

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

FOR NPS USE ONLY  
RECEIVED APR 28 1987  
DATE ENTERED JUN 12 1987

**NATIONAL REGISTER OF HISTORIC PLACES  
INVENTORY -- NOMINATION FORM**

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*  
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

**1 NAME**

HISTORIC PEQUONNOCK RIVER RAILROAD BRIDGE

AND/OR COMMON Pequonnock River Bridge

**2 LOCATION**

STREET & NUMBER AMTRAK Right-of-way at Pequonnock River

N/A NOT FOR PUBLICATION  
CONGRESSIONAL DISTRICT 4

CITY, TOWN Bridgeport

N/A VICINITY OF

STATE Connecticut

CODE 09

COUNTY Fairfield

CODE 001

**3 CLASSIFICATION**

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
<input type="checkbox"/> DISTRICT	<input checked="" type="checkbox"/> PUBLIC	<input checked="" type="checkbox"/> OCCUPIED	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> MUSEUM
<input type="checkbox"/> BUILDING(S)	<input type="checkbox"/> PRIVATE	<input type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> COMMERCIAL	<input type="checkbox"/> PARK
<input checked="" type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> EDUCATIONAL	<input type="checkbox"/> PRIVATE RESIDENCE
<input type="checkbox"/> SITE	<b>PUBLIC ACQUISITION</b>	<b>ACCESSIBLE</b>	<input type="checkbox"/> ENTERTAINMENT	<input type="checkbox"/> RELIGIOUS
<input type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input type="checkbox"/> YES: RESTRICTED	<input type="checkbox"/> GOVERNMENT	<input type="checkbox"/> SCIENTIFIC
	<input type="checkbox"/> BEING CONSIDERED	<input type="checkbox"/> YES: UNRESTRICTED	<input type="checkbox"/> INDUSTRIAL	<input checked="" type="checkbox"/> TRANSPORTATION
	N/A	<input type="checkbox"/> NO	<input type="checkbox"/> MILITARY	<input type="checkbox"/> OTHER:

**4 OWNER OF PROPERTY**

NAME State of Connecticut  
Department of Transportation, J. William Burns, Commissioner

STREET & NUMBER 24 Wolcott Hill Road

CITY, TOWN Wethersfield

N/A VICINITY OF

STATE Connecticut

**5 LOCATION OF LEGAL DESCRIPTION**

Rail Operations  
COURTHOUSE, Connecticut Department of Transportations  
REGISTRY OF DEEDS, ETC.

STREET & NUMBER 24 Wolcott Hill Road

CITY, TOWN Wethersfield

STATE Connecticut

**6 REPRESENTATION IN EXISTING SURVEYS**

TITLE Northeast Corridor Aerial Reconnaissance of Historic Structures

DATE 13-15 April, 1977  
 FEDERAL  STATE  COUNTY  LOCAL

DEPOSITORY FOR SURVEY RECORDS Federal Railroad Administration  
2100 2nd Street, SW Rm. 4613

CITY, TOWN Washington, D. C. 20590

STATE

# 7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input checked="" type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED      DATE _____
<input checked="" type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

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DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Pequonnock River Bridge is a through girder Scherzer rolling lift bascule bridge. The superstructure of the bridge is steel, the piers are stone and the main pier is concrete with stone facing. The substructure's height above mean high water is 18 feet. From north to south, the bridge consists of two through girder spans, each 88 feet long; a through girder bascule span 126 feet long; and a deck girder approach span 55 feet long. The total length is 359 feet.

There are two leaves, side by side, each carrying tracks supported on stringers that frame into floorbeams which frame into the through girders. An operating strut at the center of each leaf is connected by a bearing and journal to the leaf.

To open the bridge, a drive pinion engages the operating strut. As the strut is pulled back by the drive pinion, the segmental girders roll along on the track girders over the pit area causing the span to open. The cantilevered portion of the girders swings into the pit behind the track girders and the counterweight attached to this cantilevered portion and are lowered into the pit.

Machinery for bridge operation is suspended from the fixed deck girder approach span below deck behind the rear floor break. Each leaf has duplicate equipment consisting of a motor with integral gear box drive and three stages of reduction and transfer spur gear sets. The main drive motors are the 100-horsepower, 440-volt DC series/shunt type. Power for the motors is supplied from AC/DC motor generating equipment and distribution panels located 1,500 feet south of the bridge in the old Bridgeport passenger station. The operator's house is a two-level structure supported from the fixed approach span to the east of the bridge behind the rear floor break.

