

Maryland Historical Trust

Maryland Inventory of Historic Properties number: D-723

Name: Bestpitch Ferry Rd. over Transquaring River

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <u> X </u>	Eligibility Not Recommended <u> </u>
Criteria: <u> </u> A <u> </u> B <u> X </u> C <u> </u> D	Considerations: <u> </u> A <u> </u> B <u> </u> C <u> </u> D <u> </u> E <u> </u> F <u> </u> G <u> </u> None
Comments: _____ _____ _____	
Reviewer, OPS: <u> Anne E. Bruder </u>	Date: <u> 3 April 2001 </u>
Reviewer, NR Program: <u> Peter E. Kurtze </u>	Date: <u> 3 April 2001 </u>

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. D-723

SHA Bridge No. D0024 Bridge name Bestpitch Ferry Road over Transquaking River

LOCATION:

Street/Road name and number [facility carried] Bestpitch Ferry Road

City/town Hare Town Vicinity X

County Dorchester

This bridge projects over: Road Railway Water X Land

Ownership: State County X Municipal Other

HISTORIC STATUS:

Is the bridge located within a designated historic district? Yes No X

National Register-listed district National Register-determined-eligible district

Locally-designated district Other

Name of district

BRIDGE TYPE:

Timber Bridge X:
Beam Bridge X Truss -Covered Trestle Timber-And-Concrete

Stone Arch Bridge

Metal Truss Bridge

Movable Bridge :
Swing Bascule Single Leaf Bascule Multiple Leaf
Vertical Lift Retractable Pontoon

Metal Girder :
Rolled Girder Rolled Girder Concrete Encased
Plate Girder Plate Girder Concrete Encased

Metal Suspension

Metal Arch

Metal Cantilever

Concrete :
Concrete Arch Concrete Slab Concrete Beam Rigid Frame
Other Type Name

DESCRIPTION:

Setting: Urban _____ Small town _____ Rural X

Describe Setting:

Bridge No. D0024 carries Bestpitch Ferry Road over the Transquaking River in Dorchester County. Bestpitch Ferry Road runs east-west and the Transquaking River flows north-south. The bridge is located in the vicinity of Hare Town, near the Blackwater Wildlife Management Area. It is surrounded by a public boat ramp, two residences and marshland.

Describe Superstructure and Substructure:

Bridge No. D0024 is an 11-span, 1-lane, timber beam bridge. The bridge was originally built in 1946. The structure is 58.6 meters (192.25 feet) long and has a clear roadway width of 3.28 meters (10.79 feet); there is no sidewalk. The out-to-out width is 3.7 meters (12.12 feet). The superstructure consists of nine timber beams in each of ten spans, while the channel span has eight timber beams. The beams support a timber plank deck and metal guardrails. The beams in ten of the spans are 10.16 centimeters (4 inches) wide by 35.5 centimeters (14 inches) high and are spaced 43.2 centimeters (17 inches) ± apart. The beams in the channel span are 15.2 centimeters (6 inches) wide by 35.5 centimeters (14 inches) high and are spaced 50.8 centimeters (20 inches) ± apart. W-beam guardrails comprise the railing and align the roadway approaches. The substructure consist of two timber bent abutments and ten timber bent intermediate piers. The bridge is posted for 8.16 tonnes (9 tons) and has a sufficiency rating of 43.7.

According to the 1997 inspection report, this structure was in fair condition. The timber decking, however, was in serious condition with rotted wood. In addition, the structure had leaning bridge rails, some cracking of timber beams and the crossing bracing was in poor condition.

Discuss Major Alterations:

This structure has had no major alterations, however some deck planks have been replaced and guardrails were added in 1978.

HISTORY:

WHEN was the bridge built: 1946

This date is: Actual X Estimated _____

Source of date: Plaque _____ Design plans _____ County bridge files/inspection form X

Other (specify):

WHY was the bridge built?

The bridge was constructed in response to the need for more efficient transportation network and increased load capacity.

WHO was the designer?

Unknown

WHO was the builder?

Unknown

WHY was the bridge altered?

The bridge was altered to correct functional or structural deficiencies.

Was this bridge built as part of an organized bridge-building campaign?

There is no evidence that the bridge was built as part of an organized bridge building campaign.

