Reference Feature: H										
Minimum Vertical Cleara	ance 14	790 feet	Maxim	um Minimum Vertical (	Clearance 14.810 feet							
Total Horizontal Clearance 42.970 feet Lateral Clearances: Left: 12.780 feet Right 11.000 feet												
✓Base Highway Network LRS Inventory Route, Sub Route Number 10040												
Milepost: 100.850	Number	of Lanes:	anes: 2 ADT: 17000 Year of ADT: 2015 Percentage of Trucks: 16									
✓ National Highway System STRAHNET Highway Designator												
Functional Classification 11 Local Principal Arterial - Interstate Direction of Traffic: 1 1 - way traffic												



span 3 vertical clearance looking West

Route Number: 110004	400	0 Route Name: I 40 W Reference Feature: H										
Minimum Vertical Clearance 15.390 feet Maximum Minimum Vertical Clearance 15.790 feet												
Total Horizontal Clearance 48.320 feet Lateral Clearances: Left: 13.610 feet Right 10.000 feet												
Base Highway Network LRS Inventory Route, Sub Route Number 10040												
Milepost: 100.850	Number	of Lanes:	2 ADT: 17000 Year of ADT: 2015 Percentage of Trucks: 1									
✓ National Highway System												
Functional Classification 11 Local Principal Arterial - Interstate Direction of Traffic: 1 1 - way traffic												

NC DEPARTMENT OF TRANSPORTATION

OF TUMBUL

DIVISION OF HIGHWAYS

ATTENTION: IMPACT DAMAGE SPAN 2 ONLY / PAR X1 / CHANGE IN CLEARANCE FOR SPAN 2

# Structure Safety Report

Supplemental Element Inspection

INSPECTION DATE: 11/07/2019

DIVISION: 13	COUNTY:	BURKE	STRUC	TURE NUMBER:	110144	FREQUENCY:	None
FACILITY CARRIED:	SR1704						
LOCATION: .2 MI.N.	JCT.SR17	712					
FEATURE INTERSEC	CTED: I-40	)					
LATITUDE: 35° 43'	31.13"	LON	GITUDE:	81° 38' 10.85"			
SUPERSTRUCTURE	REINFO	ORCED CONCRETE FLOO	r on i-e	BEAMS			
SUBSTRUCTURE: E	.BTS:RC (	CAPS/TIMBER PILES;INT.E	STS:RC	POST&BEAM			
SPANS: 4 SPANS	S. SEE SP.	AN PROFILE SHEET FOR	SPAN D	ETAILS			
FRACTURE CRI	TICAL		G	SCOUR CRITIC	AL	SCOUR PLAN OF	ACTION
NBI GRADES:	DECK	6 SUPERSTRUCTURE	5	SUBSTRUCTU	RE 5	CULVERT N	
POSTED SV: Not F	Posted			POSTED TTST	: Not Po	sted	

OTHER SIGNS PRESENT: NONE



Sign noticed issued for		Number Required
NO	WEIGHT LIMIT	0
NO	DELINEATORS	0
NO	NARROW BRIDGE	0
NO	ONE LANE BRIDGE	0
NO	LOW CLEARANCE	0



DIRECTION MATCHES PLANS

#### LOOKING EAST

INSPECTED BY ME.RENFRO SIGNATURE MUL MAN ASSISTED BY BA.WILCOX

### NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

12/14/2019

(1) STATE NAME NORTH CAROLINA BRIDGE 110144	SUFFICIENCY RATING
(8) STRUCTURE NUMBER (FEDERAL) 0230144	STATUS Eurotion 710000000
(5) INVENTORY ROUTE (ON/UNDER) ON 131017040	CLASSIFICATION COD
(2) STATE HIGHWAY DEPARTMENT DISTRICT	3 (112) NBIS BRIDGE SYSTEM
(3) COUNTY CODE (FEDERAL) 23 (4) PLACE CODE 44400	) (104) HIGHWAY SYSTEM Inventory Route not on NHS
(6) FEATURE INTERSECTED I-40	(26) FUNCTIONAL CLASS Urban Collector
(7) FACILITY CARRIEDSR1704(9) LOCATION.2 MI.N.JCT.SR1712	(100) STRAHNET HIGHWAY Not a STRAHNET Route
(1) MILEPOINT 0.0	
(12) BASE HIGHWAY NETWORK	
(13) LRS INVENTORY ROUTE & SUBROUTE	(102) DIRECTION OF TRAFFIC 2-way traffic
(16) LATITUDE 35° 43' 31.13" (17) LONGITUDE 81° 38' 10.85"	(103) TEMPORARY STRUCTURE
(98) BORDER BRIDGE STATE CODE PERCENT SHARED	(110) DESIGNATED NATIONAL NETWORK - on national network for trucks
(99) BORDER BRIDGE STRUCTURE NUMBER	(20) TOLL On Free Road
STRUCTURE TYPE AND MATERIAL	(21) MAINT -
(43) STRUCTURE TYPE MAIN Stee	I (22) OWNER -
TYPE Stringer/Multi-beam or girder CODE 302	2 (37) HISTORICAL SIGNIFICANCE -
(44) STRUCTURE TYPE APPROACH	CONDITION COD
TYPE CODE	(58) DECK
	(00) SUPERSTRUCTURE
(107) DECK STRUCTURE TYPE CODE	
(108)WEARING SURFACE/PROTECTIVE SYSTEM	(62) CULVERTS
(A) TYPE OF WEARING SURFACE CODE 6	
(B) TYPE OF MEMBRANE CODE C	(31) DESIGN LOAD HS 15
(C) TYPE OF DECK PROTECTION CODE (	63) OPERATING RATING METHOD - Load Factor
AGE AND SERVICE	(64) OPERATING RATING - HS-25
(27) YEAR BUILT 1955	65) INVENTORY RATING METHOD -
(106) YEAR RECONSTRUCTED 0	(66) INVENTORY RATING HS-15
000000000000000000000000000000000000000	
(42) TYPE OF SERVICE ON - Overpass Structure	
OFF - Highway CODE 61	
(28) LANES ON STRUCTURE     2     LANES UNDER STRUCTURE     4       (29) AVERAGE DAILY TRAFFIC     3050	
	APPRAISAL COD
(30) YEAR OF ADT 2012 (109) TRUCK ADT PCT 7	(67) STRUCTURAL EVALUATION
(19) BYPASS OR DETOUR LENGTH 0.0	(68) DECK GEOMETRY
GEOMETRIC DATA	(69) UNDERCLEARANCES, VERT & HORIZ
(48) LENGTH OF MAXIMUM SPAN 51.0	(71) WATERWAY ADEQUACY
(49) STRUCTURE LENGTH 182.0	(72) APPROACH ROADWAY ALIGNMENT
(50) CURB OR SIDEWALK: LEFT 3.3 RIGHT 3.3	(72) APPROACH ROADWAY ALIGNMENT
(50) CURB OR SIDEWALK: LEFT3.3RIGHT3.3(51) BRIDGE ROADWAY WIDTH, CURB TO CURB26.0	(72) APPROACH ROADWAY ALIGNMENT (36) TRAFFIC SAFETY FEATURES 0
(50) CURB OR SIDEWALK: LEFT         3.3         RIGHT         3.3           (51) BRIDGE ROADWAY WIDTH, CURB TO CURB         26.0           (52) DECK WIDTH OUT TO OUT         34.3	(72) APPROACH ROADWAY ALIGNMENT         (36) TRAFFIC SAFETY FEATURES       0         (113) SCOUR CRITICAL BRIDGES
(50) CURB OR SIDEWALK: LEFT         3.3         RIGHT         3.3           (51) BRIDGE ROADWAY WIDTH, CURB TO CURB         26.0           (52) DECK WIDTH OUT TO OUT         34.3	(72) APPROACH ROADWAY ALIGNMENT (36) TRAFFIC SAFETY FEATURES (113) SCOUR CRITICAL BRIDGES PROPOSED IMPROVEMENTS
(50) CURB OR SIDEWALK: LEFT       3.3       RIGHT       3.3         (51) BRIDGE ROADWAY WIDTH, CURB TO CURB       26.0         (52) DECK WIDTH OUT TO OUT       34.3         (32) APPROACH ROADWAY WITH (W/ SHOULDERS)       31.0	(72) APPROACH ROADWAY ALIGNMENT (36) TRAFFIC SAFETY FEATURES (113) SCOUR CRITICAL BRIDGES PROPOSED IMPROVEMENTS (75) TYPE OF WORK CODE
(50) CURB OR SIDEWALK: LEFT       3.3       RIGHT       3.3         (51) BRIDGE ROADWAY WIDTH, CURB TO CURB       26.0         (52) DECK WIDTH OUT TO OUT       34.3         (32) APPROACH ROADWAY WITH (W/ SHOULDERS)       31.0         (33) BRIDGE MEDIAN       No median CODE         (34) SKEW       7       (35) STRUCTURE FLARED       0         (10) INVENTORY ROUTE MIN VERT CLEAR       999.5	(72) APPROACH ROADWAY ALIGNMENT         (36) TRAFFIC SAFETY FEATURES       0         (113) SCOUR CRITICAL BRIDGES       0         (75) TYPE OF WORK       CODE         (76) LENGTH OF STRUCTURE IMPROVEMENT       (94) BRIDGE IMPROVEMENT COST
(50) CURB OR SIDEWALK: LEFT       3.3       RIGHT       3.3         (51) BRIDGE ROADWAY WIDTH, CURB TO CURB       26.0         (52) DECK WIDTH OUT TO OUT       34.3         (32) APPROACH ROADWAY WITH (W/ SHOULDERS)       31.0         (33) BRIDGE MEDIAN       No median CODE       0         (34) SKEW       7       (35) STRUCTURE FLARED       0         (10) INVENTORY ROUTE MIN VERT CLEAR       999.5       (47) INVENTORY ROUTE TOTAL HORIZ CLEAR       26.0	(72) APPROACH ROADWAY ALIGNMENT         (36) TRAFFIC SAFETY FEATURES       0         (113) SCOUR CRITICAL BRIDGES       0         (75) TYPE OF WORK       CODE         (76) LENGTH OF STRUCTURE IMPROVEMENT       (94) BRIDGE IMPROVEMENT COST
(50) CURB OR SIDEWALK: LEFT       3.3       RIGHT       3.3         (51) BRIDGE ROADWAY WIDTH, CURB TO CURB       26.0         (52) DECK WIDTH OUT TO OUT       34.3         (32) APPROACH ROADWAY WITH (W/ SHOULDERS)       31.0         (33) BRIDGE MEDIAN       No median CODE         (34) SKEW       7       (35) STRUCTURE FLARED       0         (10) INVENTORY ROUTE MIN VERT CLEAR       999.5       (47) INVENTORY ROUTE TOTAL HORIZ CLEAR       26.0         (53) MIN VERT CLEAR OVER BRIDGE RDWY       999.5       (50.00000000000000000000000000000000000	(72) APPROACH ROADWAY ALIGNMENT         (36) TRAFFIC SAFETY FEATURES       0         (113) SCOUR CRITICAL BRIDGES       0         (75) TYPE OF WORK       CODE         (76) LENGTH OF STRUCTURE IMPROVEMENT       0         (94) BRIDGE IMPROVEMENT COST       0         (95) ROADWAY IMPROVEMENT COST       0
(50) CURB OR SIDEWALK: LEFT       3.3       RIGHT       3.3         (51) BRIDGE ROADWAY WIDTH, CURB TO CURB       26.0         (52) DECK WIDTH OUT TO OUT       34.3         (32) APPROACH ROADWAY WITH (W/ SHOULDERS)       31.0         (33) BRIDGE MEDIAN       No median CODE         (34) SKEW       7       (35) STRUCTURE FLARED       0         (10) INVENTORY ROUTE MIN VERT CLEAR       999.5       (47) INVENTORY ROUTE TOTAL HORIZ CLEAR       26.0         (53) MIN VERT CLEAR OVER BRIDGE RDWY       999.5       (54) MIN VERT UNDERCLEAR: REFERENCE       H       14.8	<ul> <li>(72) APPROACH ROADWAY ALIGNMENT</li> <li>(36) TRAFFIC SAFETY FEATURES</li> <li>(113) SCOUR CRITICAL BRIDGES</li> <li>(113) SCOUR CRITICAL BRIDGES</li> <li>(75) TYPE OF WORK</li> <li>(75) TYPE OF WORK</li> <li>(76) LENGTH OF STRUCTURE IMPROVEMENT</li> <li>(94) BRIDGE IMPROVEMENT COST</li> <li>(95) ROADWAY IMPROVEMENT COST</li> <li>(96) TOTAL PROJECT COST</li> </ul>
(50) CURB OR SIDEWALK: LEFT       3.3       RIGHT       3.3         (51) BRIDGE ROADWAY WIDTH, CURB TO CURB       26.0         (52) DECK WIDTH OUT TO OUT       34.3         (32) APPROACH ROADWAY WITH (W/ SHOULDERS)       31.0         (33) BRIDGE MEDIAN       No median CODE         (34) SKEW       7       (35) STRUCTURE FLARED       0         (10) INVENTORY ROUTE MIN VERT CLEAR       999.5         (47) INVENTORY ROUTE TOTAL HORIZ CLEAR       26.0         (53) MIN VERT CLEAR OVER BRIDGE RDWY       999.5         (54) MIN VERT UNDERCLEAR: REFERENCE       H       14.8         (55) MIN LAT UNDERCLEARANCE RT: REFERENCE       H       10.5	<ul> <li>(72) APPROACH ROADWAY ALIGNMENT</li> <li>(36) TRAFFIC SAFETY FEATURES</li> <li>(113) SCOUR CRITICAL BRIDGES</li> <li>PROPOSED IMPROVEMENTS</li> <li>(75) TYPE OF WORK</li> <li>(75) TYPE OF WORK</li> <li>(76) LENGTH OF STRUCTURE IMPROVEMENT</li> <li>(94) BRIDGE IMPROVEMENT COST</li> <li>(95) ROADWAY IMPROVEMENT COST</li> <li>(96) TOTAL PROJECT COST</li> <li>(97) YEAR OF IMPROVEMENT COST ESTIMATE</li> </ul>
(50) CURB OR SIDEWALK: LEFT       3.3       RIGHT       3.3         (51) BRIDGE ROADWAY WIDTH, CURB TO CURB       26.0         (52) DECK WIDTH OUT TO OUT       34.3         (32) APPROACH ROADWAY WITH (W/ SHOULDERS)       31.0         (33) BRIDGE MEDIAN       No median CODE         (34) SKEW       7       (35) STRUCTURE FLARED       0         (10) INVENTORY ROUTE MIN VERT CLEAR       999.5       (47) INVENTORY ROUTE TOTAL HORIZ CLEAR       26.0         (53) MIN VERT CLEAR OVER BRIDGE RDWY       999.5       (54) MIN VERT UNDERCLEAR: REFERENCE       H       14.8	<ul> <li>(72) APPROACH ROADWAY ALIGNMENT</li> <li>(36) TRAFFIC SAFETY FEATURES</li> <li>(113) SCOUR CRITICAL BRIDGES</li> <li>PROPOSED IMPROVEMENTS</li> <li>(75) TYPE OF WORK</li> <li>(75) TYPE OF WORK</li> <li>(76) LENGTH OF STRUCTURE IMPROVEMENT</li> <li>(94) BRIDGE IMPROVEMENT COST</li> <li>(95) ROADWAY IMPROVEMENT COST</li> <li>(96) TOTAL PROJECT COST</li> <li>(97) YEAR OF IMPROVEMENT COST ESTIMATE</li> </ul>
(50) CURB OR SIDEWALK: LEFT3.3RIGHT3.3(51) BRIDGE ROADWAY WIDTH, CURB TO CURB26.0(52) DECK WIDTH OUT TO OUT34.3(32) APPROACH ROADWAY WITH (W/ SHOULDERS)31.0(33) BRIDGE MEDIANNo median CODE0(34) SKEW7(35) STRUCTURE FLARED0(10) INVENTORY ROUTE MIN VERT CLEAR999.5(47) INVENTORY ROUTE TOTAL HORIZ CLEAR26.0(53) MIN VERT CLEAR OVER BRIDGE RDWY999.5(54) MIN VERT UNDERCLEAR: REFERENCEH(45) MIN LAT UNDERCLEARANCE RT: REFERENCEH(56) MIN LAT UNDERCLEARANCE LT:13.1NAVIGATION DATA	(72) APPROACH ROADWAY ALIGNMENT         (36) TRAFFIC SAFETY FEATURES         (113) SCOUR CRITICAL BRIDGES         (113) SCOUR CRITICAL BRIDGES         (75) TYPE OF WORK         (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         (114) FUTURE ADT         (114) FUTURE ADT
(50) CURB OR SIDEWALK: LEFT       3.3       RIGHT       3.3         (51) BRIDGE ROADWAY WIDTH, CURB TO CURB       26.0         (52) DECK WIDTH OUT TO OUT       34.3         (32) APPROACH ROADWAY WITH (W/ SHOULDERS)       31.0         (33) BRIDGE MEDIAN       No median CODE       0         (34) SKEW       7       (35) STRUCTURE FLARED       0         (10) INVENTORY ROUTE MIN VERT CLEAR       999.5       0         (47) INVENTORY ROUTE TOTAL HORIZ CLEAR       26.0       0         (53) MIN VERT CLEAR OVER BRIDGE RDWY       999.5       0         (54) MIN VERT UNDERCLEAR: REFERENCE       H       14.8         (55) MIN LAT UNDERCLEAR: REFERENCE       H       14.8         (56) MIN LAT UNDERCLEARANCE RT: REFERENCE       H       10.5         (58) NAVIGATION CONTROL -       CODE       N	(72) APPROACH ROADWAY ALIGNMENT         (36) TRAFFIC SAFETY FEATURES         (36) TRAFFIC SAFETY FEATURES         (113) SCOUR CRITICAL BRIDGES         (75) TYPE OF WORK         (75) TYPE OF WORK         (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         (90) INSPECTION DATE
(50) CURB OR SIDEWALK: LEFT3.3RIGHT3.3(51) BRIDGE ROADWAY WIDTH, CURB TO CURB26.0(52) DECK WIDTH OUT TO OUT34.3(32) APPROACH ROADWAY WITH (W/ SHOULDERS)31.0(33) BRIDGE MEDIANNo median CODE0(34) SKEW7(35) STRUCTURE FLARED0(10) INVENTORY ROUTE MIN VERT CLEAR999.5(47) INVENTORY ROUTE TOTAL HORIZ CLEAR26.0(53) MIN VERT CLEAR OVER BRIDGE RDWY999.5(54) MIN VERT UNDERCLEAR: REFERENCEH(45) MIN LAT UNDERCLEARANCE RT: REFERENCEH(56) MIN LAT UNDERCLEARANCE LT:13.1NAVIGATION DATA	(72) APPROACH ROADWAY ALIGNMENT         (36) TRAFFIC SAFETY FEATURES         (113) SCOUR CRITICAL BRIDGES         (113) SCOUR CRITICAL BRIDGES         (75) TYPE OF WORK         (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         (114) FUTURE ADT         (114) FUTURE ADT
(50) CURB OR SIDEWALK: LEFT       3.3       RIGHT       3.3         (51) BRIDGE ROADWAY WIDTH, CURB TO CURB       26.0         (52) DECK WIDTH OUT TO OUT       34.3         (32) APPROACH ROADWAY WITH (W/ SHOULDERS)       31.0         (33) BRIDGE MEDIAN       No median CODE       0         (34) SKEW       7       (35) STRUCTURE FLARED       0         (10) INVENTORY ROUTE MIN VERT CLEAR       999.5       0         (47) INVENTORY ROUTE TOTAL HORIZ CLEAR       26.0       0         (53) MIN VERT CLEAR OVER BRIDGE RDWY       999.5       0         (54) MIN VERT UNDERCLEAR: REFERENCE       H       14.8         (55) MIN LAT UNDERCLEARANCE RT: REFERENCE       H       10.5         (56) MIN LAT UNDERCLEARANCE LT:       13.1       13.1         NAVIGATION DATA         (38) NAVIGATION CONTROL -       CODE       N	(72) APPROACH ROADWAY ALIGNMENT         (36) TRAFFIC SAFETY FEATURES       0         (113) SCOUR CRITICAL BRIDGES       0         (75) TYPE OF WORK       CODE         (76) LENGTH OF STRUCTURE IMPROVEMENT       0         (94) BRIDGE IMPROVEMENT COST       0         (95) ROADWAY IMPROVEMENT COST       0         (96) TOTAL PROJECT COST       0         (97) YEAR OF IMPROVEMENT COST ESTIMATE       0         (114) FUTURE ADT       6,100       YEAR OF FUTURE ADT       2         (90) INSPECTION DATE       08/19       (91) FREQUENCY       0         (92) CRITICAL FEATURE INSPECTION       (93) CFI DATE       0
(50) CURB OR SIDEWALK: LEFT       3.3       RIGHT       3.3         (51) BRIDGE ROADWAY WIDTH, CURB TO CURB       26.0         (52) DECK WIDTH OUT TO OUT       34.3         (32) APPROACH ROADWAY WITH (W/ SHOULDERS)       31.0         (33) BRIDGE MEDIAN       No median CODE       0         (34) SKEW       7       (35) STRUCTURE FLARED       0         (10) INVENTORY ROUTE MIN VERT CLEAR       999.9       99.9         (47) INVENTORY ROUTE TOTAL HORIZ CLEAR       26.0         (53) MIN VERT CLEAR OVER BRIDGE RDWY       999.9         (54) MIN VERT UNDERCLEAR: REFERENCE       H       14.8         (55) MIN LAT UNDERCLEARANCE RT: REFERENCE       H       10.9         (56) MIN LAT UNDERCLEARANCE LT:       13.1         NAVIGATION DATA         (38) NAVIGATION CONTROL -       CODE       N         (111) PIER PROTECTION       CODE       N	(72) APPROACH ROADWAY ALIGNMENT         (36) TRAFFIC SAFETY FEATURES         (113) SCOUR CRITICAL BRIDGES         (75) TYPE OF WORK         (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         (90) INSPECTION DATE         (90) INSPECTION DATE         (92) CRITICAL FEATURE INSPECTION         (93) CFI DATE         (92) CRITICAL FEATURE INSPECTION         (93) CFI DATE         (94) FRACTURE CRIT DETAIL
(50) CURB OR SIDEWALK: LEFT       3.3       RIGHT       3.3         (51) BRIDGE ROADWAY WIDTH, CURB TO CURB       26.0         (52) DECK WIDTH OUT TO OUT       34.3         (32) APPROACH ROADWAY WITH (W/ SHOULDERS)       31.0         (33) BRIDGE MEDIAN       No median CODE       0         (34) SKEW       7       (35) STRUCTURE FLARED       0         (10) INVENTORY ROUTE MIN VERT CLEAR       999.9       99.9         (47) INVENTORY ROUTE TOTAL HORIZ CLEAR       26.0         (53) MIN VERT CLEAR OVER BRIDGE RDWY       999.9         (54) MIN VERT UNDERCLEAR: REFERENCE       H       14.8         (55) MIN LAT UNDERCLEARANCE RT: REFERENCE       H       10.9         (56) MIN LAT UNDERCLEARANCE LT:       13.1       13.1         NAVIGATION DATA         (38) NAVIGATION CONTROL -       CODE       N         (111) PIER PROTECTION       CODE       N         (39) NAVIGATION VERTICAL CLEARANCE       0.0       0.0	(72) APPROACH ROADWAY ALIGNMENT         (36) TRAFFIC SAFETY FEATURES         (36) TRAFFIC SAFETY FEATURES         (113) SCOUR CRITICAL BRIDGES         (75) TYPE OF WORK         (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       6,100         (90) INSPECTION DATE         (90) INSPECTION DATE         (92) CRITICAL FEATURE INSPECTION         (92) CRITICAL FEATURE INSPECTION         (93) OFI DATE         (94) BUDDERWATER INSP

