Brunswick #13

Span #	Component	Location (ft. from nearest bent, etc)	Bent #	Defect Description	Length (ft.)	Width (ft.)	Assumed Depth (ft.)	As-Built Quantities: Actual (C.F.)	As-Built Quantities: Actual Depth (ft.)
1	Deck	at random throughout		(x7) Spall	7	1.5	0.5		
1	Girder 1	at end of beam, at Bent 1	1	Spall	1.5	1	0.5		
1	Girder 1	3 places on beam bottom	1	Spall/Exposed Rebar	1.5	1	0.5		
1	Girder 2	at end of beam, at Bent 1	1	Spall	2	1.5	0.5		
1	Girder 2	3 places on beam bottom	1	Spall/Exposed Rebar	1.5	1	0.5		
1	Girder 3	at end of girder, at bent 1	1	Spall	1	1	0.5		
1	Girder 3	3 places on beam bottom	1	Spall/Exposed Rebar	1.5	1	0.5		
1	Girder 4	3 places on beam bottom	1	Spall/Exposed Rebar	1.5	1	0.5		
1	Girder 5	3 places on beam bottom	1	Spall/Exposed Rebar	1.5	1	0.5		
2	Girder 1	at end of girder, at bent 1	1	Spall	2	1	0.5		
2	Girder 1	at bottom flange, at end of girder, at bent 2	2	Spall	1.5	1.5	0.5		
2	Girder 1	3 places on beam bottom	2	Spall/Exposed Rebar	1.5	1	0.5		
2	Girder 2	at end of girder, at bent 1	1	Spall	1.5	1.5	0.5		
2	Girder 2	at end of girder, at bent 2	2	Cracking (PSC)	6				
2	Girder 2	3 places on beam bottom	2	Spall/Exposed Rebar	1.5	1	0.5		
2	Girder 3	at end of girder, at bent 1	1	Cracking (PSC)	6				
2	Girder 3	3 places on beam bottom	2	Spall/Exposed Rebar	1.5	1	0.5		
2	Girder 4	at end of girder, at bent 1	1	Spall/Exposed Rebar	2	1.5	0.5		
2	Girder 4	at end of girder, at bent 1	1	Spall	2	1.5	0.5		
2	Girder 4	3 places on beam bottom	2	Spall/Exposed Rebar	1.5	1	0.5		
2	Girder 5	at end of girder, at bent 1	1	Cracking (PSC)	6				
2	Girder 5	at end of girder, at bent 2	2	Cracking (PSC)	6				
3	Girder 1	at end of girder, at bent 3	3	(x2) Spalls/Exposed bar	5	4.5	0.5		
3	Girder 1	bottom flange, at end of girder, at bent 2	2	Spall	1.5	1.5	0.5		
3	Girder 1	at end of girder, at bent 3	3	Cracking (PSC)	6				
3	Girder 1	at end of girder, at bent 2	2	Cracking (PSC)	6				
3	Girder 2	bottom flange, at end of girder, at bent 2	2	Spall	1.5	1	0.5		
3	Girder 2	at end of girder, at bent 2	2	Cracking (PSC)	6				
3	Girder 2	at end of girder, at bent 3	3	Cracking (PSC)	6				
3	Girder 3	bottom flange, at end of girder, at bent 2	2	Spall/Exposed Rebar	3	3	0.5		
3	Girder 3	at end of girder, at bent 3	3	Cracking (PSC)	6				
3	Girder 3	at end of girder, at bent 2	3	Cracking (PSC)	6				
3	Girder 4	at end of girder, at bent 2	2	Spall/Exposed Rebar	3	3	0.5		
3	Girder 4	at end of girder, at bent 2	2	Cracking (PSC)	6				
3	Girder 5	bottom flange, at end of girder, at bent 2	2	Spall/Exposed Rebar	3	3	0.5		
3	Girder 5	Top flange, at end of girder, at bent 3	3	Spall	2.5	2.5	0.5		
3	Girder 5	at end of girder, at bent 2	2	Cracking (PSC)	6				
4	Girder 1	bottom flange, at end of girder, at bent 3	3	Spall/Exposed Rebar	2	2.75	0.5		
4	Girder 1	at end of girder, at bent 3	3	Cracking (PSC)	6				
4	Girder 1	at end of girder, at bent 4	4	Cracking (PSC)	6				
4	Girder 2	bottom flange, at end of girder, at bent 3	3	Spall/Exposed Rebar	1.5	0.75	0.5		
4	Girder 2	at end of girder, at bent 3	3	Cracking (PSC)	6				
4	Girder 2	at end of girder, at bent 4	4	(x2) Painted spall/Exposed R	1.5	1.5	0.5		
4	Girder 3	at end of girder, at bent 4	4	Spall/Exposed Rebar	3	2.75	0.5		
4	Girder 3	at end of girder, at bent 3	3	Cracking (PSC)	6				
4	Girder 4	North face, at bent 3	3	Spall	0.75	0.75	0.5		
4	Girder 4	Bottom flange at bent 3	3	(x2) spall /Exposed Rebar	4	1	0.5		
4	Girder 4	at end of girder, at bent 4	4	Spall/Exposed Rebar	2	1	0.5		
4	Girder 4	at end of girder, at bent 3	3	Cracking (PSC)	6				
4	Girder 4	at end of girder, at bent 4	4	Cracking (PSC)	6				
4	Girder 5	at end of girder, at bent 3	3	Spall	1.5	1	0.5		
4	Girder 5	at end of girder, at bent 4	4	Spall	1.5	1.5	0.5		
5	Girder 1	Top flange, at end of girder, at bent 4	4	Spall	2.5	2.5	0.5		
5	Girder 1	at end of girder, at bent 5	5	Cracking (PSC)	6				
5	Girder 2	Bottom flange, end of girder, at bent 4	4	Spall/Exposed Rebar	1.5	1.75	0.5		
5	Girder 2	at end of girder, at bent 5	5	Cracking (PSC)	6				
5	Girder 2	at end of girder, at bent 4	4	Cracking (PSC)	6				
5	Girder 3	At end of Girder at bent 4	4	Cracking (PSC)	6				
5	Girder 3	At end of Girder at bent 5	5	Cracking (PSC)	6				
5	Girder 4	At end of Girder at bent 4	4	Spall/Exposed Rebar	2	2.5	0.5		
5	Girder 4	At end of Girder at bent 4	4	Cracking (PSC)	6				
5	Girder 4	At end of Girder at bent 5	5	Cracking (PSC)	6				
5	Girder 5	At end of Girder at bent 4	4	Spall	1.5	1.5	0.5		
5	Girder 5	At end of Girder at bent 5	5	Spall	1	1.5	0.5		
6	Girder 1	East corner, at end girder at bent 6	6	Spall	2	1	0.5		