SURVEYOR/HISTORIAN ANALYSIS:**This bridge may have National Register significance for its association with:**

A - Events _____ B- Person _____
 C- Engineering/architectural character _____ X _____

The bridge is eligible for the National Register of Historic Places under Criterion C, as a significant example of timber beam construction. The structure has a high degree of integrity and retains such character-defining elements of the type as longitudinal beams, timber deck, timber abutments and timber pile bents.

Was the bridge constructed in response to significant events in Maryland or local history?

The earliest bridges built in North America were timber bridges. According to one account, European settlers at first utilized the bridges constructed by the Native American populations, which consisted of tied timbers laid across up-turned forked tree trunks (American Association of State Highway Officials 1953: 19). This design was adopted by the settlers, who then modified the design by hewing the upper portions of the timbers to provide a flat surface and by adding a handrail to one side (American Society of Civil Engineers 1976: 143). Where crossings exceeded the length of the available timber, short spans were joined and supported on wood piles or on timber cribs filled with earth or stone. In fact, the earliest recorded bridge built by European settlers in America was most likely this type of design. Constructed in 1611 on James Towne Island, Virginia, this timber bridge extended approximately 200 feet into the water and provided docking facilities in the 12 foot deep channel (American Association of State Highway Officials 1953: 19).

The railroads had a significant impact on the construction as well as the on-going popularity of the timber bridge. During the 1830s, the Baltimore & Ohio Railroad employed engineers such as Theodore Burr and Lewis Wernwag to construct bridges over its major crossings. Burr, Town and Long trusses were all extensively employed and became standard for railroad-bridge construction (Waddell 1916: 21).

Another type, the timber trestle bridge, also was used extensively by the railroads. The first timber trestle was built by the Philadelphia and Reading Railroad in 1840 (Waddell 1916: 22). With timber in abundant supply, the railroads used this functional design as an inexpensive and practical bridge design for its lines, particularly in remote locations of the country.

The combination of timber with other materials began with the invention of the Howe truss in 1840. William Howe patented a truss which utilized iron verticals as tension members and wood diagonals as compression members. The Howe truss became a standard of railroad bridge design. By the

Ketchum, Milo S.

1908 *The Design of Highway Bridges and the Calculation of Stresses in Bridge Trusses.* The Engineering News Publishing Co., New York.

1920 *The Design of Highway Bridges of Steel, Timber and Concrete.* Second edition. McGraw-Hill Book Company, New York.

Lay, Maxwell Gordon

1992 *Ways of the World: A History of the World's Roads and of the Vehicles That Used Them.* Rutgers University Press, New Brunswick, New Jersey.

Luten, Daniel B.

1912 Concrete Bridges. *American Concrete Institute Proceedings* 8:631-640.

1917 *Reinforced Concrete Bridges.* National Bridge Company, Indianapolis, Indiana.

Maryland State Roads Commission

1930a *Report of the State Roads Commission for the Years 1927, 1928, 1929 and 1930.* State of Maryland, State Roads Commission, Baltimore.

1930b *Standard Plans.* State of Maryland, State Roads Commission, Baltimore.

Taylor, Frederick W., Sanford E. Thompson, and Edward Smulski

1939 *Reinforced-Concrete Bridges with Formulas Applicable to Structural Steel and Concrete.* John Wiley & Sons, Inc., New York.

Tyrrell, H. Grattan

1909 *Concrete Bridges and Culverts for Both Railroads and Highways.* The Myron C. Clark Publishing Company, Chicago and New York.

SURVEYOR:

Date bridge recorded February 1998

Name of surveyor Caroline Hall/Marris German

Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204/

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Maryland Historic Highway Bridges