			'ertical							raffic	ce			See N	lote Be	low			٤	
Span Number	Facility Carried	Inventory Route	Maximum Minimum Vert Clearance	Milepoint	Base Highway	LRS Inventory Route	Functional Classification	Number of Lanes	Average Daily Traffic	Year of Average Daily T	Total Horizontal Clearan	Reference Feature	Minimum Vertical Underclearance	Rigth Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway	Direction of Traffic	National Highway System	National Truck Network
	7	5	10	11	12	13	26	28	29	30	47	54A	54	55	56	69	100	102	104	110
2	I 40 E	11000400	15.3	106.4	1	10040	11	2	22500	2015	42.4	н	15.0	10.9	13.1	3	1	1		
3	I 40 W	11000400	17.0	106.4	1	10040	11	2	22500	2015	42.7	Н	16.3	10.6	13.8	4	1	1		

Note: 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.



Span 2 Beam 1: INDENTION IN LEFT SIDE OF BOTTOM FLANGE AT 14'7" FROM INT. BENT 1, 2" LONG X 1" WIDE X 1/8" DEEP (PAR)



Span 2 Beam 1: POINT OF IMPACT TO BEAM 1 AT 24'8" FROM INT. BENT 1 FOR A LENGTH OF 15'.



Span 2 Beam 2: SCATTERED SCRAPES TO BOTTOM FLANGE THROUGHOUT BEAM 2



Span 2 Beam 3: SCATTERED SCRAPES TO LEFT SIDE OF WEB THROUGHOUT BEAM 3 SPAN 2

Structure: 110144

County: BURKE

Date: 11/07/2019



Span 2 Beam 3: SCRAPES TO BOTTOM FLANGE AT 20'9" FROM INT. BENT 1



Span 2 Beam 4: SCATTERED SCRAPES TO BOTTOM FLANGE

Date: 11/07/2019



Span 2 Beam 4: SCATTERED SCRAPES TO LEFT SIDE OF WEB.



Span 2 Beam 5: SCATTERED SCRAPES TO BOTTOM FLANGE



SCATTERED POPOUTS IN BOTTOM DECK AT LEFT SIDE OF BEAM 1 AT BOTTOM FLANGE



SPAN 2 BEAM 1: SCATTERED SCRAPES IN LEFT SIDE OF BOTTOM WEB

Structure: 110144

County: BURKE

Date: 11/07/2019



SPAN 2 BEAM 1: SCATTERED SCRAPES TO BOTTOM WEB

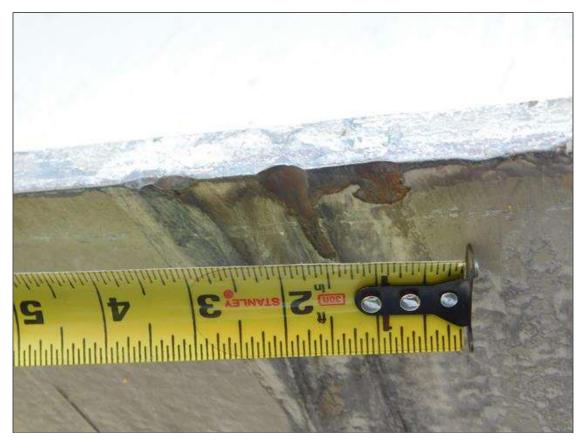


SPAN 2 BEAM 1: BEAM 1 SWEPT EASTWARD 1" FOR A LENGTH OF 20' (PAR)

Date: 11/07/2019



SPAN 2 BEAM 1: SCATTERED SCRAPES TO BOTTOM FLANGE



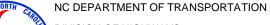
SPAN 2 BEAM 1: INDENTION TO LEFT SIDE OF BOTTOM FLANGE AT 20' 9" FROM INT. BENT 1, 2" LONG X 1" WIDE X 1/8" DEEP (PAR)



SPAN 2 BEAM 1: OVERVIEW OF IMPACT DAMAGE TO BEAM 1 (PAR)



LOOKING EAST





DIVISION OF HIGHWAYS

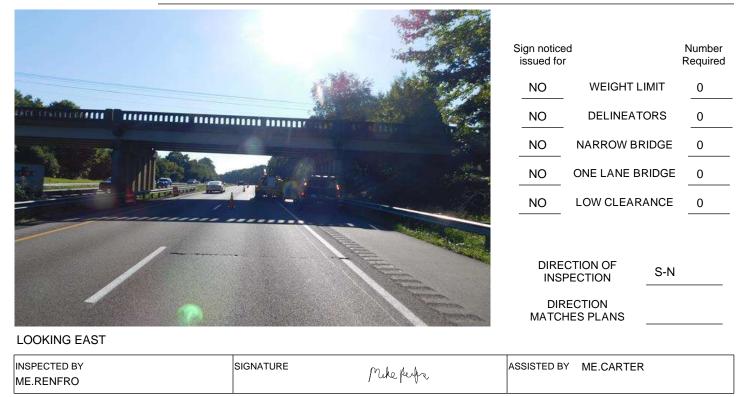
## Structure Safety Report

Supplemental Element Inspection

INSPECTION DATE: 09/02/2021

DIVISION: 13	COUNTY:	BURKE	STRUCT	URE NUMBER:	110147	FREG	UENCY:	None	
FACILITY CARRIED:	SR1734					MILE POST:	110.72		
LOCATION: .05 MI.I	N.JCT.SR1	1737							
FEATURE INTERSE	CTED: I-40	)							
LATITUDE: 35° 43	' 37.03"		LONGITUDE:	81° 33' 37.85	u				
SUPERSTRUCTURE	::								
SUBSTRUCTURE:									
SPANS: 4 SPANS	S. SEE SP	AN PROFILE SHEET	FOR SPAN DE	ETAILS					
FRACTURE CR	ITICAL			SCOUR CRITI	CAL	SCOUR	PLAN OF	ACTION	
GRADES: (Inspector	r/NBI Coding)	DECK 5/5 S	UPERSTRUCTU	RE <u>5/5</u>	SUBSTRU	ICTURE 5/5	CUL	VERT N/N	
POSTED SV: Not I	Posted			POSTED TTS	ST: Not Po	osted			

