MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes ___ no X

Property Name: Queen Anne's Railroad bridge, Milepost 6.75 Inventory Number: CAR-376

Address: Abandoned section of Queen Anne's Railroad over tributary to the Choptank River, Milepost 6.75 Historic district: ___ yes X no

City: Denton Zip Code: 21629 County: Caroline

USGS Quadrangle(s): Denton

Property Owner: State of Maryland Tax Account ID Number: ___

Tax Map Parcel Number(s): ___ Tax Map Number: ___

Project: Statewide Repairs to Freight Line Rail Structures Project Agency: Maryland Transit Administration

Agency Prepared By: A.D. Marble & Company

Preparer's Name: Shauna Haas Date Prepared: 2/14/2013

Documentation is presented in: Queen Anne's Railroad Corridor Maryland Historical Trust Determination of Eligibility Form, 2010. On file at the Maryland Historical Trust, Crownsville, Maryland.

Preparer's Eligibility Recommendation: ___ Eligibility recommended X Eligibility not recommended

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G

Complete if the property is a contributing or non-contributing resource to a NR district/property:

Name of the District/Property: ___

Inventory Number: ___ Eligible: ___ yes Listed: ___ yes

Site visit by MHT Staff ___ yes X no Name: ___ Date: ___

Description of Property and Justification: *(Please attach map and photo)*

Description

The following is summarized from Maryland Transit Administration (MTA), Maryland Department of Transportation (MDOT), Comprehensive Structural Inspection of Aerial Structures and Bridges, for the Queen Anne/Denton Freight Rail Line 150 and Hurlock/Preston Freight Rail Line 152, Inspection Year 2011 (Wilson T. Ballard Company 2011).

The Queen Anne's Railroad bridge, Milepost 6.75 is located northwest of Maryland Route 404, near Denton in Caroline County, Maryland. The area surrounding the bridge is predominantly rural, with a few industrial properties near the highway. The construction date of the bridge is unknown, but the bridge was likely built ca. 1896, which was when the rail line was constructed through the area. The structure has four simple spans with lengths of 11'-0", 12'-0", 11'-10", and 12'-6". The bridge carries a single track of the former Queen Anne's Railroad (presently abandoned Queen Anne/Denton Freight Rail Line) over a tributary to the Choptank River that flows from south to north under the bridge (Photographs 1 to 10).

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ___ **Eligibility not recommended** X

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments: PART OF QUEEN ANNE'S RAILROAD CORRIDOR (CAR-362) WHICH WAS DETERMINED NOT ELIGIBLE IN 2011.

[signature] 4/23/13
Reviewer, Office of Preservation Services **Date**

[signature] 5/2/13
Reviewer, National Register Program **Date**

20130104

The superstructure consists of two timber beams spaced at 4'-10"± on center. Each beam is built from three 10" wide x 16" deep members connected by two through bolts at each support. The open deck has 7" x 9" x 8'-8"± long structural timber ties, two 8" x 5" timber plank curbs, and a single track (Photographs 3 and 4). There are no guard rails on the bridge.

The substructure consists of five timber pile bents and timber abutments. Bents 1 and 5 are adjacent to the abutments. There is an additional timber wall to retain the embankment under Span 1 (Photograph 7). Each pile bent has a 12" x 12" timber cap supported on five timber piles. The piles are untreated at Bents 2, 3, and 4. There is a 3" x 10" transverse cross bracing on each side of the pile bents.

The bridge at Milepost 6.75 is in poor condition, deteriorating due to disuse as the Queen-Anne/Denton line is inactive and has been abandoned for approximately 30 years. The timber bents are in a severe state of deterioration, and the timber retaining wall is collapsing.

Integrity

The bridge at Milepost 6.75 retains integrity of location and setting as it remains in place, carrying railroad tracks over the tributary to the Choptank River. The setting remains predominantly rural, with open fields beyond the wooded area that flanks the rail line. However, the railroad line is inactive, overgrown with vegetation, and the condition of the bridge is highly deteriorated. While the timber construction materials remain extant, they are in extremely poor condition; some sections have collapsed, including the timber retaining wall; and the timber piles in the waterway are eroded significantly. Trees have fallen onto the bridge, causing further damage. While integrity of materials is maintained, design and workmanship have been compromised through the deterioration of the bridge. The bridge also does not retain integrity of feeling or association as the railroad has been abandoned, the bridge left to deteriorate, and the area is overgrown with vegetation.