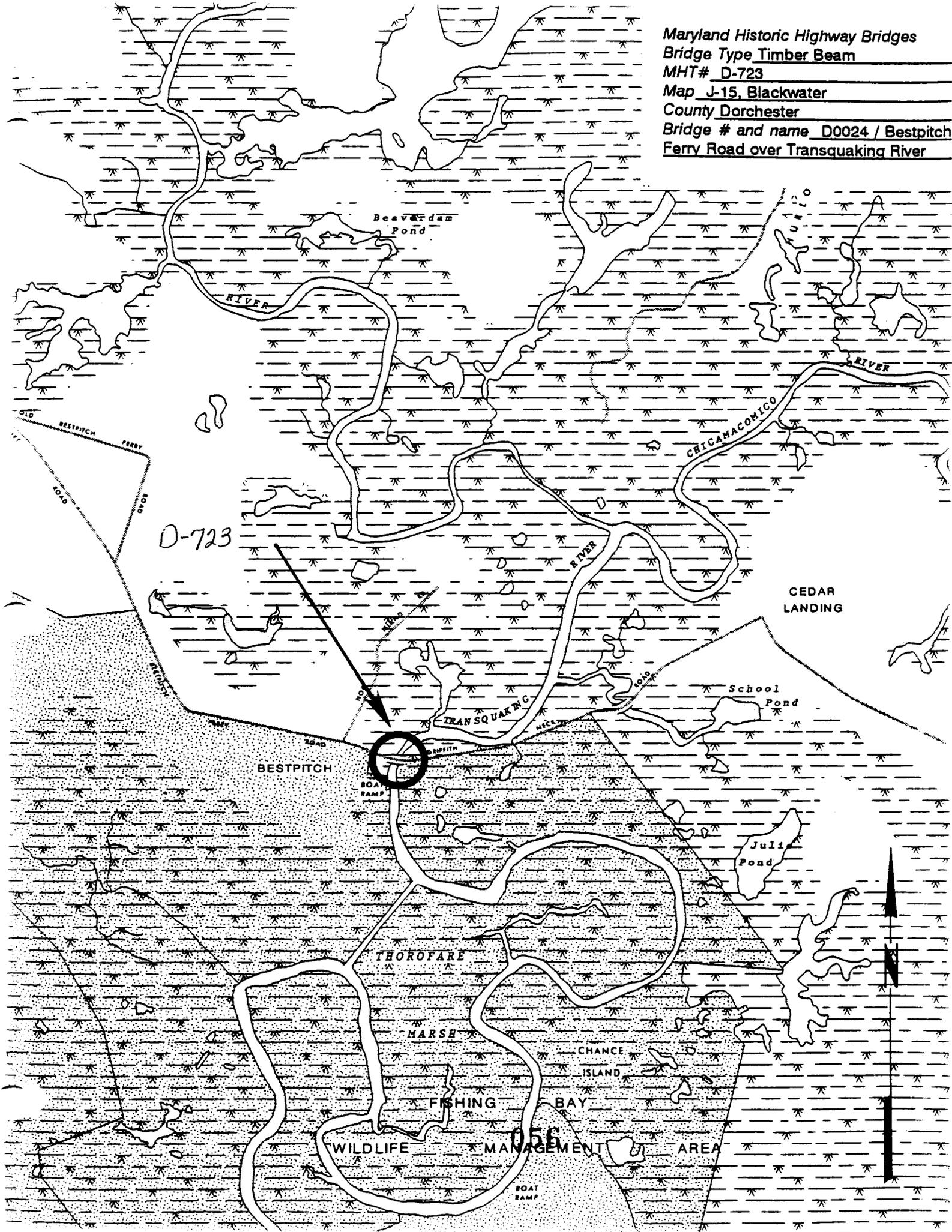
Bridge Type Timber Beam

MHT# D-723

Map J-15, Blackwater

County Dorchester

Bridge # and name D0024 / Bestpitch
Ferry Road over Transquaking River





1 D-723

2 Bestpitch Ferry Rd. over Transquaking River

3 Dorchester Co., MD

4 3/98

5 Marris German, WMA

6 MD SHPO

7 Looking west.

8 1 of 6

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1 D-723

2 Bestpitch Ferry Rd. over Transquaking River

3 Dorchester Co., MD

4 3/98

5 Marris German WMA

6 MD SHPO

7 Looking east

8 2 of 6



- 1 D-723
- 2 Bestpitch Ferry Rd over Transquaking River
- 3 Dorchester Co., MD
- 4 3/98
- 5 Marris German, WMA
- 6 MD SHPO
- 7 Elevation Northside Looking West to East
- 8 3 of 6



1 D-723

2 Best pitch Ferry Rd. over Transquaking River

3 Dorchester Co., MD

4 3/98

5 Marris German, WMA

6 MD SHPO

7 Elevation Looking North

8 4 of 6



1 D-723

2 Bestpitch Ferry Rd. over Transquaking River

3 Dorchester Co., MD

4 3/98

5 Marris German, WMAF

6 MD SHPO

7 Looking east

8 5 of 6



- 1 D-723
- 2 Bestpitch Ferry Rd. over Transquaking River
- 3 Dorchester Co, MD
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- 7 Looking West
- 8 6 of 6