### OTHER SIGNS PRESENT: 2 VERTICAL CLEARANCE SIGNS AT 1500 ' WEST OF BRIDGE



### NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

10/19/2021

IDENTIFICATION			
(1) STATE NAME NORTH CAROLINA BRIDGE	11014		58.19
(8) STRUCTURE NUMBER (FEDERAL)	023014	7 STATUS = Functionally	Obsolete
(5) INVENTORY ROUTE (ON/UNDER) ON	13101734	CEASSILICATION	CODE
(2) STATE HIGHWAY DEPARTMENT DISTRICT (3) COUNTY CODE (FEDERAL) 23 (4) PLACE CODE	1: 6952		YES
(3) COUNTY CODE (FEDERAL) 23 (4) PLACE CODE (6) FEATURE INTERSECTED I-40	0952	(104) HIGHWAY SYSTEM Inventory Route not on NHS	C
(7) FACILITY CARRIED SR1734		(26) FUNCTIONAL CLASS Urban Minor Collector	16
(9) LOCATION .05 MI.N.JCT.SR1737		(100) STRAHNET HIGHWAY Not a STRAHNET Route	C
(11) MILEPOINT	110.		Ν
(12) BASE HIGHWAY NETWORK	(	0 (102) DIRECTION OF TRAFFIC 2-way traffic	2
(13) LRS INVENTORY ROUTE & SUBROUTE (16) LATITUDE 35° 43' 37.03" (17) LONGITUDE	81° 33' 37.85	(103) TEMPORARY STRUCTURE	
(18) EXTINUE 35 45 57.05 (17) EXIGINAL (98) BORDER BRIDGE STATE CODE PERCENT SHA		(110) DESIGNATED NATIONAL NETWORK - on national network for trucks	(
(99) BORDER BRIDGE STRUCTURE NUMBER		(20) TOLL On Free Road	3
		(21) MAINT -	01
STRUCTURE TYPE AND MATERIAL -			
(43) STRUCTURE TYPE MAIN	Stee		01
TYPE Stringer/Multi-beam or girder	CODE 30	2 (37) HISTORICAL SIGNIFICANCE -	5
(44) STRUCTURE TYPE APPROACH			CODE
	CODE	(58) DECK	5
(45) NUMBER OF SPANS IN MAIN UNIT		4 (59) SUPERSTRUCTURE	5
(46) NUMBER OF SPANS IN APPROACH		0 (60) SUBSTRUCTURE	5
(107) DECK STRUCTURE TYPE	CODE	1 (61) CHANNEL & CHANNEL PROTECTION	N
(108)WEARING SURFACE/PROTECTIVE SYSTEM		(62) CULVERTS	N
(A) TYPE OF WEARING SURFACE	CODE	6 LOAD RATING AND POSTING	CODE
(B) TYPE OF MEMBRANE	CODE	0 (31) DESIGN LOAD HS 15	3
(C) TYPE OF DECK PROTECTION	CODE	0 (63) OPERATING RATING METHOD - Load Factor	1
AGE AND SERVICE		(64) OPERATING RATING - HS-27	49
(27) YEAR BUILT	195	5 (65) INVENTORY RATING METHOD -	1
(106) YEAR RECONSTRUCTED	(	0 (66) INVENTORY RATING HS-16	29
(42) TYPE OF SERVICE ON - Highw	vay - Pedestriar	n (70) BRIDGE POSTING No Posting Required	5
OFF - Highway	CODE 5	1 (41) STRUCTURE OPEN, POSTED, OR CLOSED	А
(28) LANES ON STRUCTURE 2 LANES UNDER STRUCT	URE 4	4 DESCRIPTION Open, no restriction	
(29) AVERAGE DAILY TRAFFIC	3900	0 APPRAISAL	CODE
(30) YEAR OF ADT 2019 (109) TRUCK ADT PCT	(	6 (67) STRUCTURAL EVALUATION	5000
(19) BYPASS OR DETOUR LENGTH	3.0	0 (68) DECK GEOMETRY	3
GEOMETRIC DATA	-	(69) UNDERCLEARANCES, VERT & HORIZ	3
(48) LENGTH OF MAXIMUM SPAN	52.0		5
(49) STRUCTURE LENGTH	184.0	()	3
(50) CURB OR SIDEWALK: LEFT 3.2 RIGHT	3.2	2	
(51) BRIDGE ROADWAY WIDTH, CURB TO CURB	26.0		0111
	34.0		N
(32) APPROACH ROADWAY WITH (W/ SHOULDERS) (33) BRIDGE MEDIAN No median CO	28.0 DE		
(34) SKEW 0 (35) STRUCTURE FLARED		0	-
(10) INVENTORY ROUTE MIN VERT CLEAR	999.9	9	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	26.	0 (94) BRIDGE IMPROVEMENT COST	
(53) MIN VERT CLEAR OVER BRIDGE RDWY	999.		
(54) MIN VERT UNDERCLEAR: REFERENCE H	14.		
(55) MIN LAT UNDERCLEARANCE RT: REFERENCE H (56) MIN LAT UNDERCLEARANCE LT:	11.5 14.0	(97) YEAR OF IMPROVEMENT COST ESTIMATE	
	14.0	0 (114) FUTURE ADT 7,800 YEAR OF FUTURE ADT	2040
	CODE N	N (90) INSPECTION DATE 09/21 (91) FREQUENCY	24
	CODE	(92) CRITICAL FEATURE INSPECTION (93) CFI DATE	
(39) NAVIGATION VERTICAL CLEARANCE	0.0		
(116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR	0.0		
(40) NAVIGATION HORIZONTAL CLEARANCE	0.0		
		SCOUR	

Number	ty Carried	tory Route	num Minimum Vertical ance	oint	Highway	Inventory Route	ional Classification	ber of Lanes	erage Daily Traffic	of Average Daily Traffic	Horizontal Clearance	eference Feature	Vertical trance	eral trance	ateral rclearance ag	rclearance iisal Grade	STRAHNET Highway	tion of Traffic	nal Highway System	nal Truck Network
Span	Facility	Inventory	Maximum I Clearance	Milepoint	Base	LRSI	Functional	Number	Avera	Year	Total	Refer	Minimum Underclea	Rigth Under	Left L Undei	Undel Appra	STR/	Direction	National	National
	7	5	10	11	12	13	26	28	29	30	47	54A	54	55	56	69	100	102	104	110
2	I40 EBL	11000400	15.0	110.7	1	10040	11	2	23000	2015	43.1	н	14.4	11.5	14.0	3		1		
2	I 40 E	11000400	15.0	110.7	1	10040	11	2	23000	2015	43.1	н	14.4	11.5	14.0	3	1	1		
3	I 40 WBL	11000400	16.9	110.7	1	10040	11	2	23000	2015	43.5	н	16.1	12.1	13.0	5		1		
3	I 40 WBL	11000400	16.9	110.7	1	10040	11	2	23000	2015	43.5	н	16.1	12.1	13.0	5	1	1		

Note: 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.

Date: 09/02/2021

**Condition Photos** 



Span 2 Beam 2: SUPPLEMENTAL INSPECTION 2021: POINT OF IMPACT 8" LONG WTH A 1/2" DEEP GOUGE AT 18'-8" FROM INT. BENT 2, WITH BEAM BEING SWEPT EASTWARD 1/2". SCATTERED SCRAPES ALONG THE BEAM (PAR) THERE IS A BENT UP SECTION ON THE WEST BOTTOM FLANGE 4" LONG X 1" HIGH AT 20' OUT FROM INT. BENT 1 (PAR)

Date: 09/02/2021

**Condition Photos** 



Span 2 Beam 2: SUPPLEMENTAL INSPECTION 2021: POINT OF IMPACT 8" LONG WTH A 1/2" DEEP GOUGE AT 18'-8" FROM INT. BENT 2, WITH BEAM BEING SWEPT EASTWARD 1/2". SCATTERED SCRAPES ALONG THE BEAM (PAR) THERE IS A BENT UP SECTION ON THE WEST BOTTOM FLANGE 4" LONG X 1" HIGH AT 20' OUT FROM INT. BENT 1 (PAR)

Date: 09/02/2021

**Condition Photos** 



Span 2 Beam 2: SUPPLEMENTAL INSPECTION 2021: POINT OF IMPACT 8" LONG WTH A 1/2" DEEP GOUGE AT 18'-8" FROM INT. BENT 2, WITH BEAM BEING SWEPT EASTWARD 1/2". SCATTERED SCRAPES ALONG THE BEAM (PAR) THERE IS A BENT UP SECTION ON THE WEST BOTTOM FLANGE 4" LONG X 1" HIGH AT 20' OUT FROM INT. BENT 1(PAR)

Date: 09/02/2021

**Condition Photos** 



Span 2 Beam 2: SUPPLEMENTAL INSPECTION 2021: POINT OF IMPACT 8" LONG WTH A 1/2" DEEP GOUGE AT 18'-8" FROM INT. BENT 2, WITH BEAM BEING SWEPT EASTWARD 1/2". SCATTERED SCRAPES ALONG THE BEAM (PAR) THERE IS A BENT UP SECTION ON THE WEST BOTTOM FLANGE 4" LONG X 1" HIGH AT 20' OUT FROM INT. BENT 1 (PAR)

Date: 09/02/2021

**Condition Photos** 



Span 2 Beam 2: SUPPLEMENTAL INSPECTION 2021: POINT OF IMPACT 8" LONG WTH A 1/2" DEEP GOUGE AT 18'-8" FROM INT. BENT 2, WITH BEAM BEING SWEPT EASTWARD 1/2". SCATTERED SCRAPES ALONG THE BEAM (PAR) THERE IS A BENT UP SECTION ON THE WEST BOTTOM FLANGE 4" LONG X 1" HIGH AT 20' OUT FROM INT. BENT 1 (PAR)

Date: 09/02/2021

#### **Condition Photos**



Date: 09/02/2021

**Condition Photos** 



Date: 09/02/2021

**Condition Photos** 



Date: 09/02/2021



Date: 09/02/2021



Span 2 Deck: SUPPLEMENTAL INSPECTION 2021 : THERE ARE 2 HAIRLINE CRACK IN THE RIGHT OVERHANG ABOVE POINT OF IMPACT



LOOKING EAST

Route Number: 110004	400	Route Na	ame: I	40 EBL		Reference Feature:	Н				
Minimum Vertical Cleara											
Total Horizontal Clearance 43.110       feet       Lateral Clearances: Left: 13.970 feet       Right 11.460       feet											
Base Highway Network LRS Inventory Route, Sub Route Number 10040											
Milepost: 110.720	Number	of Lanes:	2	ADT: 23000	Year of ADT: 2015	Percentage of Trucks:	16				
✓ National Highway System STRAHNET Highway Designator											
Functional Classification 11 Local Principal Arterial - Interstate Direction of Traffic: 1 1 - way traffic											



Span 3 vertical clearance looking West

Route Number: 110004	400	Route Na	ame: I	40 WBI		Reference Feature:	Н					
Minimum Vertical Clear	ance 16	.070 feet	Maxim	Maximum Minimum Vertical Clearance 16.900 feet								
Total Horizontal Clearance 43.540 feet Lateral Clearances: Left: 13.020 feet Right 12.060 feet												
Base Highway Network LRS Inventory Route, Sub Route Number 10040												
Milepost: 110.720	Number	of Lanes:	2	ADT:	23000	Year of A	ADT: 2015	Percentage of Trucks:	16			
✓National Highway System   STRAHNET Highway Designator												
Functional Classification 11 Local Principal Arterial - Interstate Direction of Traffic: 1 1 - way traffic												

Structure: 110147

County: BURKE

Date: 09/02/2021

Structure Photos



LOOKING EAST



REP OF LOW CLEARANCE SIGNS 1500' WEST OF BRIDGE



NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

ATTENTION: IMPACT DAMAGE REPORT FOR SPAN 3, GRADES ARE FOR DAMAGED AREAS ONLY .ROAD RESURFACED BENEATH SPANS 2 AND 3, CHANGE IN MMVC IN SPAN 3, PAR X 1

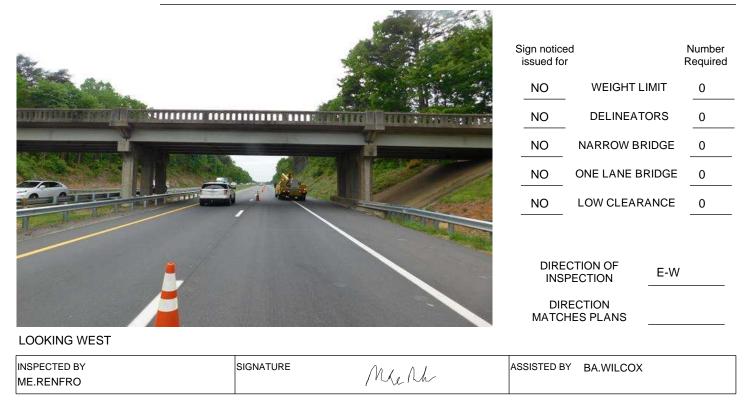
# Structure Safety Report

Supplemental Element Inspection

INSPECTION DATE: 04/29/2019

DIVISION: 13	COUNTY: BURKE	STRUCTU	RE NUMBER: 110169	FREQUENCY:	None
FACILITY CARRIED:	SR1765			MILE POST: 117.3	
LOCATION: .3 MI.S.J	ICT.US64,70				
FEATURE INTERSEC	TED: I-40				
LATITUDE: 35° 42' 9	53.08"		1° 27' 10.93"		
SUPERSTRUCTURE:	REINFORCED CONCRET	E FLOOR ON I-BE	AMS		
SUBSTRUCTURE: E.I	BTS:RC CAPS/H-PILES;INT	.BTS: RC POST &	BEAM		
SPANS: 4 SPANS.	. SEE SPAN PROFILE SHEE	ET FOR SPAN DET	AILS		
FRACTURE CRIT			COUR CRITICAL	SCOUR PLAN OF	ACTION
NBI GRADES:	DECK 6 SUPERSTR	UCTURE 5	SUBSTRUCTURE 6	CULVERT N/A	
POSTED SV: Not Po	osted		POSTED TTST: Not Pos	sted	