Brunswick #13

Span #	Component	Location (ft. from nearest bent, etc)	Bent #	Defect Description	Length(ft.)	Width(ft.)	Depth(ft.)	As-Built Quantities: Actual (C.F.)	As-Built Quantities: Actual Depth (ft.)
6	Girder 1	At end of girder at bent 5	5	Cracking (PSC)	6				
6	Girder 1	3 places on beam bottom	6	Spall/Exposed Rebar	1.5	1	0.5		
6	Girder 2	Bottom of beam at bent 5	5	Spall	1	1.5	0.5		
6	Girder 2	End of girder, at bent 5	5	Spall	2.5	2.5	0.5		
6	Girder 2	At end of girder, at bent 6	6	Cracking (PSC)	6				
6	Girder 2	3 places on beam bottom	6	Spall/Exposed Rebar	1.5	1	0.5		
6	Girder 3	At beam end, at bent 6	6	Spall	1.5	1.5	0.5		
6	Girder 3	Top of flange, at end of girder, at bent 6	6	Spall	2.5	2.5	0.5		
6	Girder 3	At end of girder at bent 5	5	Cracking (PSC)	6				
6	Girder 4	Bottom of beam, at bent 5	5	Spall	2	1	0.5		
6	Girder 4	At end of girder, at bent 5	5	Cracking (PSC)	6				
6	Girder 4	At end of girder, at bent 6	6	Cracking (PSC)	6				
6	Girder 5	At end of girder, at bent 5	5	Cracking (PSC)	6				
6	Girder 5	At end of girder, at bent 6	6	Spall	2.5	2.5	0.5		
7	Deck	Top of deck, 10' from left bridge rail	7	Spall	2	1	0.5		
7	Girder 1	North face, at bent 6	6	Spall	1	1	0.5		
7	Girder 1	End of girder, at bent 6	6	Cracking (PSC)	6				
7	Girder 1	Bottom of Beam 1' from near end	6	Spall/Exposed Rebar	1.5	1	0.5		
7	Girder 1	End of girder, at bent 7	7	Spall	1	1.5	0.5		
7	Girder 1	3 places on beam bottom	7	Spall/Exposed Rebar	1.5	1	0.5		
7	Girder 2	At end of girder at bent 6	6	Cracking (PSC)	6				
7	Girder 2	End of girder, at bent 7	7	Cracking (PSC)	6				
7	Girder 2	3 places on beam bottom	7	Spall/Exposed Rebar	1.5	1	0.5		
7	Girder 2	Web, Right side 1' from far end	7	Spall/Exposed Rebar	1.5	1	0.5		
7	Girder 3	South Face, at bent 6	6	Spall	1	1	0.5		
7	Girder 3	End of girder, at bent 7	7	Cracking (PSC)	6				
7	Girder 3	3 places on beam bottom	7	Spall/Exposed Rebar	1.5	1	0.5		
7	Girder 4	Diagonal crack, South face at bent 6	6	Cracking (PSC)	1				
7	Girder 4	End of girder, at bent 6	6	Cracking (PSC)	6				
7	Girder 4	End of girder, at bent 7	7	Cracking (PSC)	6				
7	Girder 4	3 places on beam bottom	7	Spall/Exposed Rebar	1.5	1	0.5		
7	Girder 5	End of girder, at bent 6	6	Cracking (PSC)	6				
7	Girder 5	End of girder, at bent 7	7	Cracking (PSC)	6				
7	Girder 5	3 places on beam bottom	7	Spall/Exposed Rebar	1.5	1	0.5		
8	Deck	Top of deck, 10' from left bridge rail	7	Spall	3.5	1	0.5		
8	Girder 1	End of girder, at bent 8	8	Cracking (PSC)	6				
8	Girder 1	End of girder, at bent 7	7	Cracking (PSC)	6				
8	Girder 2	South face, at bent 7	7	Spall	2	1	0.5		
8	Girder 2	North face, at bent 7	7	Spall	1	1	0.5		
8	Girder 2	End of girder, at bent 8	8	Cracking (PSC)	6				
8	Girder 2	End of girder, at bent 7	7	Cracking (PSC)	6				