The superstructure of Pequonnock Bridge is in good condition, but the mechanical and electrical workings are deteriorated. There were major repairs to the piers in 1916 and 1926. Extensive repairs were also made to the segmental and track girders in 1939 and some of the gear trains were replaced about this time.

# 8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input checked="" type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input checked="" type="checkbox"/> TRANSPORTATION
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES 1902 BUILDER/ARCHITECT Pennsylvania Steel Company,

STATEMENT OF SIGNIFICANCE fabricator

The Pequonnock River Bridge is one of two through girder Scherzer rolling lift bascule bridges on the Northeast Corridor rail line. It was constructed in 1902 as part of a package of rail improvements in Bridgeport.

The movable bridge is an ancient type that can be changed in position so as to open a clear passage, or to afford an increased headway for ships and boats in navigable channels. Engineers choose this type of bridge when no other way of giving vertical clearance for the passage of vessels on a waterway exists. The introduction of railroads to the U.S. in the early 1800's greatly spurred the development and construction of this type of bridge. Along the eastern seaboard the large number of navigable rivers and inlets to be crossed resulted in the construction of fifteen movable bridges on what is today the Northeast Corridor rail line. There are three basic types of movable bridges--the bascule, the swing, and the vertical lift. On the Northeast Corridor there are nine bascule bridges, five swing bridges, and one vertical lift bridge. These bridges were prefabricated at the construction company's plant and then built by unskilled labor at the site. The machinery to operate the bridges was not standardized and each one has unique mechanical components.

The earliest forerunners of the bascule type of movable bridge date from medieval times when they were used to cross moats to bridges and forts. Some bascules were developed in Europe in the first half of the nineteenth century, but the first modern bascule bridge in this country was the Van Buren Street Bridge built in Chicago in 1893. It was designed by William Scherzer and was the first of the structures known as the Scherzer rolling lift bascule. This type of bascule bridge, of which the Pequonnock Bridge is a variety, is characterized by rounded, segmental girders at the rear of the bascule span which roll back on stationary track girders when opened.

Engineers for the substructure, approach spans, and erection were W.H. Moore and R.M. Berriam of the New Haven Railroad. The lift span was designed by the Scherzer Rolling Lift Bridge Company of Chicago.

- HRC, 5/86

# 9 MAJOR BIBLIOGRAPHICAL REFERENCES

Condit, Carl. American Building. Chicago: University of Chicago Press, 1968.

Hool, George, ed. Movable and Long-Span Bridges. New York: McGraw-Hill Book Co., Inc., 1923.

(continued)

# 10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 1  
UTM REFERENCES

Bridgeport Quadrangle  
Scale 1:24000

A 18 | 6521110 | 45604510  
ZONE EASTING NORTHING  
C    |    |   

B    |    |     
ZONE EASTING NORTHING  
D    |    |   

## VERBAL BOUNDARY DESCRIPTION

This bridge is on the Northeast Corridor rail line, across the Pequonnock River in Bridgeport, Connecticut.

## LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

N/A

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

# 11 FORM PREPARED BY

NAME / TITLE

Ann Baggerman, Cultural Resources Planner

August 10, 1977

ORGANIZATION

DeLeuw, Cather, Parsons and Assoc. Northeast Corridor Project

STREET & NUMBER

1201 Connecticut Avenue

TELEPHONE

202-452-5242

CITY OR TOWN

Washington, D. C.

STATE

20036

# 12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL   

STATE   

LOCAL   

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

TITLE

DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST

DATE

KEEPER OF THE NATIONAL REGISTER

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES  
INVENTORY -- NOMINATION FORM**

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Pequonnock River Railroad Bridge  
Bridgeport, CT

CONTINUATION SHEET

ITEM NUMBER 9

PAGE 1

Major Bibliographical References (continued):