OTHER SIGNS PRESENT: NONE



## NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

(1) STATE NAME NORTH CAROLINA BRIDGE 110169	SUFFICIENCY RATING 68.480
(8) STRUCTURE NUMBER (FEDERAL) 0230169	STATUS = Functionally Obso
(5) INVENTORY ROUTE (ON/UNDER) ON 131017650	CLASSIFICATION COD
(2) STATE HIGHWAY DEPARTMENT DISTRICT13(3) COUNTY CODE (FEDERAL)23(4) PLACE CODE31060	(112) NBIS BRIDGE SYSTEM
(6) FEATURE INTERSECTED I-40	(104) HIGHWAY SYSTEM Inventory Route not on NHS
(7) FACILITY CARRIED SR1765	(26) FUNCTIONAL CLASS Urban Local
(9) LOCATION .3 MI.S.JCT.US64,70	(100) STRAHNET HIGHWAY Not a STRAHNET Route
(11) MILEPOINT         117.3           12) BASE HIGHWAY NETWORK         0	(101) PARALLEL STRUCTURE No parallel structure exists
12) DASE HIGHWAY NETWORK 0 13) LRS INVENTORY ROUTE & SUBROUTE	(102) DIRECTION OF TRAFFIC 2-way traffic
(16) LATITUDE 35° 42' 53.08" (17) LONGITUDE 81° 27' 10.93"	(103) TEMPORARY STRUCTURE
(98) BORDER BRIDGE STATE CODE PERCENT SHARED	(110) DESIGNATED NATIONAL NETWORK - on national network for trucks
(99) BORDER BRIDGE STRUCTURE NUMBER	(20) TOLL On Free Road
STRUCTURE TYPE AND MATERIAL	(21) MAINT -
(43) STRUCTURE TYPE MAIN Steel	(22) OWNER -
TYPE Stringer/Multi-beam or girder CODE 302	(37) HISTORICAL SIGNIFICANCE -
(44) STRUCTURE TYPE APPROACH	CONDITION COD
TYPE CODE	(58) DECK
(45) NUMBER OF SPANS IN MAIN UNIT 4	(59) SUPERSTRUCTURE
(46) NUMBER OF SPANS IN APPROACH 0	(60) SUBSTRUCTURE
(107) DECK STRUCTURE TYPE CODE 1	(61) CHANNEL & CHANNEL PROTECTION
(108)WEARING SURFACE/PROTECTIVE SYSTEM	(62) CULVERTS
(A) TYPE OF WEARING SURFACE CODE 1	LOAD RATING AND POSTING COD
(B) TYPE OF MEMBRANE CODE 0	(31) DESIGN LOAD HS 15
(C) TYPE OF DECK PROTECTION CODE 0	(63) OPERATING RATING METHOD - Load Factor
AGE AND SERVICE	(64) OPERATING RATING - HS-27
(27) YEAR BUILT 1956	(65) INVENTORY RATING METHOD -
(106) YEAR RECONSTRUCTED 0.000000	(66) INVENTORY RATING HS-16
(42) TYPE OF SERVICE ON - Highway - Pedestrian	(70) BRIDGE POSTING No Posting Required
OFF - Highway CODE 51	(41) STRUCTURE OPEN, POSTED, OR CLOSED
(28) LANES ON STRUCTURE 2 LANES UNDER STRUCTURE 4	DESCRIPTION Open, no restriction
(29) AVERAGE DAILY TRAFFIC 800	APPRAISAL COD
(30) YEAR OF ADT 2015 (109) TRUCK ADT PCT 7	(67) STRUCTURAL EVALUATION
19) BYPASS OR DETOUR LENGTH2.0	(68) DECK GEOMETRY
GEOMETRIC DATA	69) UNDERCLEARANCES, VERT & HORIZ
(48) LENGTH OF MAXIMUM SPAN 52.0	(71) WATERWAY ADEQUACY
(49) STRUCTURE LENGTH 189.0	(72) APPROACH ROADWAY ALIGNMENT
(50) CURB OR SIDEWALK: LEFT3.1RIGHT3.1(51) BRIDGE ROADWAY WIDTH, CURB TO CURB26.0	(36) TRAFFIC SAFETY FEATURES
(52) DECK WIDTH OUT TO OUT 34.4	(113) SCOUR CRITICAL BRIDGES
(32) APPROACH ROADWAY WITH (W/ SHOULDERS) 21.0	PROPOSED IMPROVEMENTS
(33) BRIDGE MEDIAN No median CODE 0	(75) TYPE OF WORK CODE
(34) SKEW 0 (35) STRUCTURE FLARED 0	(76) LENGTH OF STRUCTURE IMPROVEMENT
(10) INVENTORY ROUTE MIN VERT CLEAR999.9(47) INVENTORY ROUTE TOTAL HORIZ CLEAR26.0	(94) BRIDGE IMPROVEMENT COST
(53) MIN VERT CLEAR OVER BRIDGE RDWY 999.9	(95) ROADWAY IMPROVEMENT COST
(54) MIN VERT UNDERCLEAR: REFERENCE H 14.8	(96) TOTAL PROJECT COST
(55) MIN LAT UNDERCLEARANCE RT: REFERENCE H 10.9	(97) YEAR OF IMPROVEMENT COST ESTIMATE
(56) MIN LAT UNDERCLEARANCE LT: 13.6	(114) FUTURE ADT 1,600 YEAR OF FUTURE ADT 2
NAVIGATION DATA     ODE N	(90) INSPECTION DATE 10/17 (91) FREQUENCY
111) PIER PROTECTION CODE	(92) CRITICAL FEATURE INSPECTION (93) CFI DATE
39) NAVIGATION VERTICAL CLEARANCE 0.0	A) FRACTURE CRIT DETAIL 0 A)
116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR     0.0	B) UNDERWATER INSP 0 B)
	C) OTHER SPECIAL INSP 0 C)
(40) NAVIGATION HORIZONTAL CLEARANCE 0.0	

			ical							raffic	ce			See N	lote Be	low			۶	
Span Number	Facility Carried	Inventory Route	Maximum Minimum Vertical Clearance	Milepoint	Base Highway	LRS Inventory Route	Functional Classification	Number of Lanes	Average Daily Traffic	Year of Average Daily Tr	Total Horizontal Clearan	Reference Feature	Minimum Vertical Underclearance	Rigth Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway	Direction of Traffic	National Highway System	National Truck Network
	7	5	10	11	12	13	26	28	29	30	47	54A	54	55	56	69	100	102	104	110
2	I 40 E	11000400	15.5	117.2	1	10040	11	2	26500	2017	43.3	н	15.2	11.9	13.9	4	1	1		
3	I 40 W	11000400	14.7	117.2	1	10040	11	2	26500	2017	43.0	Н	14.7	12.5	13.6	3	1	1		

Note: 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.



Span 3 Beam 1: DAMAGE TO BEAM 1 SPAN 3 STARTING AT 13.5' FROM INTERIOR BENT 3 FOR A TOTAL LENGTH OF 10'. POINT OF IMPACT MEASURED AT 17.417' FROM INTERIOR BENT 3, WITH SCATTERED SCRAPES AND INDENTIONS THROUGHOUT.

Date: 04/29/2019



Span 3 Beam 1: DAMAGE TO BEAM 1 SPAN 3 STARTING AT 13.5' FROM INTERIOR BENT 3 FOR A TOTAL LENGTH OF 10'. POINT OF IMPACT MEASURED AT 17.417' FROM INTERIOR BENT 3, WITH SCATTERED SCRAPES AND INDENTIONS THROUGHOUT.



Span 3 Beam 1: DAMAGE TO BEAM 1 SPAN 3 STARTING AT 13.5' FROM INTERIOR BENT 3 FOR A TOTAL LENGTH OF 10'. POINT OF IMPACT MEASURED AT 17.417' FROM INTERIOR BENT 3, WITH SCATTERED SCRAPES AND INDENTIONS THROUGHOUT.



Span 3 Beam 1: DAMAGE TO BEAM 1 SPAN 3 STARTING AT 13.5' FROM INTERIOR BENT 3 FOR A TOTAL LENGTH OF 10'. POINT OF IMPACT MEASURED AT 17.417' FROM INTERIOR BENT 3, WITH SCATTERED SCRAPES AND INDENTIONS THROUGHOUT.



Span 3 Beam 1: BEAM 1 SPAN 3 IS DEFLECTED UPWARD 1" STARTING AT 14.583' FROM INTERIONR BENT 3 FOR A TOTAL LENGTH OF 6'



Span 3 Beam 1: BEAM 1 SPAN 3 IS DEFELCTED WESTWARD 1" FOR A TOTAL LENGTH OF 10'. PAR



Span 3 Beam 1: CRACK IN WELD OF PLATE AT BOTTOM FLANGE OF BEAM 1 SPAN 3 MEASURED AT 17' FROM INTERIOR BENT 3 FOR A LENGTH OF 1'



Span 3 Beam 2: SPALL AT TOP FLANGE OF WEST SIDE OF BEAM 2 SPAN 3. 17" LONG BY 6" WIDE BY 1/4" DEEF MEASURED AT 15.417' FROM INTERIOR BENT 3

County: BURKE

Date: 04/29/2019

**Condition Photos** 



Span 3 Beam 2: DAMAGE TO BEAM 2 SPAN 3 STARTING AT 15.333' FROM INTERIOR BENT 3 FOR A TOTAL LENGH OF 5', WITH SCRAPES THROUGHOUT BOTTOM FLANGE. POINT OF IMPACT MEASURED AT 16.917' FROM INTERIOR BENT 3

### **Condition Photos**



Span 3 Beam 2: DAMAGE TO BEAM 2 SPAN 3 STARTING AT 15.333' FROM INTERIOR BENT 3 FOR A TOTAL LENGH OF 5', WITH SCRAPES THROUGHOUT BOTTOM FLANGE. POINT OF IMPACT MEASURED AT 16.917' FROM INTERIOR BENT 3

### **Condition Photos**



Span 3 Beam 2: DAMAGE TO BEAM 2 SPAN 3 STARTING AT 15.333' FROM INTERIOR BENT 3 FOR A TOTAL LENGH OF 5', WITH SCRAPES THROUGHOUT BOTTOM FLANGE. POINT OF IMPACT MEASURED AT 16.917' FROM INTERIOR BENT 3



Span 3 Beam 2: BEAM 2 SPAN 3 DEFLECTED UPWARD 1/2" AT POINT OF IMPACT FOR A LENGTH OF 5'



Span 3 Beam 2: MINOR INDENTIONS IN BEAM 2 SPAN 3 STARTING AT 18.167' FROM INTERIOR BENT 3 FOR A TOTAL LENGTH OF 2'

### **Condition Photos**



Span 3 Beam 3: BEAM 4 SPAN 3 HAS SCRAPES TO BOTTOM FLANGE AT 16.917' FROM INTERIOR BENT 3 FOR A TOTAL LENGTH OF 2'



Span 3 Beam 4: BEAM 4 SPAN 3 HAS SCRAPES TO BOTTOM FLANGE AT 16.75' FROM INTERIOR BENT 3 FOR A TOTAL LENGTH OF 1'

County: BURKE

Date: 04/29/2019

**Condition Photos** 



Span 3 Beam 5: BEAM 5 SPAN 3 HAS SCRAPES ON BOTTOM FLANGE AT 16.5' FROM INTERIOR BENT 3 FOR A TOTAL LENGTH OF 1'. INDENTION AT 16.417' FROM INTERIOR BENT 3, 1" LONG BY 1/4" DEEP



Span 3 Beam 5: BEAM 5 SPAN 3 HAS SCRAPES ON BOTTOM FLANGE AT 16.5' FROM INTERIOR BENT 3 FOR A TOTAL LENGTH OF 1'. INDENTION AT 16.417' FROM INTERIOR BENT 3, 1" LONG BY 1/4" DEEP



Span 3 Beam 1: BEAM 1 SPAN 3 HAS INDENTION AT 21.167' FROM INTERIOR BENT 2 FOR A LENGTH OF 2', WITH UPWARD DEFLECTION OF 1/2". ONE INDENTION 15.5' FROM INTERIOR BENT 2 FOR A LENGTH OF 1', WITH UPWARD DEFLECTION OF 1/4"

### **Condition Photos**



Span 3 Beam 1: BEAM 1 SPAN 3 HAS INDENTION AT 21.167' FROM INTERIOR BENT 2 FOR A LENGTH OF 2', WITH UPWARD DEFLECTION OF 1/2". ONE INDENTION 15.5' FROM INTERIOR BENT 2 FOR A LENGTH OF 1', WITH UPWARD DEFLECTION OF 1/4"



Span 3 Beam 1: BEAM 1 SPAN 3 DEFLECTED UPWARD 1/2" AT 22.75' FROM INTERIOR BENT 2 FOR A LENGTH OF 1'



Span 3 Beam 2: BEAM 2 SPAN 3 DEFLECTED UPWARD 1/2" AT 19.5" FROM INTERIOR BENT 2 FOR A LENGTH OF 4', WITH SCRAPES ON BOTTOM FLANGE



Span 3 Beam 2: BEAM 2 SPAN 3 DEFLECTED UPWARD 1/2" AT 19.5" FROM INTERIOR BENT 2 FOR A LENGTH OF 4', WITH SCRAPES ON BOTTOM FLANGE



Span 3 Beam 3: TWO INDENTIONS IN BOTTOM FLANGE OF BEAM 3 SPAN 3. ONE 1/4" DEEP AND ONE 1/2" DEEP AT 15.583" FROM INTERIOR BENT 2 FOR A TOTAL LENGTH OF 1'

County: BURKE

Date: 04/29/2019

**Condition Photos** 



Span 3 Beam 3: BEAM 3 SPAN 3 DEFLECTED UPWARD 1/4" FOR A LENGTH OF 3' AT 15' FROM INTERIOR BENT 2



Span 3 Beam 3: SPALL AT EAST SIDE OF TOP FLANGE OF BEAM 3 SPAN 3. 3' LONG AT 12' FROM INTERIOR BENT 2

### **Condition Photos**



Span 3 Beam 3: SPALL AT EAST SIDE OF TOP FLANGE OF BEAM 3 SPAN 3. 3' LONG AT 12' FROM INTERIOR BENT 2. SPALL. SPALL AT EAST SIDE OF TOP FLANGE OF BEAM 3 SPAN 2. 2' LONG AT 20' FROM INTERIOR BENT 2



Span 3 Beam 5: TWO 1/4" DEEP INDENTIONS IN BOTTOM FLANGE OF BEAM 5 SPAN 3 AT 16.5' FROM INTERIOR BENT 2 FOR A LENGTH OF 1'



Span 3 Beam 5: BEAM 5 SPAN 3 IS DEFLECTED UPWARD 1/4" AT 16.417' FROM INTERIOR BENT 2 FOR A LENGTH OF 3'