8	Girder 3	End of girder, at bent 7	7	Cracking (PSC)	6				
8	Girder 3	End of girder, at bent 8	8	Cracking (PSC)	6				
8	Girder 4	North face, bottom flange at beam end	7	(x2) Spall	2	1	0.5		
8	Girder 4	North face at bent 7	7	(x2) Spall	3.5	1	0.5		
8	Girder 4	North face at bent 8	8	Spall	1.25	1	0.5		
8	Girder 4	South face at bent 8	8	Spall	1	1	0.5		
8	Girder 4	End of girder, at bent 7	7	Cracking (PSC)	6				
8	Girder 4	End of girder, at bent 8	8	Cracking (PSC)	6				
8	Girder 5	End of girder, at bent 8	8	Spall	1	1	0.5		
8	Girder 5	End of girder, at bent 7	7	Cracking (PSC)	6				
9	Girder 1	South face, at beam end, at Bent 8	8	Spall	1.5	1	0.75		
9	Girder 1	Southewest corner at end of girder at bent 8	8	Spall	1	1.5	0.75		
9	Girder 1	3 places on beam bottom	9	Spall/Exposed Rebar	1.5	1	0.5		
9	Girder 2	End of girder at bent 8	8	Cracking (PSC)	6				
9	Girder 2	3 places on beam bottom	9	Spall/Exposed Rebar	1.5	1	0.5		
9	Girder 3	End of girder at bent 8	8	Cracking (PSC)	6				
9	Girder 3	End of girder at bent 9	9	Cracking (PSC)	6				
9	Girder 3	3 places on beam bottom	9	Spall/Exposed Rebar	1.5	1	0.5		
9	Girder 4	End of girder at bent 9	9	Cracking (PSC)	6				
9	Girder 4	Bottom of beam Near End	8	Spall/Delam	1	1	0.5		
9	Girder 4	Bottom of beam Far End	9	Spall/Delam	1	1	0.5		
9	Girder 4	3 places on beam bottom	8	Spall/Exposed Rebar	1.5	1	0.5		
9	Girder 5	South face over bent 8	8	(x2) Spall	3	1	0.5		
9	Girder 5	North face at bent 8	8	Spall	1	1	0.5		
9	Girder 5	End of girder at bent 8	8	Cracking (PSC)	6				

NOTES:

1. ALL DEFECTS WERE TAKEN FROM THE 2017 BRIDGE INSPECTION REPORT.
2. REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE.
3. THE ENGINEER SHALL FILL OUT THE AS-BUILT REPAIR QUANTITY FOR EACH LISTED DEFICIENCY.
4. COORDINATE THIS SHEET WITH "CONCRETE RESTORATION DETAILS" AND "SUPERSTRUCTURE CONCRETE REPAIRS" SHEETS.
5. IF ADDITIONAL REPAIRS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE CORRESPONDING SHEET THE APPROXIMATE LOCATIONS AND THE DESCRIPTION OF THE REPAIRS, AND WILL ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE AS-BUILT REPAIR QUANTITIES TABLE.
6. FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS

DRAWN BY : OMAR M. KHALAFALLA DATE : 10/2018
CHECKED BY : DIEGO A. AGUIRRE DATE : 10/2018
DESIGN ENGINEER OF RECORD : JACOB H. DUKE DATE : 10/2018

9/3/2020
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DocuSigned by: Jacob Duke
NORTH CAROLINA PROFESSIONAL SEAL 043777 ENGINEER JACOB H DUKE
9/3/2020

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PROJECT NO. 15BPR.24
BRUNSWICK COUNTY
BRIDGE NO. 090013
SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE REPAIRS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-15
1			3			TOTAL SHEETS
2			4			45