Historical Narrative

The Queen Anne's Railroad bridge, Milepost 6.75 carries the former Queen Anne's Railroad (presently abandoned Queen Anne/Denton Freight Line) over a tributary to the Choptank River at Milepost 6.75. The year the bridge was built is unknown, although based on the form, materials, and lack of evidence of an earlier crossing, the bridge was likely constructed ca. 1896, when the rail line was originally constructed.

The following is taken from Queen Anne's Railroad Corridor Maryland Historical Trust Determination of Eligibility Form (Schuchman 2010) on file at Maryland Historical Trust (MHT), except where noted.

Queen Anne's Railroad Overview

The Queen Anne's Railroad was established in 1894 and was the last major railway built on Maryland's eastern shore. The Queen Anne's Railroad Company was established to provide a rail connection between Baltimore, Maryland; and Cape May, New Jersey. The Maryland legislature approved the line in 1894, and Delaware approved it the following spring. The first section of the line, from Queenstown to Denton, Maryland, which included the crossing at Milepost 6.75, opened in July 1896, although the line would not reach its full length until 1902. The bridge at Milepost 6.75 was likely constructed ca. 1896, as there is no evidence of an earlier bridge; however, timber bridges continued to be common into the twentieth century.

The Queen Anne's Railroad was a disappointment to its investors and was acquired by the Pennsylvania Railroad (PRR) only a few years after its completion. In 1905, the Maryland, Delaware, and Virginia Railroad (MD&V) was incorporated in both

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Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

Maryland and Delaware for the purpose of acquiring the Queen Anne's Railroad. The MD&V was controlled by the Baltimore, Chesapeake and Atlantic Railway (BC&A), another operating company of the PRR.

The MD&V and BC&A had similar routes, operating from a terminal on the Chesapeake from whence steamer service provided access to Baltimore and journeyed to a resort town on the Atlantic. However, the MD&V's route was through a less productive and more sparsely populated area with fewer large towns. Therefore, the MD&V never achieved the success of the BC&A. The MD&V sustained an operating loss in every year of its existence except 1910 and 1911. The PRR subsequently sold the MD&V in 1923. The portion of the rail line west of Denton, which includes the bridge at Milepost 6.75, became part of the Baltimore and Eastern Railroad, a newly created subsidiary of the BC&A, while the portion east of Denton eventually became an independent operation.

On February 1, 1968, the PRR and New York Central merged to form the Penn Central, which declared bankruptcy in June 1970. The Consolidated Rail Corporation (Conrail) was created in April 1976 as a federally funded railroad to assume control of the major Northeast railroad companies, all of which were financially failing. The Final System Plan that created Conrail in 1976 omitted the Delmarva Peninsula rail lines, including the former Queen Anne's Railroad. These lines were slated to be abandoned; however, politicians from Maryland and Delaware contracted with Conrail to operate these struggling branches as a subsidized "designated operator," with ownership retained by Penn Central. After only a year, the expense of subsidizing these lines at Conrail's high rate led the state governments to seek a lower-cost short line as designated operator. The Maryland and Delaware Railroad Company (MDDE) was subsequently created and served as the designated operator of three branches in Maryland and Delaware under contract with MDOT.

The MDDE provided freight and occasional special passenger service on the line from Queen Anne to Denton in the 1970s and early 1980s. Service on the rail corridor between Queen Anne and Denton ceased in the early 1980s, and the rail line and surviving elements have been abandoned.

Queen Anne's Railroad Bridge, Milepost 6.75

The Queen Anne's Railroad bridge, Milepost 6.75 is a typical example of a timber beam bridge supported by timber bents and abutments, which are exceedingly common in railroad bridge construction from the nineteenth through the twentieth centuries throughout Maryland.

