HistoricBridges.org - National Bridge Inventory Data Sheet

2017 Inventor

The National Bridge Inventory contains data submitted by state transportion departments to the Federal Highway Administration in coded format.
Form Interface Design: www.historicbridges.org. Data Conversion Assistance By www.bridgehunter.com. None of the involved parties make any guarantee of accuracy.

Basic Information

North Carolina [37]	New Hanover County [129]	Wilmington [74440]	1.5 MI. N. JCT. US421	34-15-31.82 = 34.258839	077-56-20.22 = -77.938950

1290029	Highway agency district 3	Owner	State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]

Route	281	East [2]	SR2812	Toll	On free road [3]

Features intersected: SMITH CREEK

Design - main	Steel [3]	Design - approach	
1	Movable - Swing [17]	2	Other [00]

Kilometerpoint: 0 km = 0.0 mi

Year built: 1931 Year reconstructed: 1962

Skew angle: 0 Structure Flared:

Historical significance: Bridge is not eligible for the NRHP. [5]

Total length	75.6 m = 248.0 ft	Length of maximum span	52.4 m = 171.9 ft	Deck width, out-to-out	9.5 m = 31.2 ft	Bridge roadway width, curb-to-curb	8.3 m = 27.2 ft

Inventory Route, Total Horizontal Clearance	8.3 m = 27.2 ft	Curb or sidewalk width - left	0.2 m = 0.7 ft	Curb or sidewalk width - right	0.2 m = 0.7 ft

Deck structure type: Closed Grating [4]

Type of wearing surface: Other [9]

Deck protection:

Type of membrane/wearing surface:

Weight Limits

Bypass, detour length: 0.2 km = 0.1 mi

Method to determine inventory rating: Load Factor(LF) [1]

Method to determine operating rating: Load Factor(LF) [1]

Bridge posting:

Inventory rating: 17.2 metric ton = 18.9 tons

Operating rating: 29 metric ton = 31.9 tons

Design Load: M 9 / H 10 [1]

Functional Details

Average Daily Traffic	2600	Average daily truck traffi	7 %	Year	2013	Future average daily traffic	5200
Year	2025						
Road classification	Local (Urban) [19]	Lanes on structure	2	Approach roadway width	7.3 m = 24.0 ft		
Type of service on bridge	Highway [1]	Direction of traffic	2 - way traffic [2]	Bridge median			
Parallel structure designatio	No parallel structure exists. [N]						
Type of service under bridge	Waterway [5]	Lanes under structure	0	Navigation control	Navigation control on waterway (bridge permit required). [1]		
Navigation vertical clearanc	2.4 m = 7.9 ft	Navigation horizontal clearance	2.4 m = 7.9 ft				
Minimum navigation vertical clearance, vertical lift bridge	0 m = 0.0 ft	Minimum vertical clearance over bridge roadway	4.27 m = 14.0 ft				
Minimum lateral underclearance reference feature	Feature not a highway or railroad [N]						
Minimum lateral underclearance on right	0 = N/A	Minimum lateral underclearance on left	0 = N/A				
Minimum Vertical Underclearance	0 = N/A	Minimum vertical underclearance reference feature	Feature not a highway or railroad [N]				
Appraisal ratings - underclearances	N/A [N]						

Repair and Replacement Plans

Type of work to be performed

Replacement of bridge or other structure because of substandard load carrying capacity or substantial bridge roadway geometry. [31]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	0	Roadway improvement cost	0
Length of structure improvement		Total project cost	0
Year of improvement cost estimate			
Border bridge - state		Border bridge - percent responsibility of other state	
Border bridge - structure number			

Inspection and Sufficiency

Structure status	Posted for load [P]	Appraisal ratings - structural	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - superstructur	Poor [4]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Poor [4]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of corrrective action [3]
Condition ratings - deck	Fair [5]		

Scour	Bridge foundations determined to be stable for assessed or calculated scour condition. [5]
Channel and channel protection	Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition. [8]

Appraisal ratings - water adequacy	Equal to present desirable criteria [8]	Status evaluation	Structurally deficient [1]
Pier or abutment protection	In place and functioning [2]	Sufficiency rating	39.1

Culverts	Not applicable. Used if structure is not a culvert. [N]
Traffic safety features - railings	
Traffic safety features - transitions	
Traffic safety features - approach guardrail	
Traffic safety features - approach guardrail ends	

Inspection date	October 2016 [1016]	Designated inspection frequency	24	Months

Underwater inspection	Unknown [Y48]	Underwater inspection date	May 2012 [0512]
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	October 2014 [1014]
Other special inspection	Not needed [N]	Other special inspection date	