

The National Bridge Inventory contains data submitted by state transportation departments to the Federal Highway Administration in coded format.
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Basic Information

New York [36] Niagara County [063] Niagara Falls [51055] 0.1 MI W OF INT 104 & 384 43-05-23 = 43.089722 079-04-03 = - 79.067500

5068199 Highway agency district 54 Owner Local Toll Authority [32] Maintenance responsibility Local Toll Authority [32]

Route 0 RAINBOW BRIDGE Toll Toll bridge [1] Features intersected MAINT ROADWAY, NIAGARA R

Design - main Steel [3] Design - approach Concrete continuous [2] Kilometerpoint 16090 km = 9975.8 mi

1 Arch - Deck [11] 10 Arch - Deck [11] Year built 1941 Year reconstructed N/A [0000]

Skew angle 6 Structure Flared Yes, flared [1]

Historical significance Historical significance is not determinable at this time. [4]

Total length 440.1 m = 1444.0 ft Length of maximum span 303.2 m = 994.8 ft Deck width, out-to-out 20.1 m = 65.9 ft Bridge roadway width, curb-to-curb 6.7 m = 22.0 ft

Inventory Route, Total Horizontal Clearance 6.7 m = 22.0 ft Curb or sidewalk width - left 3.4 m = 11.2 ft Curb or sidewalk width - right 0.2 m = 0.7 ft

Deck structure type Concrete Cast-in-Place [1]

Type of wearing surface Bituminous [6]

Deck protection Epoxy Coated Reinforcing [1]

Type of membrane/wearing surface

Weight Limits

Bypass, detour length 0.4 km = 0.2 mi Method to determine inventory rating No rating analysis performed [5] Inventory rating 32.6 metric ton = 35.9 tons

Method to determine operating rating No rating analysis performed [5] Operating rating 76.7 metric ton = 84.4 tons

Bridge posting Equal to or above legal loads [5] Design Load MS 18 / HS 20 [5]

Functional Details

Average Daily Traffic	5493	Average daily truck traffi	6	%	Year	1998	Future average daily traffic	6686	Year	2018
Road classification	Other Principal Arterial (Urban) [14]		Lanes on structure	4	Approach roadway width	13.4 m = 44.0 ft				
Type of service on bridge	Highway-pedestrian [5]		Direction of traffic	2 - way traffic [2]		Bridge median	Closed median (no barriers) [2]			
Parallel structure designation	No parallel structure exists. [N]									
Type of service under bridge	Highway-waterway [6]		Lanes under structure	4	Navigation control	Navigation control on waterway (bridge permit required). [1]				
Navigation vertical clearanc	21.9 m = 71.9 ft			Navigation horizontal clearance	249.3 m = 818.0 ft					
Minimum navigation vertical clearance, vertical lift bridge					Minimum vertical clearance over bridge roadway	4.87 m = 16.0 ft				
Minimum lateral underclearance reference feature	Highway beneath structure [H]									
Minimum lateral underclearance on right	0.4 m = 1.3 ft				Minimum lateral underclearance on left	0.8 m = 2.6 ft				
Minimum Vertical Underclearance	3.7 m = 12.1 ft			Minimum vertical underclearance reference feature	Highway beneath structure [H]					
Appraisal ratings - underclearances	Basically intolerable requiring high priority of corrective action [3]									

Repair and Replacement Plans

Type of work to be performed	Work done by			Work to be done by contract [1]			
Widening of existing bridge with deck rehabilitation or replacement. [34]	Bridge improvement cost	7276000	Roadway improvement cost	4235000			
	Length of structure improvement	440.1 m = 1444.0 ft		Total project cost	11511000		
	Year of improvement cost estimate	2009					
	Border bridge - state	Unknown [CAN]			Border bridge - percent responsibility of other state		
	Border bridge - structure number	0					

Inspection and Sufficiency

Structure status	Open, no restriction [A]	Appraisal ratings - structural	Equal to present minimum criteria [6]
Condition ratings - superstructure	Satisfactory [6]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Satisfactory [6]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Satisfactory [6]		
Scour	Bridge foundations (including piles) on dry land well above flood water elevations. [9]		
Channel and channel protection	Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift. [7]		
Appraisal ratings - water adequacy	Equal to present minimum criteria [6]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection	Navigation protection not required [1]	Sufficiency rating	73.6
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings			
Traffic safety features - transitions	Not applicable or a safety feature is not required. [N]		
Traffic safety features - approach guardrail			
Traffic safety features - approach guardrail ends			
Inspection date	June 2009 [0609]	Designated inspection frequency	24 Months
Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Not needed [N]	Fracture critical inspection date	
Other special inspection	Not needed [N]	Other special inspection date	