Wood has been a common bridge material for railroads since the early history of the U.S. railroads and was the principle bridge building material until the late nineteenth century, when engineers turned to iron and steel for bridge making. Wood was considered cheaper, easier to work with, and less susceptible to damage than stone structures. Iron and steel were later favored as they had a higher load capacity than wooden bridges, which was important when carrying heavy locomotives and equipment. However, wood continued to be utilized in bridge construction into the twentieth century, as the low cost of construction and lightweight structures were attractive to some railroads (Bianculli 2003).

The simplest type of timber bridge is the beam type, which is essentially made up of timber beams laid across a stream. The timber beam bridge is one of the oldest types of bridge designs and is still used in short spans because of the structure's simplicity and readily available material. Beam bridges are typically used in only narrow crossings, as is the case at Milepost 6.75, as the center of the beam tends to sag over longer spans and heavier loads. Pile bents can be utilized in longer spans, erected as individual members, not connected in groups or towers, to support the beams. Bents typically consist of four legs that are braced horizontally and diagonally, erected at regular intervals, and connected by longitudinal bracing. Timber bridges are typically constructed on-site, as they do not lend themselves toward prefabrication. Creosote-treated timbers became standard in the early twentieth century,

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_____ _____

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and later timber bridges often use rot-resistant laminated timbers (Bianculli 2003; P.A.C. Spero & Company and Louis Berger & Associates [Spero and Berger] 1995). The bridge at Milepost 6.75 appears to contain a variety of timber types, including creosote-treated timbers.

Significance Evaluation

The Queen Anne's Railroad bridge, Milepost 6.75 is not eligible for listing in the National Register of Historic Places (National Register) due to a lack of integrity and significance. The bridge is not part of a significant rail line; the Queen Anne's Rail Corridor was previously determined not eligible for listing in the National Register due to a lack of integrity (Schuchman 2010). While the Queen Anne's Railroad played a significant role in the economic and social development of the communities through which it traveled, few elements survive to reflect the corridor's use and significance. The rail line is no longer in use and the corridor is deteriorated and overgrown. The bridge is also not individually eligible. The bridge is not associated with any significant events or persons; therefore, it is not eligible under Criteria A and B. Timber bridges were very common railroad bridge types from the nineteenth century through the twentieth century. While intact, the bridge at Milepost 6.75 is not an exceptional example of the type and does not exhibit any outstanding architectural or engineering features. Furthermore, the bridge is in very poor condition and does not retain adequate integrity to convey significance as a timber bridge. Therefore, the bridge is not eligible under Criterion C. The bridge is recommended not eligible under Criterion D as it is not likely to yield information important in history or prehistory.

References

Bianculli, Anthony J.
2003 Trains and Technology: The American Railroad in the Nineteenth Century. Volume 4: Bridges and Tunnels Signals. University of Delaware Press, Newark, Delaware.

P.A.C Spero & Company and Louis Berger & Associates (Spero and Berger)
1995 Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report. Prepared for the Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore, Maryland.

Schuchman, Joseph
2010 Queen Anne's Railroad Corridor Maryland Historical Trust Determination of Eligibility Form. On file at the Maryland Historical Trust, Crownsville, Maryland.

Wilson T. Ballard Company
2011 Comprehensive Structural Inspection of Aerial Structures and Bridges for the Queen Anne/Denton Freight Rail Line 150 and Hurlock/Preston Freight Rail Line 152. Inspection Year 2011. Prepared for the Maryland Transit Administration and Maryland Department of Transportation.