County: BURKE

Date: 04/29/2019

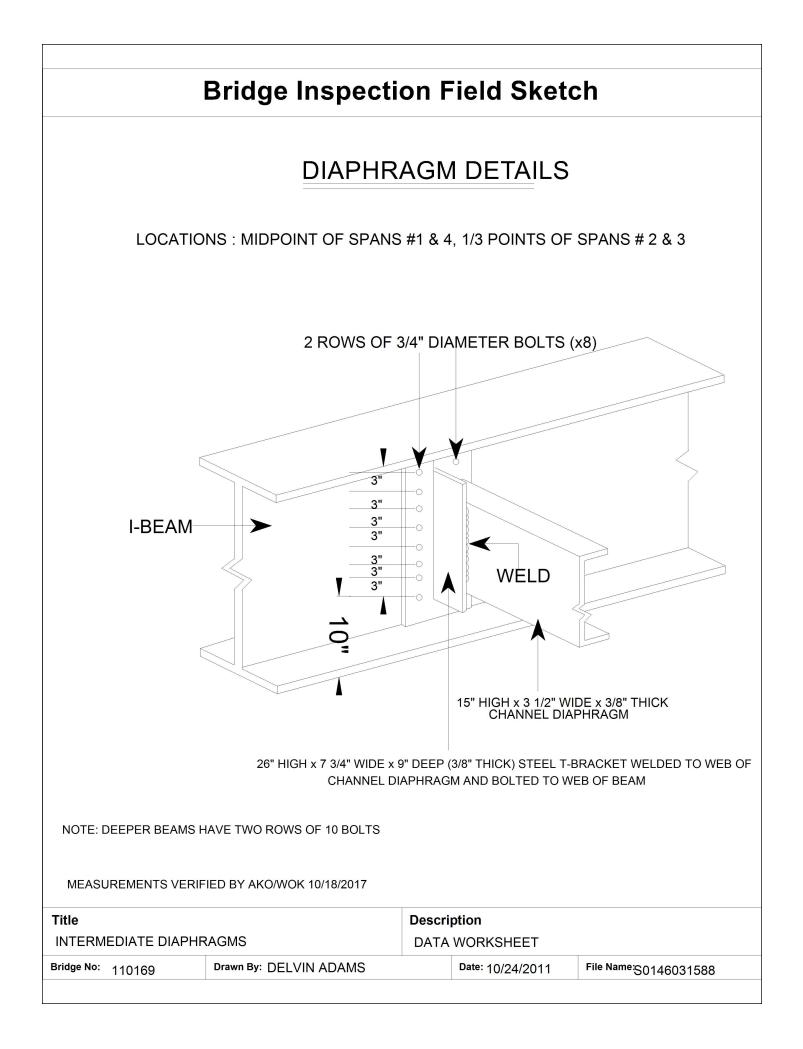


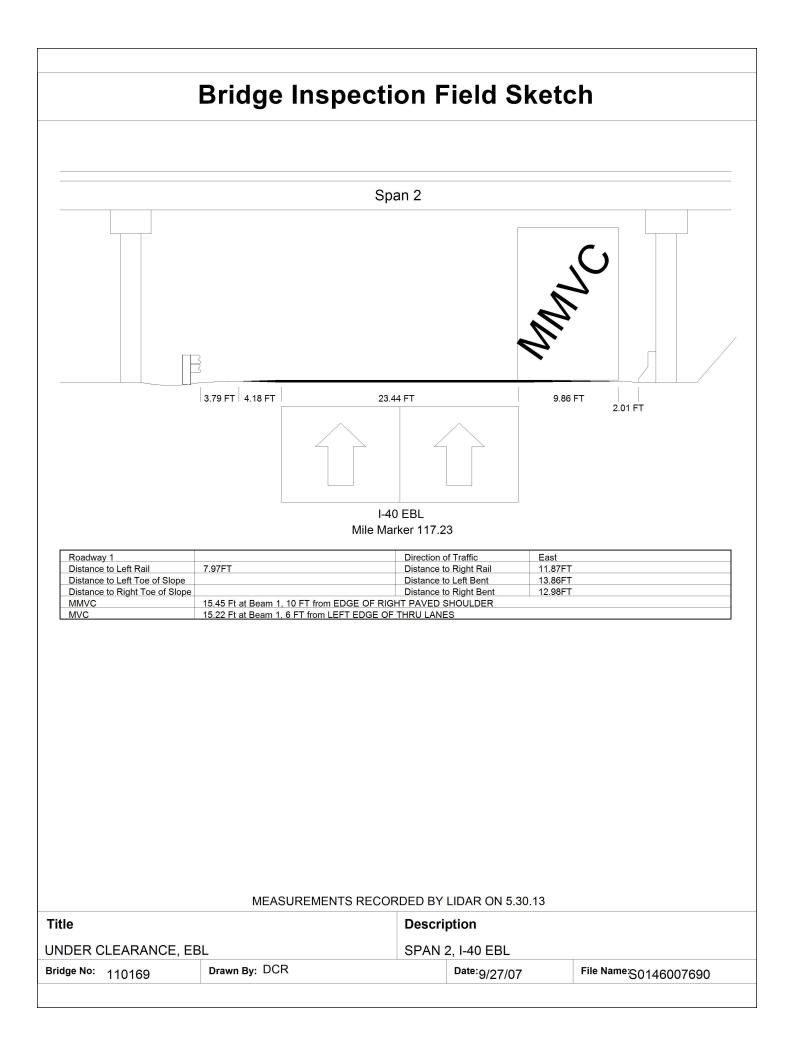
BEAM 1 SPAN 3: DIAPHRAGM 2 BAY 2 DEFLECTED SOUTHWARD FOR 1/2"

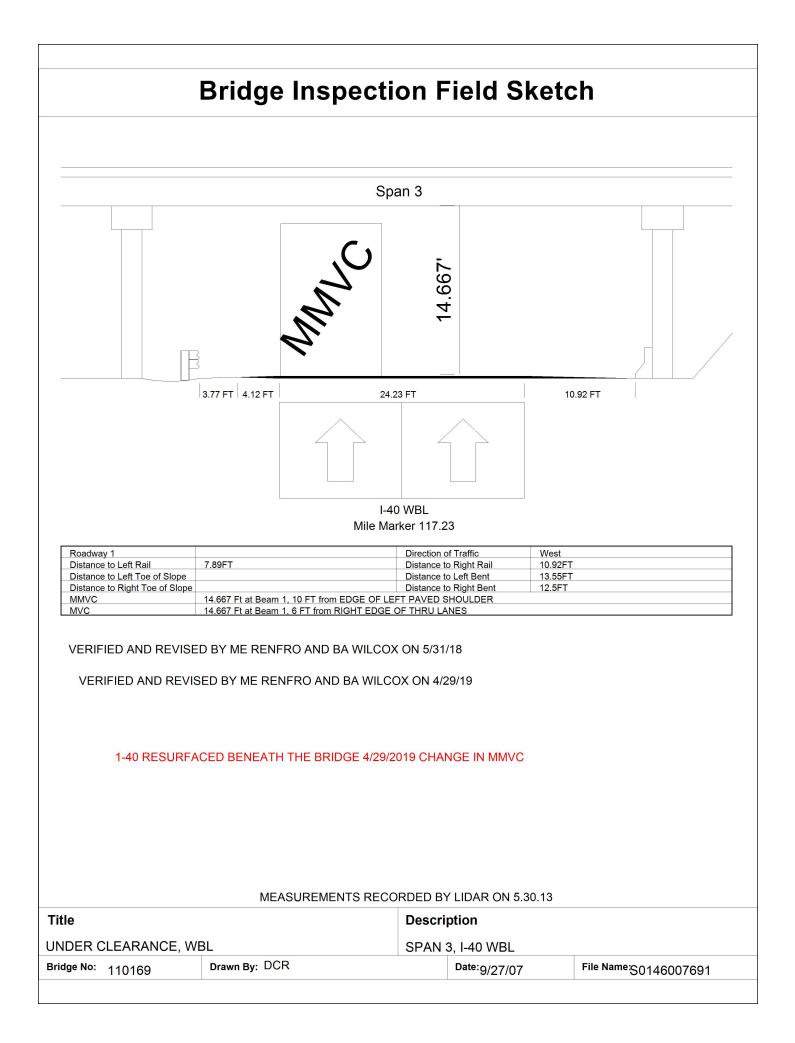
Structure Photos



LOOKING WEST









NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

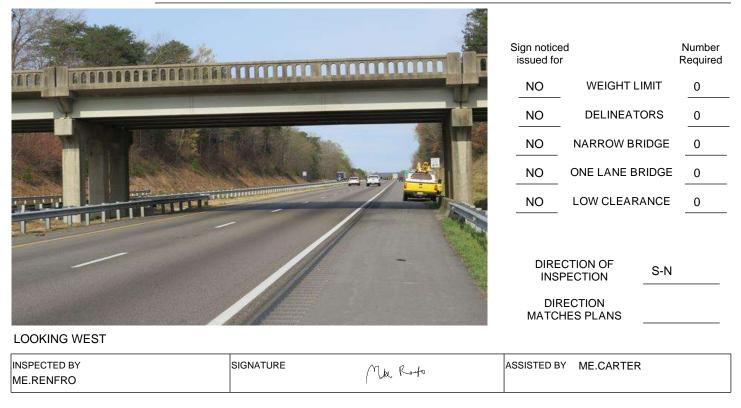
# Structure Safety Report

Supplemental Element Inspection

INSPECTION DATE: 03/29/2022

DIVISION: 13	COUNTY:	BURKE	STRUCT	JRE NUMBER:	110169	FREG	QUENCY:	None	
FACILITY CARRIED:	SR1765					MILE POST:	117.3		
LOCATION: .3 MI.S	JCT.US64	,70							
FEATURE INTERSEC	CTED: I-40	)							
LATITUDE: 35° 42	' 53.08"	L	ONGITUDE:	81° 27' 10.93"					
SUPERSTRUCTURE		DRCED CONCRETE FL	.oor on I-be	EAMS					
SUBSTRUCTURE:	E.BTS:RC (	CAPS/H-PILES;INT.BTS	: RC POST &	BEAM					
SPANS: 4 SPANS	S. SEE SP.	AN PROFILE SHEET F	OR SPAN DE	TAILS					
FRACTURE CR	ITICAL		RING S		CAL	SCOUR	PLAN OF	ACTION	
GRADES: (Inspector	r/NBI Coding)	DECK 5/5 SUP	ERSTRUCTUR	E <u>6/6</u>	SUBSTRU	CTURE 6/6	CUL	VERT N/N	
	Posted			POSTED TTS	T: Not Po	sted			

### OTHER SIGNS PRESENT: NONE



### NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

04/26/2022

(1) STATE NAME NORTH CAROLINA BRIDGE		110169	SUFFICIENCY RATING		78.4
(8) STRUCTURE NUMBER (FEDERAL)	(	0230169	STATUS =	Functional	lly Obsolet
(5) INVENTORY ROUTE (ON/UNDER) ON	131	1017650		CLASSIFICATION	- CODE
(2) STATE HIGHWAY DEPARTMENT DISTRICT		13	(112) NBIS BRIDGE SYSTEM		YE
(3) COUNTY CODE (FEDERAL)23(4) PLACE CODE(6) FEATURE INTERSECTEDI-40		33320	(104) HIGHWAY SYSTEM	Inventory Route not on NHS	6
(7) FACILITY CARRIED SR1765			(26) FUNCTIONAL CLASS	Urban Local	· ۱
(9) LOCATION .3 MI.S.JCT.US64,70			(100) STRAHNET HIGHWAY	Not a STRAHNET Route	9
(11) MILEPOINT		117.3	(101) PARALLEL STRUCTURE	No parallel structure exists	5
(12) BASE HIGHWAY NETWORK		0	(102) DIRECTION OF TRAFFIC	2-way traffic	;
(13) LRS INVENTORY ROUTE & SUBROUTE (16) LATITUDE 35° 42' 53.08" (17) LONGITUDE	Q1º 27	" 10.93"	(103) TEMPORARY STRUCTUR	RE	
(98) BORDER BRIDGE STATE CODE PERCENT S		10.35	(110) DESIGNATED NATIONAL	NETWORK - on national network for trucks	5
(99) BORDER BRIDGE STRUCTURE NUMBER			(20) TOLL	On Free Road	1
			(21) MAINT -		
(43) STRUCTURE TYPE AND MATERIAL ·		Steel	(22) OWNER -		
TYPE Stringer/Multi-beam or girde		302			
с с	, CODE	502	(37) HISTORICAL SIGNIFICANC		
(44) STRUCTURE TYPE APPROACH TYPE	CODE			CONDITION	- CODE
	CODE				
		4	(59) SUPERSTRUCTURE		
(46) NUMBER OF SPANS IN APPROACH		0	(60) SUBSTRUCTURE		
(107) DECK STRUCTURE TYPE	CODE	1	(61) CHANNEL & CHANNEL PR	OTECTION	
(108)WEARING SURFACE/PROTECTIVE SYSTEM			(62) CULVERTS		
(A) TYPE OF WEARING SURFACE	CODE	1		RATING AND POSTING	- CODE
(B) TYPE OF MEMBRANE	CODE	0	(31) DESIGN LOAD	HS 15	
(C) TYPE OF DECK PROTECTION	CODE	0	(63) OPERATING RATING MET		
AGE AND SERVICE			(64) OPERATING RATING -	HS-28	3
(27) YEAR BUILT		1956	(65) INVENTORY RATING MET	HOD -	
(106) YEAR RECONSTRUCTED		0	(66) INVENTORY RATING	HS-17	7
(42) TYPE OF SERVICE ON - Hig	ghway - Peo	destrian	(70) BRIDGE POSTING	No Posting Required	I
OFF - Highway	CODE	51	(41) STRUCTURE OPEN, POST	ED, OR CLOSED	
(28) LANES ON STRUCTURE 2 LANES UNDER STRU	JCTURE	4	DESCRIPTION	Open, no restriction	
(29) AVERAGE DAILY TRAFFIC		800		APPRAISAL	- CODE
(30) YEAR OF ADT 2019 (109) TRUCK ADT PC	т	7	(67) STRUCTURAL EVALUATIO	DN	
19) BYPASS OR DETOUR LENGTH		3.0	(68) DECK GEOMETRY		
GEOMETRIC DATA			(69) UNDERCLEARANCES, VE	RT & HORIZ	
(48) LENGTH OF MAXIMUM SPAN		52.0	(71) WATERWAY ADEQUACY		
(49) STRUCTURE LENGTH		189.0	(72) APPROACH ROADWAY AL	IGNMENT	
(50) CURB OR SIDEWALK: LEFT 3.1 RIGHT (51) BRIDGE ROADWAY WIDTH, CURB TO CURB		3.1 26.0	(36) TRAFFIC SAFETY FEATUR	RES	01
(52) DECK WIDTH OUT TO OUT		34.4	(113) SCOUR CRITICAL BRIDG	ES	
(32) APPROACH ROADWAY WITH (W/ SHOULDERS)		21.0	PROP	OSED IMPROVEMENTS	
(33) BRIDGE MEDIAN No median	CODE	0	(75) TYPE OF WORK	со	DE
(34) SKEW 0 (35) STRUCTURE FLARED		0	(76) LENGTH OF STRUCTURE	IMPROVEMENT	
		999.9 26.0	(94) BRIDGE IMPROVEMENT C	OST	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR (53) MIN VERT CLEAR OVER BRIDGE RDWY		20.0 999.9	(95) ROADWAY IMPROVEMEN	T COST	
(54) MIN VERT UNDERCLEAR: REFERENCE H		14.6	(96) TOTAL PROJECT COST		
(55) MIN LAT UNDERCLEARANCE RT: REFERENCE	н	12.5	(97) YEAR OF IMPROVEMENT	COST ESTIMATE	
(56) MIN LAT UNDERCLEARANCE LT:		13.6	(114) FUTURE ADT	1,600 YEAR OF FUTURE ADT	204
NAVIGATION DATA (38) NAVIGATION CONTROL -	CODE	N	(90) INSPECTION DATE	INSPECTION 10/21 (91) FREQUENCY	, ;
(111) PIER PROTECTION	CODE		(92) CRITICAL FEATURE INSPE	ζ, γ	
	JUDL	0.0	A) FRACTURE CRIT DET		
			B) UNDERWATER INSP	B)	
(116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR		0.0	C) OTHER SPECIAL INSP	,	
(40) NAVIGATION HORIZONTAL CLEARANCE		0.0		(.)	

