

HistoricBridges.org - National Bridge Inventory Data Sheet

2011 Inventory

The National Bridge Inventory contains data submitted by state transportation 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

Massachusetts [25]	Essex County [009]	Ipswich [32310]	.32 KM SE OF COUNTY RD	42-40-44 = 42.678889	070-50-16 = - 70.837778
I010022PQMUNNBI	Highway agency district 4	Owner Town or Township Highway Agency [03]	Maintenance responsibility	Town or Township Highway Agency [03]	
Route #Num!	ST 1 A/S MAIN ST	Toll On free road [3]	Features intersected WATER IPSWICH RIVER		
Design - main	Masonry [8]	Design - approach	Kilometerpoint 4744.2 km = 2941.4 mi		
2	Arch - Deck [11]	0	Other [00]	Year built 1764	Year reconstructed 1839
				Skew angle 0	Structure Flared
				Historical significance Bridge is on the NRHP. [1]	
Total length 21.9 m = 71.9 ft	Length of maximum span 9.1 m = 29.9 ft	Deck width, out-to-out 11.2 m = 36.7 ft	Bridge roadway width, curb-to-curb 8.1 m = 26.6 ft		
Inventory Route, Total Horizontal Clearance 10 m = 32.8 ft	Curb or sidewalk width - left 1.8 m = 5.9 ft	Curb or sidewalk width - right 0.6 m = 2.0 ft			
Deck structure type	Not applicable [N]				
Type of wearing surface	Not applicable (applies only to structures with no deck) [N]				
Deck protection	Not applicable (applies only to structures with no deck) [N]				
Type of membrane/wearing surface	Not applicable (applies only to structures with no deck) [N]				

Weight Limits

Bypass, detour length 0.2 km = 0.1 mi	Method to determine inventory rating	Allowable Stress(AS) [2]	Inventory rating 32.4 metric ton = 35.6 tons
	Method to determine operating rating	Allowable Stress(AS) [2]	Operating rating 44.1 metric ton = 48.5 tons
Bridge posting	Equal to or above legal loads [5]	Design Load	

Functional Details

Average Daily Traffic	33600	Average daily truck traffi	7	%	Year	2009	Future average daily traffic	53064	Year	2030
Road classification	Other Principal Arterial (Urban) [14]		Lanes on structure	2		Approach roadway width	8.8 m = 28.9 ft			
Type of service on bridge	Highway-pedestrian [5]		Direction of traffic	2 - way traffic [2]		Bridge median				
Parallel structure designation	No parallel structure exists. [N]									
Type of service under bridge	Waterway [5]		Lanes under structure	0		Navigation control				
Navigation vertical clearanc	0 = N/A		Navigation horizontal clearance	0 = N/A						
Minimum navigation vertical clearance, vertical lift bridge	0 m = 0.0 ft					Minimum vertical clearance over bridge roadway	99.99 m = 328.1 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	Work done by	Work to be done by contract [1]		
Widening of existing bridge or other major structure without deck rehabilitation or replacement [33]	Bridge improvement cost	693000	Roadway improvement cost	70000
	Length of structure improvement	22 m = 72.2 ft	Total project cost	1040000
	Year of improvement cost estimate	2011		
	Border bridge - state		Border bridge - percent responsibility of other state	
	Border bridge - structure number			

Inspection and Sufficiency

Structure status	Open, no restriction [A]	Appraisal ratings - structural	Better than present minimum criteria [7]
Condition ratings - superstructure	Good [7]	Appraisal ratings - roadway alignment	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Not Applicable [N]		
Scour	Bridge with "unknown" foundation that has not been evaluated for scour. [U]		
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	Superior to present desirable criteria [9]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection		Sufficiency rating	71.8
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	June 2009 [0609]	Designated inspection frequency	24 Months
Underwater inspection	Unknown [Y36]	Underwater inspection date	January 2010 [0110]
Fracture critical inspection	Not needed [N]	Fracture critical inspection date	
Other special inspection	Not needed [N]	Other special inspection date	