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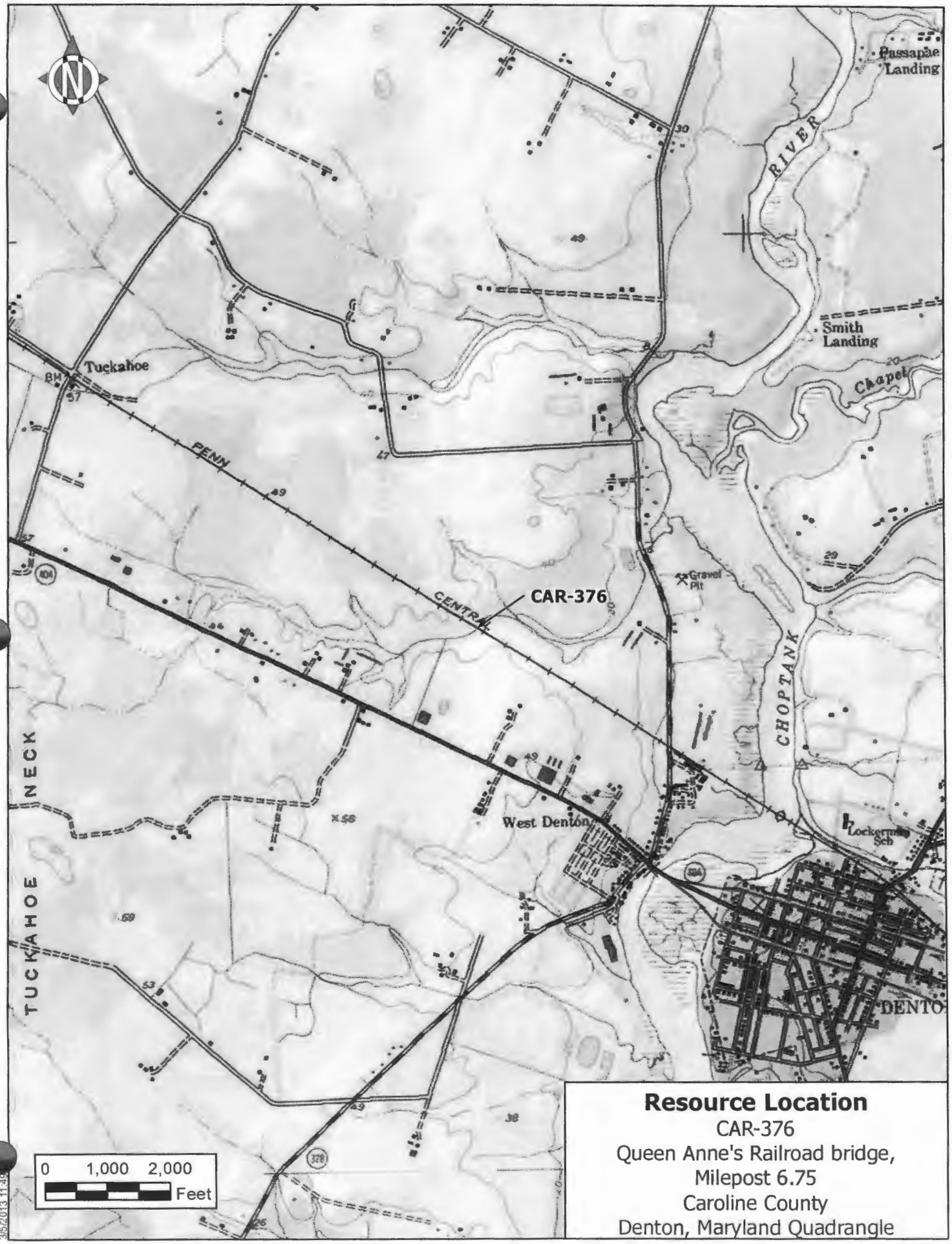

Resource Location
CAR-376
Queen Anne's Railroad bridge,
Milepost 6.75
Caroline County
Denton, Maryland Quadrangle

