HistoricBridges.org - National Bridge Inventory Data Sheet

2012 Inventory

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

Massachusetts [25]	Barnstable County [001]	Cape Cod National Seas	JUNCT MA RTES 25,28, & 6	41-44-36 = 41.743333	070-35-18 = -70.588333

CEPNEDMA2510001	Highway agency district: 1	Owner: Corps of Engineers (Civil) [70]	Maintenance responsibility: Corps of Engineers (Civil) [70]		

Route: 28		MA ROUTE 28	Toll: On free road [3]	Features intersected: CAPE COD CANAL	

Design - main: Steel [3]	3	Arch - Thru [12]	Design - approach: Steel [3]	4	Truss - Deck [09]

Kilometerpoint: 0.1 km = 0.1 mi			
Year built: 1935	Year reconstructed: 1981		
Skew angle: 0	Structure Flared:		
Historical significance: Historical significance is not determinable at this time. [4]			

Total length: 726.6 m = 2384.0 ft	Length of maximum span: 187.7 m = 615.8 ft	Deck width, out-to-out: 14.8 m = 48.6 ft	Bridge roadway width, curb-to-curb: 12.1 m = 39.7 ft		
Inventory Route, Total Horizontal Clearance: 12.1 m = 39.7 ft	Curb or sidewalk width - left: 2 m = 6.6 ft	Curb or sidewalk width - right: 0.6 m = 2.0 ft			

Deck structure type	Closed Grating [4]
Type of wearing surface	Bituminous [6]
Deck protection	
Type of membrane/wearing surface	Preformed Fabric [2]

Weight Limits

Bypass, detour length: 1.6 km = 1.0 mi	Method to determine inventory rating: Load and Resistance Factor(LRFR) [3]		Inventory rating: 31.6 metric ton = 34.8 tons		
	Method to determine operating rating: Load and Resistance Factor(LRFR) [3]		Operating rating: 31.6 metric ton = 34.8 tons		
	Bridge posting: Equal to or above legal loads [5]		Design Load: MS 18 / HS 20 [5]		

Functional Details

Average Daily Traffic	60000	Average daily truck traffi	20 %	Year	2004	Future average daily traffic	79000	Year	2030

Road classification	Principal Arterial - Other (Rural) [02]	Lanes on structure	4	Approach roadway width	14.8 m = 48.6 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 control on waterway (bridge permit required). [1]
Navigation vertical clearanc	41 m = 134.5 ft	Navigation horizontal clearance	146.3 m = 480.0 ft		
Minimum navigation vertical clearance, vertical lift bridge	0 m = 0.0 ft	Minimum vertical clearance over bridge roadway	4.56 m = 15.0 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	99.9 = Unlimited		
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

Bridge rehabilitation because of general structure deterioration or inadequate strength. [35]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	5651000	Roadway improvement cost	565000
Length of structure improvement	762.9 m = 2503.1 ft	Total project cost	8477000
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	Basically intolerable requiring high priority of corrrective action [3]
Condition ratings - superstructure	Serious [3]	Appraisal ratings - roadway alignment	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Good [7]		
Scour	Bridge foundations determined to be stable for the assessed or calculated scour condition. [8]		
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 desirable criteria [8]	Status evaluation	Structurally deficient [1]
Pier or abutment protection	In place and functioning [2]	Sufficiency rating	20.8
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	October 2010 [1010]	Designated inspection frequency	24 Months
Underwater inspection	Unknown [Y60]	Underwater inspection date	August 2006 [0806]
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	October 2010 [1010]
Other special inspection	Not needed [N]	Other special inspection date	