## **Priority Actions Request**

Structure Num	ber 110169		
Span3			
3314	Beam 1	Plate Girder	
Priority Level	Defect Type	Quantity	Defect Description
2	Cracking	1	Span 3 Beam 1: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022. Crack in weld of plate at bottom flange of beam 1 span 3 measured at 17ft from bent 3 for a length of 1ft
2	Distortion	20	Span 3 Beam 1: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: POINT OF IMPACT 9' LONG WITH SCATTERD 1" DEEP INDENTIONS THROUGH OUT BOTTOM FLANGE , AT 12'-9" OUT FROM INT. BENT 3 . BEAM 1 DEFLECTION 1/2" TO THE WEST,EAST SIDE OF BOTTOM FLANGE BENT UPWARD 1/2in. SCATTERED SCRAPES ALONG BOTTOM FLANGE. (PAR) . SCATTERED OLD SCRAPES AND INDENTIONS ALONG BOTTOM FLANGE .
Removal of Hazard			

	Hazard		
Priority Level	Defect Type	Quantity	Defect Description
2		1	SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022: SPAN 3 DIAPHRAGM 2 BAY 1: 20 BOLTS WITH 6 MISSING ON BEAM 1, UP TO 1' HIGH CRACKING STRATING AT 1/32" WIDE AT TOP AND UP TO 1 1/8" AT BOTTOM OF DIAPHRAGM (PAR).

Removal of Hazard

Removal of

? Priority Action Request (PAR) 1 Assigned Routine Maintenance

2 Assigned Priority Maintenance 3 Assigned Critical Find



Span 3 Deck: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022. spalling up to 12" WIDE X 1" deep, full length, underside of deck along both sides of beam 1.



Span 3 Deck: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022. spalling up to 12" WIDE X 1" deep, full length, underside of deck along both sides of beam 1.



Span 3 Deck: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: full length x up to 1/2in deep surface spalling, in underside of deck, along edges of beam 3.



Span 3 Deck: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.surface spalling up to 1/2in deep, full length, underside of deck along both sides of beam 2.

**Condition Photos** 





**Condition Photos** 



County: BURKE

Date: 03/29/2022

### **Condition Photos**



Date: 03/29/2022

**Condition Photos** 



County: BURKE

Date: 03/29/2022

**Condition Photos** 





Span 3 Beam 1: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022. Crack in weld of plate at bottom flange of beam 1 span 3 measured at 17ft from bent 3 for a length of 1ft



Span 3 Beam 2: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: beam 2 span 3 deflected upward 1/2in at 19.5in from bent 2 for a length of 4ft, with scrapes on bottom flange

County: BURKE

Date: 03/29/2022



Span 3 Beam 2: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: beam 2 span 3 deflected upward 1/2in at 19.5in from bent 2 for a length of 4ft, with scrapes on bottom flange



Span 3 Beam 2: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: beam 2 span 3 deflected upward 1/2in at 19.5in from bent 2 for a length of 4ft, with scrapes on bottom flange



Span 3 Beam 2: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: SCATTERED SCRAPES WEB OF BEAM 2.



Span 3 Beam 3: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022. : SCATTERED SCRAPES ALONG BOTTOM FLANGE OF BEAM 3



Span 3 Beam 4: bSUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: Beam 4 Span 3 has scrapes to bottom flange at 16.75ft from bent 3 for a total length of 1ft



Span 3 Beam 5: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: two 1/4in deep indentions in bottom flange of beam 5 span 3 at 16.5ft from bent 2 for a length of 1ft

County: BURKE

Date: 03/29/2022



Span 3 Beam 5: beam 5 span 3 has scrapes on bottom flange

County: BURKE

Date: 03/29/2022





SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022: SPAN 3 DIAPHRAGM 2 BAY 1: 20 BOLTS WITH 6 MISSING ON BEAM 1, UP TO 1' HIGH CRACKING STRATING AT 1/32" WIDE AT TOP AND UP TO 1 1/8" AT BOTTOM OF DIAPHRAGM (PAR).

County: BURKE

Date: 03/29/2022



SPAN 3 DIAPHRAGM 2 BAY 1: 20 BOLTS WITH 6 MISSING ON BEAM 1, UP TO 1' HIGH CRACKING STRATING AT 1/32" WIDE AT TOP AND UP TO 1 1/8" AT BOTTOM OF DIAPHRAGM (PAR) .



SPAN 3 DIAPHRAGM 2 BAY 1: 20 BOLTS WITH 6 MISSING ON BEAM 1, UP TO 1' HIGH CRACKING STRATING AT 1/32" WIDE AT TOP AND UP TO 1 1/8" AT BOTTOM OF DIAPHRAGM (PAR) .

Date: 03/29/2022

**Condition Photos** 



SCATTERED SCRAPES ALONG WEB BEAM 2 SPAN 3



vertical clearance looking East [span 2]

Route Number: 11000	400	Route Na	ute Name: I 40 E Reference Feature: H					
Minimum Vertical Clear	Minimum Vertical Clearance 15.220 feet Maximum Minimum Vertical Clearance 15.450 feet							
Total Horizontal Clearance 43.280 feet Lateral Clearances: Left: 13.860 feet Right 11.870 feet								
Base Highway Network LRS Inventory Route, Sub Route Number 10040								
Milepost: 117.230	Number	of Lanes: 2	i Lanes: 2 ADT: 26500 Year of ADT: 2017 Percentage of Trucks: 16					
✓ National Highway System								
Functional Classification         11         Local Principal Arterial - Interstate         Direction of Traffic:         1         1 - way traffic								

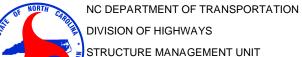
Structure Number: 110169 Span: 3

Route Name: I40W



LOOKING WEST

Route Number: 110004	400	Route Na	te Name: I40W Reference Feature: H						
Minimum Vertical Clear	Minimum Vertical Clearance 14.583 feet Maximum Minimum Vertical Clearance 14.583 feet								
Total Horizontal Clearance 43.040       feet       Lateral Clearances: Left: 13.550 feet       Right 12.500       feet									
Base Highway Network LRS Inventory Route, Sub Route Number 10040									
Milepost: 117.230	Number	of Lanes:	Lanes: 2         ADT: 26500         Year of ADT: 2017         Percentage of Trucks: 16						16
Image: Strain Algebra       Image: Strain Algebra         Image: Strain Algebra       Image: Strain Algebra									
Functional Classification 11 Local Principal Arterial - Interstate Direction of Traffic: 1 1 - way traffic									



ATTENTION: SUPPLEMENTAL INSPECTION / IMPACT DAMAGE SPAN 3/ PAR ISSUED / CHANGE IN VERTICAL CLEARANCE

# Structure Safety Report

Supplemental Element Inspection

INSPECTION DATE: 05/11/2022

DIVISION: 13	COUNTY:	BURKE	STRUCTU	RE NUMBER:	110169	FREQ	UENCY:	None
FACILITY CARRIED:	SR1765					MILE POST:	117.3	
LOCATION: .3 MI.S.	JCT.US64	.70						
FEATURE INTERSEC	TED: I-40							
LATITUDE: <u>35° 42'</u>	53.08"	LC	ONGITUDE: 8	1° 27' 10.93"				
SUPERSTRUCTURE: REINFORCED CONCRETE FLOOR ON I-BEAMS								
SUBSTRUCTURE: E	.BTS:RC C	APS/H-PILES;INT.BTS:	RC POST &	BEAM				
SPANS: 4 SPANS	S. SEE SPA	AN PROFILE SHEET FO	R SPAN DET	AILS				
	TICAL	TEMPORARY SHOR			CAL		PLAN OF	ACTION
GRADES: (Inspector/	NBI Coding)	DECK 5/5 SUPER	RSTRUCTURE	6/6	SUBSTRU	CTURE 6/6		VERT N/N
POSTED SV: Not P	Posted			POSTED TTS	T: Not Po	sted		

### OTHER SIGNS PRESENT: NONE



### NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

05/16/2022

(1) STATE NAME NORTH CAROLINA BRIDGE	1	10169	SUFFICIENCY RATING	_	78.4
(8) STRUCTURE NUMBER (FEDERAL)		230169	STATUS =	Function	ally Obsolet
(5) INVENTORY ROUTE (ON/UNDER) ON	310	17650		CLASSIFICATION	- CODE
(2) STATE HIGHWAY DEPARTMENT DISTRICT (3) COUNTY CODE (FEDERAL) 23 (4) PLACE CODE		13 33320	(112) NBIS BRIDGE SYSTEM		YE
(6) FEATURE INTERSECTED I-40		00020	(104) HIGHWAY SYSTEM	Inventory Route not on N	HS
(7) FACILITY CARRIED SR1765			(26) FUNCTIONAL CLASS	Urban Loo	cal
(9) LOCATION .3 MI.S.JCT.US64,70			(100) STRAHNET HIGHWAY	Not a STRAHNET Rou	ite
		117.3	(101) PARALLEL STRUCTURE		
(12) BASE HIGHWAY NETWORK (13) LRS INVENTORY ROUTE & SUBROUTE		0	(102) DIRECTION OF TRAFFIC	2-way traf	fic
(16) LATITUDE 35° 42' 53.08" (17) LONGITUDE	81° 27'	10.93"	(103) TEMPORARY STRUCTUR	RE	
(98) BORDER BRIDGE STATE CODE PERCENT SHA			(110) DESIGNATED NATIONAL	NETWORK - on national network for truc	ks
(99) BORDER BRIDGE STRUCTURE NUMBER			(20) TOLL	On Free Ro	ad
STRUCTURE TYPE AND MATERIAL -			(21) MAINT -		
(43) STRUCTURE TYPE MAIN		Steel	(22) OWNER -		
TYPE Stringer/Multi-beam or girder	CODE	302	(37) HISTORICAL SIGNIFICANC	SF -	
(44) STRUCTURE TYPE APPROACH					CODE
TYPE	CODE		(58) DECK	CONDITION	CODE
(45) NUMBER OF SPANS IN MAIN UNIT		4	(59) SUPERSTRUCTURE		
(46) NUMBER OF SPANS IN APPROACH		0	(60) SUBSTRUCTURE		
(107) DECK STRUCTURE TYPE	CODE	1	(61) CHANNEL & CHANNEL PR	OTECTION	
(108)WEARING SURFACE/PROTECTIVE SYSTEM	OODL		(62) CULVERTS		
(A) TYPE OF WEARING SURFACE	CODE	1			0005
(A) TYPE OF MEARING SORFACE (B) TYPE OF MEMBRANE	CODE	0	(31) DESIGN LOAD	RATING AND POSTING	CODE
(C) TYPE OF DECK PROTECTION	CODE	0	(63) OPERATING RATING METI		
	OODL	0	(64) OPERATING RATING -	HOD LOUGH AC	
AGE AND SERVICE		1056			20
(27) YEAR BUILT		1956	(65) INVENTORY RATING METH	HOD - HS-	17
		0	(66) INVENTORY RATING		
	way - Pede		(70) BRIDGE POSTING	No Posting Requir	ed
0,	CODE	51	(41) STRUCTURE OPEN, POST		
(28) LANES ON STRUCTURE 2 LANES UNDER STRUCT	TURE	4	DESCRIPTION	Open, no restrictio	n
(29) AVERAGE DAILY TRAFFIC		800		APPRAISAL	_ CODE
(30) YEAR OF ADT 2019 (109) TRUCK ADT PCT		7	(67) STRUCTURAL EVALUATIO	DN	
19) BYPASS OR DETOUR LENGTH GEOMETRIC DATA		3.0	(68) DECK GEOMETRY		
			(69) UNDERCLEARANCES, VEF	RT & HORIZ	
(48) LENGTH OF MAXIMUM SPAN (49) STRUCTURE LENGTH		52.0	(71) WATERWAY ADEQUACY		
(50) CURB OR SIDEWALK: LEFT 3.1 RIGHT		189.0 3.1	(72) APPROACH ROADWAY AL	IGNMENT	
(51) BRIDGE ROADWAY WIDTH, CURB TO CURB		26.0	(36) TRAFFIC SAFETY FEATUR	RES	
(52) DECK WIDTH OUT TO OUT		34.4	(113) SCOUR CRITICAL BRIDG	ES	
(32) APPROACH ROADWAY WITH (W/ SHOULDERS)	005	21.0		OSED IMPROVEMENTS	
(33) BRIDGE MEDIAN C( (34) SKEW 0 (35) STRUCTURE FLARED	ODE	5 0111	(75) TYPE OF WORK	C	ODE
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9	(76) LENGTH OF STRUCTURE	IMPROVEMENT	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			(94) BRIDGE IMPROVEMENT C	OST	
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9	(95) ROADWAY IMPROVEMEN	T COST	
(54) MIN VERT UNDERCLEAR: REFERENCE H		14.6	(96) TOTAL PROJECT COST		
(55) MIN LAT UNDERCLEARANCE RT: REFERENCE H	1	12.5	(97) YEAR OF IMPROVEMENT	COST ESTIMATE	
(56) MIN LAT UNDERCLEARANCE LT:		13.6	(114) FUTURE ADT	1,600 YEAR OF FUTURE ADT	20
(38) NAVIGATION CONTROL -	CODE	6	(90) INSPECTION DATE	INSPECTION 10/21 (91) FREQUEN	CY 2
· · ·	CODE	0	(92) CRITICAL FEATURE INSPE		
	CODE				
				ΔII Λ\	
(39) NAVIGATION VERTICAL CLEARANCE		0.0			
		0.0	A) FRACTURE CRIT DET/ B) UNDERWATER INSP C) OTHER SPECIAL INSP	В)	

### **Condition Photos**



**Condition Photos** 



County: BURKE

Date: 05/11/2022

#### **Condition Photos**

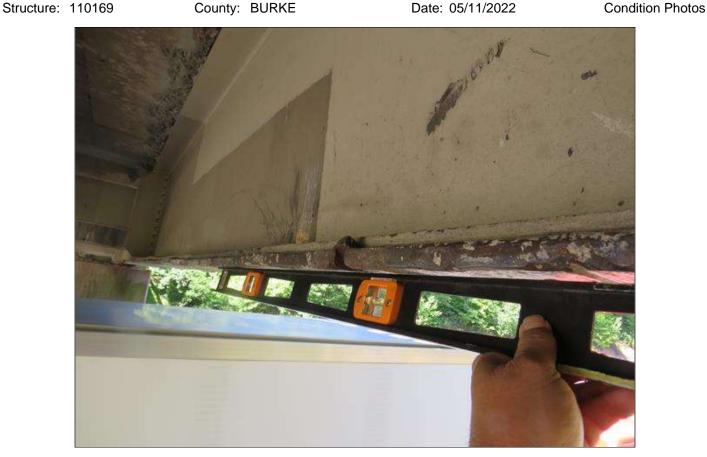


County: BURKE

Date: 05/11/2022

#### **Condition Photos**





County: BURKE

Date: 05/11/2022

#### **Condition Photos**



# **Condition Photos**



Span 3 Deck: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.surface spalling up to 1/2in deep, full length, underside of deck along both sides of beam 1.