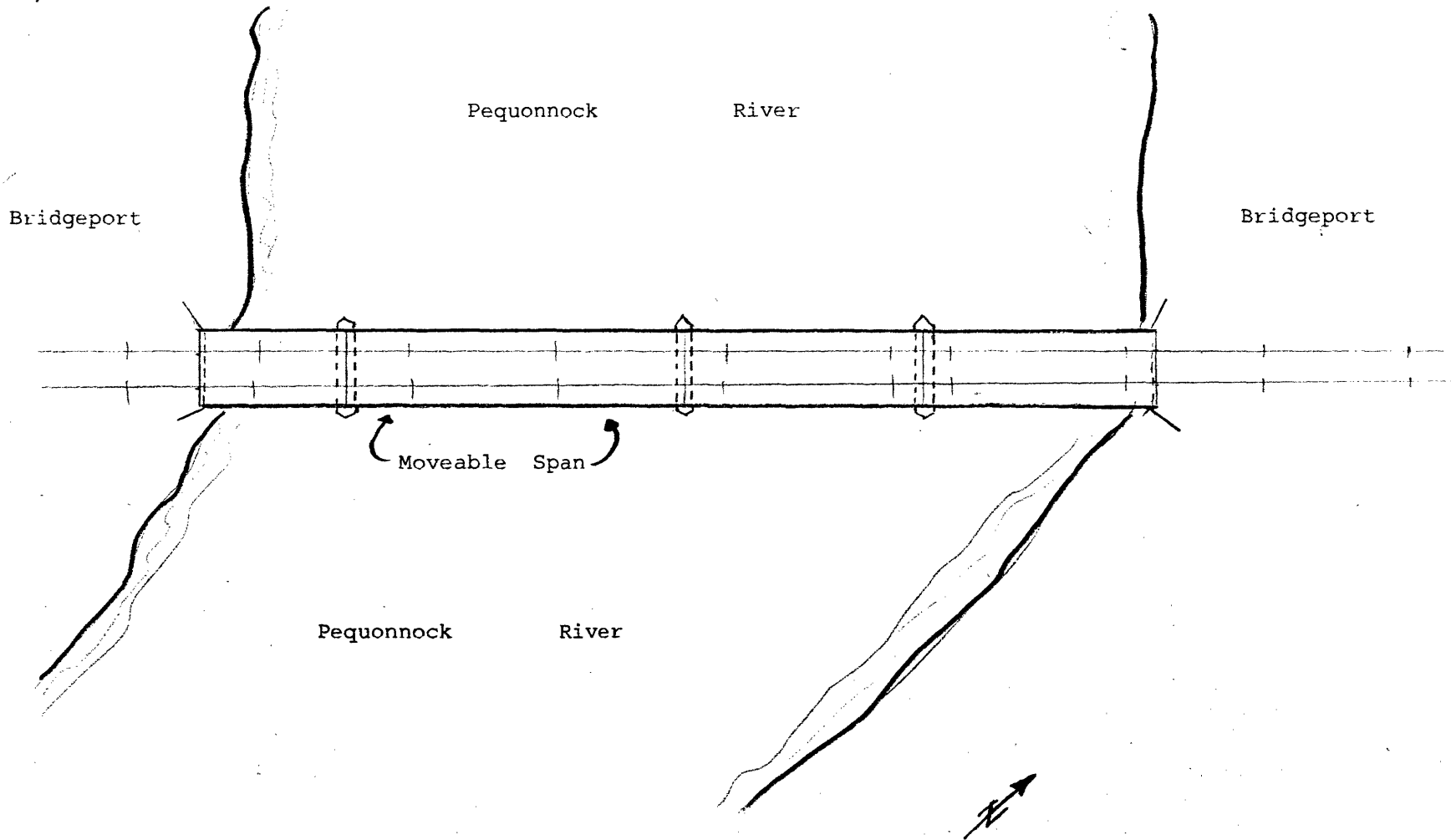
Hovey, Otis Ellis. Movable Bridges, Vol. I and II. New York:  
John Wiley and Sons, Inc., 1926.

Railroad Gazette, Vol. XXXVIII, No. 11, March 17, 1905.

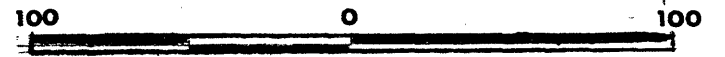
U.S. DOT, Northeast Corridor High Speed Rail Passenger Service  
Improvement Project, Tasks 15.1 and 15.2, Vol. VI, Jan. 1977.

"Scherzer Rolling-lift Plate-Girder Railroad Bridges." Engineering News 48,  
no. 2 (July 11, 1903): 39-40.

# PEQUONNOCK RIVER RAILROAD BRIDGE



APPROXIMATE SCALE IN FEET





Pequonnock River Bridge  
Bridgeport, Connecticut

Bridgeport, Conn. Quadrangle  
Scale 1:2400

UTM Reference:  
18/652110/4560450