Span 3 Deck: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.surface spalling up to 1/2in deep, full length, underside of deck along both sides of beam 2.

County: BURKE

Date: 05/11/2022

**Condition Photos** 



Span 3 Deck: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: full length x up to 1/2in deep surface spalling, in underside of deck, along edges of beam 3.

**Condition Photos** 





Span 3 Beam 1: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022. Crack in weld of plate at TOP flange of beam 1 span 3 measured at 17ft from bent 3 for a length of 1ft



Span 3 Beam 2: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: beam 2 span 3 deflected upward 1/2in at 19.5in from bent 2 for a length of 4ft, with scrapes on bottom flange . SCATTERED SCRAPES ALONG THE WEB .

Structure: 110169

County: BURKE

Date: 05/11/2022

**Condition Photos** 



Span 3 Beam 4: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: Beam 4 Span 3 has scrapes to bottom flange at 16.75ft from bent 3 for a total length of 1ft



Span 3 Beam 5: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: two 1/4in deep indentions in bottom flange of beam 5 span 3 at 16.5ft from bent 2 for a length of 1ft . SCATTERED SCRAPES

# **Condition Photos**



Span 3 Beam 5: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2022.: two 1/4in deep indentions in bottom flange of beam 5 span 3 at 16.5ft from bent 2 for a length of 1ft . SCATTERED SCRAPES

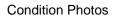


UP TO 1" WIDE CRACKING DIAPHRAGM 2 BAY 1

Structure: 110169

County: BURKE

Date: 05/11/2022





UP TO 1" WIDE CRACKING DIAPHRAGM 2 BAY 1

#### **Condition Photos**



Structure: 110169

County: BURKE

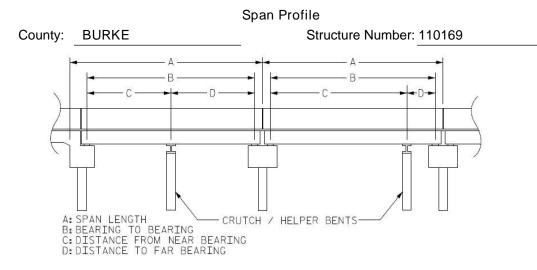
Date: 05/11/2022

**Condition Photos** 



6 DIAPHRAGM BOLTS MISSING BEAM 1

# Structure Data Worksheet



Span Number	Span Length	Bearing to Bearing	Crutch/ Helper Bent	Distance to Near Bearing	Distance to Far Bearing
1	42.000	40.250			
2	52.500	51.500			
3	52.500	51.500			
4	42.000	40.250			



vertical clearance looking East [span 2]

Route Number: 110004	400	Route Na	ute Name: I40E Reference Feature: H					
Minimum Vertical Cleara	ance 15	220 feet	Maxim	um Minimum Vertical (	Clearance 15.450 feet			
Total Horizontal Clearance 43.280 feet       Lateral Clearances: Left: 13.860 feet       Right 11.870 feet								
Base Highway Network LRS Inventory Route, Sub Route Number 10040								
Milepost: 117.230	Number	of Lanes:	Lanes: 2         ADT: 26500         Year of ADT: 2017         Percentage of Trucks: 16					
STRAHNET Highway Designator								
Functional Classification 11         Local Principal Arterial - Interstate         Direction of Traffic:         1         1 - way traffic								

Structure Number: 110169 Span: 3

Route Name: I40W



LOOKING WEST

Route Number: 110004	400	Route Na	te Name: I40W Reference Feature: H						
Minimum Vertical Clear	Minimum Vertical Clearance 14.583 feet Maximum Minimum Vertical Clearance 14.583 feet								
Total Horizontal Clearance 43.040       feet       Lateral Clearances: Left: 13.550 feet       Right 12.500       feet									
Base Highway Network LRS Inventory Route, Sub Route Number 10040									
Milepost: 117.230	Number	of Lanes:	Lanes: 2         ADT: 26500         Year of ADT: 2017         Percentage of Trucks: 16						16
Image: Strain Algebra       Image: Strain Algebra         Image: Strain Algebra       Image: Strain Algebra									
Functional Classification 11 Local Principal Arterial - Interstate Direction of Traffic: 1 1 - way traffic									



LOOKING WEST

Route Number: 110004	400 Route Na		e Name: I40W Reference Feature: H					
Minimum Vertical Clear	ance 14.	500 feet	Maxim	num Minimum Vertical	Clearance	14.583 feet		
Total Horizontal Clearance 43.040         feet         Lateral Clearances: Left: 13.550 feet         Right 12.500         feet								
Base Highway Network LRS Inventory Route, Sub Route Number 10040								
Milepost: 117.230	Number	of Lanes:	of Lanes: 2 ADT: 25500 Year of ADT: 2019 Percentage of Trucks: 16					
Image: Strain and Strain an								
Functional Classification         11         Local Principal Arterial - Interstate         Direction of Traffic:         1         1 - way traffic								

Structure: 110169

County: BURKE

Date: 05/11/2022

Structure Photos



LOOKING WEST



TOP OF DECK SPAN 3

OF NORTH CARD	NC DEPART	MENT OF TRANSF	ORTATION	-		ENTAL INSPECTION / IMPACT DAMAGE /			
Ki jim	DIVISION OF	HIGHWAYS			SPAN 3 / PAF	R			
OF TRUBE	STRUCTURE	MANAGEMENT U	INIT						
		St	ructure	Safety	Repor	t			
		Su	pplementa	l Element	nspection	n			
			INSPECTION	N DATE: 11/30	/2021				
DIVISION: 13	COUNTY:	BURKE	STR	UCTURE NUMB	ER: 110173	FREQUE	NCY: No	ne	
FACILITY CARRIE	D: SR1002					MILE POST:			
LOCATION: .2 MI.	.N.JCT.SR17	80							
FEATURE INTERS	ECTED: I-40	I							
LATITUDE: 35° 4	42' 19.14"		LONGITU	DE: 81° 25' 24	.74"		_		
SUPERSTRUCTUR	RE: REINFO	DRCED CONCRE		N I-BEAMS (WI	DENED)				
SUBSTRUCTURE:	E.BTS:RC C	CAPS/TIM.PILES	&H-PILESINT.	BTS:RC POST	&BEAM				
SPANS: 4 SPA	NS. SEE SP	AN PROFILE SH	EET FOR SPAI	N DETAILS					
FRACTURE C	RITICAL		SHORING		RITICAL		N OF AC	TION	
GRADES: (Inspec	ctor/NBI Coding)	DECK 5/5	SUPERSTRU	CTURE 4/4	SUBSTRU	CTURE 4/4	CULVER	T n/N	

POSTED SV:	Not Posted	POSTED TTST:	Not Posted

### OTHER SIGNS PRESENT: NONE



Sign notice issued fo		Number Required
NO	WEIGHT LIMIT	0
NO	DELINEATORS	0
NO	NARROW BRIDGE	0
NO	ONE LANE BRIDGE	0
NO	LOW CLEARANCE	0



DIRECTION MATCHES PLANS

# LOOKING WEST

INSPECTED BY ME.RENFRO	SIGNATURE	Mil hh	ASSISTED BY	ME.CARTER

#### NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

01/04/2022

IDENTIFICATION			
(1) STATE NAME NORTH CAROLINA BRIDGE 110	0173	SUFFICIENCY RATING	61.86
	0173	STATUS = Structurally	Deficient
(5) INVENTORY ROUTE (ON/UNDER) ON 131010		CLASSIFICATION	
(2) STATE HIGHWAY DEPARTMENT DISTRICT (3) COUNTY CODE (FEDERAL) 23 (4) PLACE CODE 3 <sup>7</sup>	13 1500	(112) NBIS BRIDGE SYSTEM	YES
(6) FEATURE INTERSECTED I-40	1500	(104) HIGHWAY SYSTEM Inventory Route not on NHS	
(7) FACILITY CARRIED SR1002		(26) FUNCTIONAL CLASS Urban Collector	1
(9) LOCATION .2 MI.N.JCT.SR1780		(100) STRAHNET HIGHWAY Not a STRAHNET Route	(
(11) MILEPOINT	0.0	(101) PARALLEL STRUCTURE No parallel structure exists	1
(12) BASE HIGHWAY NETWORK	0	(102) DIRECTION OF TRAFFIC 2-way traffic	:
(13) LRS INVENTORY ROUTE & SUBROUTE		(103) TEMPORARY STRUCTURE	
(16) LATITUDE 35° 42' 19.14" (17) LONGITUDE 81° 25' 24	1.74"		
(98) BORDER BRIDGE STATE CODE     PERCENT SHARED       (99) BORDER BRIDGE STRUCTURE NUMBER		(110) DESIGNATED NATIONAL NETWORK - on national network for trucks	
(33) BORDER BRIDGE STRUCTURE NOMBER		(20) TOLL On Free Road	
STRUCTURE TYPE AND MATERIAL		(21) MAINT -	0
(43) STRUCTURE TYPE MAIN S	Steel	(22) OWNER -	0
TYPE Stringer/Multi-beam or girder CODE	302	(37) HISTORICAL SIGNIFICANCE -	ţ
(44) STRUCTURE TYPE APPROACH		CONDITION	CODE
TYPE CODE		(58) DECK	
(45) NUMBER OF SPANS IN MAIN UNIT	4	(59) SUPERSTRUCTURE	4
(46) NUMBER OF SPANS IN APPROACH	0	(60) SUBSTRUCTURE	
	1		
	I	(61) CHANNEL & CHANNEL PROTECTION	
(108)WEARING SURFACE/PROTECTIVE SYSTEM		(62) CULVERTS	1
(A) TYPE OF WEARING SURFACE CODE	6	LOAD RATING AND POSTING	CODE
(B) TYPE OF MEMBRANE CODE	0	(31) DESIGN LOAD HS 15	
(C) TYPE OF DECK PROTECTION CODE	0	(63) OPERATING RATING METHOD - Load Factor	
AGE AND SERVICE		(64) OPERATING RATING - HS-27	49
(27) YEAR BUILT	1956	(65) INVENTORY RATING METHOD -	
(106) YEAR RECONSTRUCTED	1975	(66) INVENTORY RATING HS-16	29
(42) TYPE OF SERVICE ON - Overpass Struc	cture	(70) BRIDGE POSTING No Posting Required	ŧ
OFF - Highway CODE	61	(41) STRUCTURE OPEN, POSTED, OR CLOSED	A
(28) LANES ON STRUCTURE 4 LANES UNDER STRUCTURE	4	DESCRIPTION Open, no restriction	
(29) AVERAGE DAILY TRAFFIC	5850	APPRAISAL	CODE
(30) YEAR OF ADT 2019 (109) TRUCK ADT PCT	7	(67) STRUCTURAL EVALUATION	OODL
(19) BYPASS OR DETOUR LENGTH	0.0	(68) DECK GEOMETRY	ç
GEOMETRIC DATA	0.0	(69) UNDERCLEARANCES, VERT & HORIZ	3
(48) LENGTH OF MAXIMUM SPAN	57.0		
	207.0	(71) WATERWAY ADEQUACY	١
(50) CURB OR SIDEWALK: LEFT 0.0 RIGHT	0.0	(72) APPROACH ROADWAY ALIGNMENT	ł
(51) BRIDGE ROADWAY WIDTH, CURB TO CURB	67.4	(36) TRAFFIC SAFETY FEATURES	0110
(52) DECK WIDTH OUT TO OUT	70.0	(113) SCOUR CRITICAL BRIDGES	1
	58.0	PROPOSED IMPROVEMENTS	
(33) BRIDGE MEDIAN No median CODE	0	(75) TYPE OF WORK COD	E
(34) SKEW27(35) STRUCTURE FLARED(10) INVENTORY ROUTE MIN VERT CLEAR9	0 199.9	(76) LENGTH OF STRUCTURE IMPROVEMENT	
	67.4	(94) BRIDGE IMPROVEMENT COST	
	999.9	(95) ROADWAY IMPROVEMENT COST	
	14.8	(96) TOTAL PROJECT COST	
(55) MIN LAT UNDERCLEARANCE RT: REFERENCE H	8.7	(97) YEAR OF IMPROVEMENT COST ESTIMATE	
(56) MIN LAT UNDERCLEARANCE LT:	13.3		20.4
		(114) FUTURE ADT 11,700 YEAR OF FUTURE ADT INSPECTION	204
(38) NAVIGATION CONTROL - CODE	N	(90) INSPECTION DATE 10/21 (91) FREQUENCY	24
(11) PIER PROTECTION CODE		(92) CRITICAL FEATURE INSPECTION (93) CFI DAT	
	0.0	A) FRACTURE CRIT DETAIL A)	-
	0.0		
(116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR	0.0	B) UNDERWATER INSP B)	
(40) NAVIGATION HORIZONTAL CLEARANCE	0.0	C) OTHER SPECIAL INSP C)	
		SCOUR	

		ticol	ertical							raffic	lce			See Note Below					Ę	
Span Number	Facility Carried	Inventory Route	Maximum Minimum Ver Clearance	Milepoint	Base Highway	LRS Inventory Route	Functional Classification	Number of Lanes	Average Daily Traffic	Year of Average Daily T	Total Horizontal Clearan	Reference Feature	Minimum Vertical Underclearance	Rigth Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway	Direction of Traffic	National Highway System	National Truck Network
	7	5	10	11	12	13	26	28	29	30	47	54A	54	55	56	69	100	102	104	110
2	I 40 EB - LIDAR 05/30/13	1100040	16.4	119.0	1	10040	11	2	22500	2015	42.7	н	16.1	11.6	12.3	5		1		
3	I 40 WB - LIDAR 05/30/13	1100040	15.0	119.0	1	10040	11	2	22500	2015	43.3	н	14.8	8.7	13.3	3		1		
3	I 40 W	1100040	15.0	119.0	1	10040	11	2	25750	2019	43.3	н	14.8	8.7	13.3	3	1	1		

Note: 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.

#### **Condition Photos**



Span 3 Beam 11: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2021 area of previous impact damage, distortion of bottom flange vertical up to 2" lateral up to 1/2" with broken cover plate weld [10" long]. new area of impact damage 6" long x 2" high at 13'-5" out from int. bent 3 . with the bottom cover plate being broken loose from bottom flange 10" long x 2" deep . there are also two older 1/2" indentions in the same area . Beam 11 is swept westward up to 1 1/2". (par) there is a 2" diameter torch cut hole at both ends of of the 6' length .

Date: 11/30/2021

**Condition Photos** 



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**Condition Photos** 



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Date: 11/30/2021

**Condition Photos** 



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**Condition Photos** 



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 Structure:
 110173
 County:
 BURKE
 Date:
 11/30/2021
 Condition Photos

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Date: 11/30/2021

**Condition Photos** 



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Date: 11/30/2021



Span 3 Beam 10: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2021: 1 indention 1" long x 1/2" deep at 18'-8" from int. bent 3 . scattered scrapes along the web .



Span 3 Beam 10: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2021: 1 indention 1" long x 1/2" deep at 18'-8" from int. bent 3 . scattered scrapes along the web .

Structure: 110173

County: BURKE

Date: 11/30/2021

**Condition Photos** 



Span 3 Beam 10: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2021: 1 indention 1" long x 1/2" deep at 18'-8" from int. bent 3 . scattered scrapes along the web .



Span 3 Beam 9: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2021: 1 indention 1" long x 1/4" deep at 18'-7" from int. bent 3



Span 3 Beam 4: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2021: scattered scrapes



Span 3 Beam 3: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2021 :scattered scrapes

Structure: 110173

Date: 11/30/2021



Span 3 Beam 2: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2021 :scattered scrapes



Span 3 Beam 1: SUPPLEMENTAL INSPECTION IMPACT DAMAGE 2021 :scattered scrapes



vertical clearance looking East Span 2 (choose 1)

Route Number: 110004	40	Route Na	Reference Feature:	Н						
Minimum Vertical Cleara	060 feet	Maxim	Maximum Minimum Vertical Clearance 16.360 feet							
Total Horizontal Clearance 42.650         feet         Lateral Clearances: Left: 12.250 feet         Right 11.580         feet										
Image: Sub-Reserve and the sub-Reserve and						ber 1004	0			
Milepost: 119.020	Number	umber of Lanes: 2 ADT: 22500 Year of ADT: 2015					Percentage of Trucks:	16		
✓ National Highway System										
Functional Classification 11 Local Principal Arterial - Interstate Direction of Traffic: 1 1 - way traffic										



LOOKING WEST CLEARANCE

Route Number: 110004	40	Route Na	ame: I	I 40 WB - LIDAR 05/30/	Reference Feature:	Н				
Minimum Vertical Clear	ance 14	770 feet	Maxim	Maximum Minimum Vertical Clearance 14.950 feet						
Total Horizontal Clearance 43.270       feet       Lateral Clearances: Left: 13.280 feet       Right 8.670       feet										
Base Highway Netwo	ork	LRS Inv	entory F	Route, Sub Route Num	ber 10040					
Milepost: 119.020	Number	of Lanes:	2	ADT: 22500	Year of ADT: 2015	Percentage of Trucks:	16			
✓ National Highway System										
Functional Classification 11 Local Principal Arterial - Interstate Direction of Traffic: 1 1 - way traffic										

Date: 11/30/2021

Structure Photos



LOOKING WEST



LOOKING WEST CLEARANCE

NC DEPARTMENT OF TRANSPORTATION

OF TUMBUL

DIVISION OF HIGHWAYS

ATTENTION: SUPPLEMENTAL INSPECTION / IMPACT DAMAGE SPAN 2 ONLY / PAR X2 / CHANGE IN MMVC

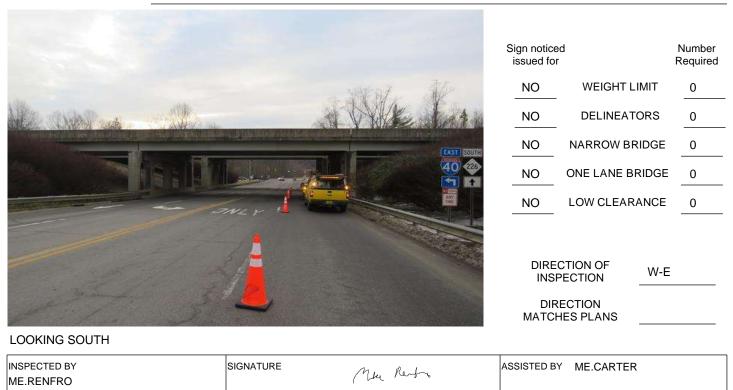
# Structure Safety Report

Supplemental Element Inspection

INSPECTION DATE: 01/25/2022

DIVISION: 13	COUNTY:	MCDOWELL	STRUCT	URE NUMBER:	580143	FREC	QUENCY:	None	
FACILITY CARRIED	: I-40 WBI					MILE POST:	86.38		
LOCATION: 1.8 MI.	E.JCT.US2	21							
FEATURE INTERSE	CTED: NC	226							
LATITUDE: 35° 39	' 29.71"		LONGITUDE:	81° 57' 44.59'	I				
SUPERSTRUCTURE	RC FLC	OOR ON I-BEAMS (S.	.P. METAL FO	RMS)(WIDEN	ED)				
SUBSTRUCTURE:	E.BTS:RC (	CAPS/PPC PILES;INT	BT:RC P&B/P	ILE FTGS.					
SPANS: 3 SPAN	S. SEE SP	AN PROFILE SHEET	FOR SPAN DE	TAILS					
FRACTURE CR	ITICAL			SCOUR CRITI	CAL	SCOUR	PLAN OF	ACTION	
GRADES: (Inspecto	r/NBI Coding)	DECK 5/5 SU	PERSTRUCTUR	RE <u>6/6</u>	SUBSTRU	CTURE 6/6	CUL	VERT N/N	
POSTED SV: Not	Posted			POSTED TTS	T: Not Po	sted			

#### OTHER SIGNS PRESENT: NONE



#### NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

02/08/2022

IDENTIFICATION	
(1) STATE NAME NORTH CAROLINA BRIDGE 580143	
(8) STRUCTURE NUMBER (FEDERAL) 1110143	
(5) INVENTORY ROUTE (ON/UNDER) ON 11000400	
(2) STATE HIGHWAY DEPARTMENT DISTRICT13(3) COUNTY CODE (FEDERAL)111(4) PLACE CODE41420	
(6) FEATURE INTERSECTED NC226	(104) HIGHWAY SYSTEM Inventory Route is on NHS
(7) FACILITY CARRIED I-40 WBL	(26) FUNCTIONAL CLASS Urban Principal Arterial - Interstate
(9) LOCATION 1.8 MI.E.JCT.US221	(100) STRAHNET HIGHWAY Interstate STRAHNET Route
(11) MILEPOINT 86.4	(101) PARALLEL STRUCTURE
(12) BASE HIGHWAY NETWORK 1	(102) DIRECTION OF TRAFFIC 1-way traffic
(13) LRS INVENTORY ROUTE & SUBROUTE         10040           (16) LATITUDE         35° 39' 29.71"         (17) LONGITUDE         81° 57' 44.59"	(103) TEMPORARY STRUCTURE
(98) BORDER BRIDGE STATE CODE PERCENT SHARED	(110) DESIGNATED NATIONAL NETWORK - ۲۰ natiional network for trucks
(99) BORDER BRIDGE STRUCTURE NUMBER	(20) TOLL On Free Road
	(21) MAINT -
STRUCTURE TYPE AND MATERIAL	
(43) STRUCTURE TYPE MAIN Steel	
TYPE Stringer/Multi-beam or girder CODE 302	(37) HISTORICAL SIGNIFICANCE -
(44) STRUCTURE TYPE APPROACH	CONDITION CODE
TYPE CODE	(58) DECK
(45) NUMBER OF SPANS IN MAIN UNIT 3	
(46) NUMBER OF SPANS IN APPROACH 0	(60) SUBSTRUCTURE
(107) DECK STRUCTURE TYPE CODE 1	(61) CHANNEL & CHANNEL PROTECTION
(108)WEARING SURFACE/PROTECTIVE SYSTEM	(62) CULVERTS
(A) TYPE OF WEARING SURFACE CODE 1	LOAD RATING AND POSTING CODE
(B) TYPE OF MEMBRANE CODE 0	(31) DESIGN LOAD H 20 + Mod
(C) TYPE OF DECK PROTECTION CODE 1	(63) OPERATING RATING METHOD - Load Factor
AGE AND SERVICE	(64) OPERATING RATING - HS-55
(27) YEAR BUILT 1958	(65) INVENTORY RATING METHOD -
(106) YEAR RECONSTRUCTED 1997	(66) INVENTORY RATING HS-33
(42) TYPE OF SERVICE ON - Overpass Structure	(70) BRIDGE POSTING No Posting Required
OFF - Highway CODE 61	(41) STRUCTURE OPEN, POSTED, OR CLOSED
(28) LANES ON STRUCTURE 3 LANES UNDER STRUCTURE 2	DESCRIPTION Open, no restriction
(29) AVERAGE DAILY TRAFFIC 13500	APPRAISAL CODE
(30) YEAR OF ADT 2013 (109) TRUCK ADT PCT 16	
(19) BYPASS OR DETOUR LENGTH 2.0	(68) DECK GEOMETRY
GEOMETRIC DATA	(69) UNDERCLEARANCES, VERT & HORIZ
(48) LENGTH OF MAXIMUM SPAN 57.0	
(49) STRUCTURE LENGTH 174.0	
(50) CURB OR SIDEWALK: LEFT 0.0 RIGHT 0.0	
(51) BRIDGE ROADWAY WIDTH, CURB TO CURB 48.2	
(52) DECK WIDTH OUT TO OUT 51.0	
(32) APPROACH ROADWAY WITH (W/ SHOULDERS)48.0(33) BRIDGE MEDIANCODE5	
(34) SKEW 5 (35) STRUCTURE FLARED 1111	
(10) INVENTORY ROUTE MIN VERT CLEAR 999.9	(76) LENGTH OF STRUCTURE IMPROVEMENT
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	(94) BRIDGE IMPROVEMENT COST
(53) MIN VERT CLEAR OVER BRIDGE RDWY 999.9	
(54) MIN VERT UNDERCLEAR: REFERENCE H 14.7	
(55) MIN LAT UNDERCLEARANCE RT: REFERENCEH2.5(56) MIN LAT UNDERCLEARANCE LT:0.0	(97) YEAR OF IMPROVEMENT COST ESTIMATE
(30) WIN LAT UNDERCELANANCE ET. 0.0	(114) FUTURE ADT 27,000 YEAR OF FUTURE ADT 204
NAVIGATION DATA	
(38) NAVIGATION CONTROL - CODE 6	
(111) PIER PROTECTION CODE	(92) CRITICAL FEATURE INSPECTION (93) CFI DATE
(39) NAVIGATION VERTICAL CLEARANCE	A) FRACTURE CRIT DETAIL A)
(116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR 0.0	B) UNDERWATER INSP B)
(40) NAVIGATION HORIZONTAL CLEARANCE	C) OTHER SPECIAL INSP C)

			Vertical			۵	ation		U	aily Traffic	arance			See N	lote Be	low	ay		ystem	
Span Number	Facility Carried	Inventory Route	Maximum Minimum Clearance	Milepoint	Base Highway	LRS Inventory Route	Functional Classific	Number of Lanes	Average Daily Traffic	Year of Average Da	Total Horizontal Cle	Reference Feature	Minimum Vertical Underclearance	Rigth Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highwa	Direction of Traffic	National Highway S	
	7	5	10	11	12	13	26	28	29	30	47	54A	54	55	56	69	100		 104	ł
2	NC226 N	31002260	15.0	0.0	0		16	4	13000	2013	53.0	н	14.7	2.5	2.0	3		2		ĺ

Date: 01/25/2022

**Condition Photos** 



**Condition Photos** 



Date: 01/25/2022

**Condition Photos** 



Date: 01/25/2022

**Condition Photos** 



Date: 01/25/2022

**Condition Photos** 





Structure: 580143

County: MCDOWELL

Date: 01/25/2022

**Condition Photos** 



Date: 01/25/2022



Span 2 Beam 2: 2022 OLD INDENTIONS BEAM 4



Span 2 LEFT RAIL SCATTERED INDENTIONS BOTTOM

Date: 01/25/2022



Span 2 Left Bridge Rail: 2022 SUPPLEMENTAL INSPECTION SCATTERED SCRAPES ON BEAM 2



Span 2 Beam 2: 2022 OLD INDENTIONS BEAM 4

Date: 01/25/2022

**Condition Photos** 



Span 2 Beam 1: SCATTERED SCRAPES



SPAN 2 BAY 1 DIAPHRAM 2 ALL 4 BOLTS MISSING AT DIAPHRAM ATTACHMENT TO BEAM 1 (PAR)

Date: 01/25/2022



SPAN 2 BAY 1 BOTTOM LOWER BASE PLATE WELD BROKEN LOOSE FROM BEAM 1 DIAPHRAM 2 , 3 3/4" LONG X 1/16" DEEP AT 3" UP FROM BOTTOM OF PLATE .(PAR)



# CLEARANCE PHOTO

Route Number: 31002	260	Route Na	ame: I	NC226 N	Reference Feature:	Н					
Minimum Vertical Clear	ance 14.	667 feet	Maxim	Maximum Minimum Vertical Clearance 15.000 feet							
Total Horizontal Clearance 53.000         feet         Lateral Clearances: Left: 2.000         feet         Right 2.500         feet											
Base Highway Netwo	ork	ber									
Milepost: 0.000	Number	of Lanes:	4	ADT: 13000	Percentage of Trucks:	6					
National Highway System         STRAHNET Highway Designator											
Functional Classification 16         Local Minor Arterial         Direction of Traffic: 2         2 - way traffic											

Date: 01/25/2022

Structure Photos



TOP OF DECK



LOOKING SOUTH

Date: 01/25/2022

Structure Photos



CLEARANCE PHOTO