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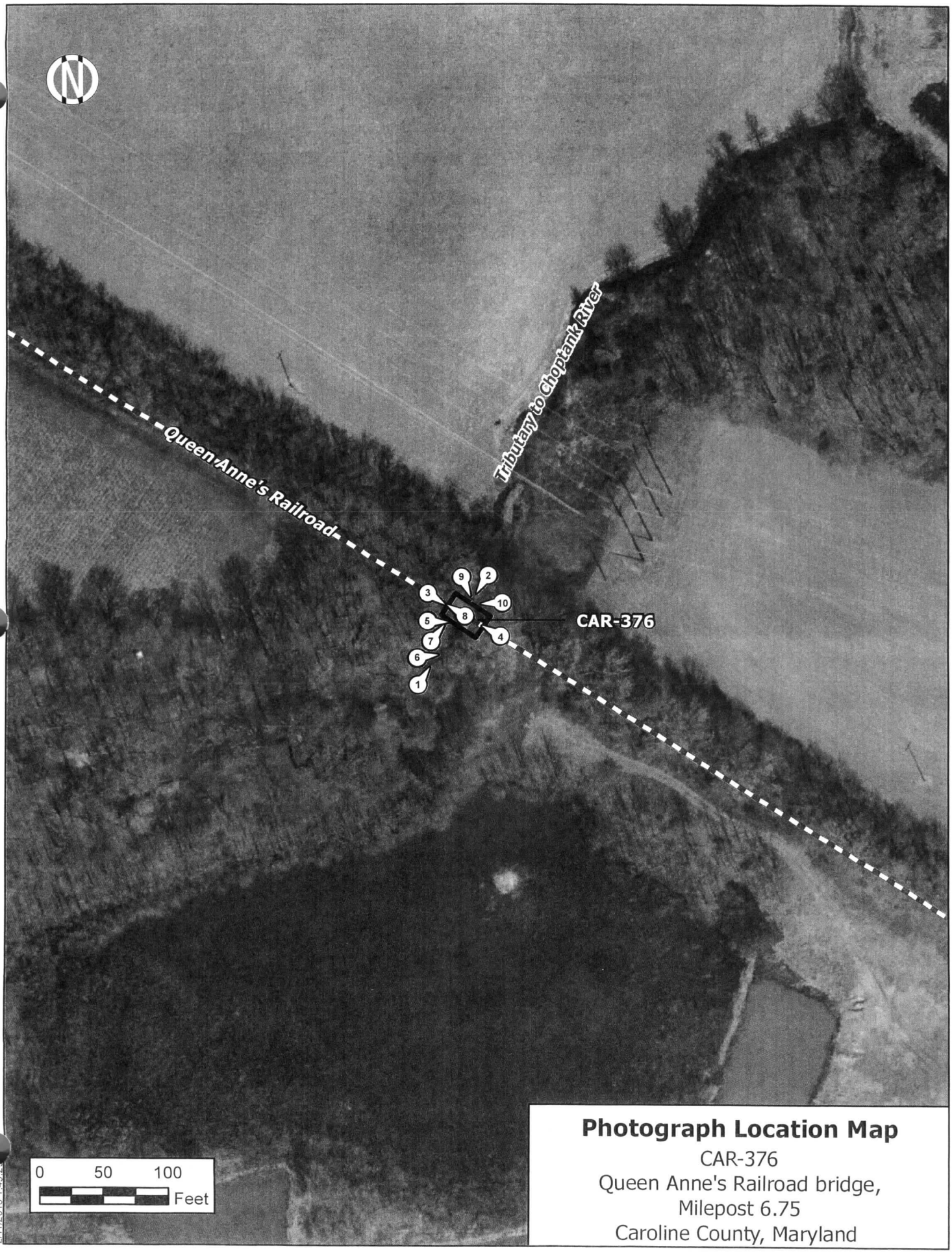

Photograph Location Map

CAR-376

Queen Anne's Railroad bridge,

Milepost 6.75

Caroline County, Maryland

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Queen Anne's Railroad bridge, Milepost 6.75 (CAR-376)
Digital Photo Log: All photographs printed using Epson Ultrachrome Pigmented Ink on Epson Premium Matte Photo Paper

Photo File Name	MIHP #	Property Name	County	Photographer	Date of Photo	Photo Description	Photo Sequence
CAR-376_2012-12-19_01	CAR-376	Queen Anne's Railroad bridge, Milepost 6.75	Caroline	R. Stevenson	12/2012	Overview of bridge at Milepost 6.75, southwest elevation. View looking northeast.	1 of 10
CAR-376_2012-12-19_02	"	"	"	"	"	Northeast elevation. View looking southwest. Note the deteriorated condition of bridge.	2 of 10
CAR-376_2012-12-19_03	"	"	"	"	"	View looking southeast across bridge along abandoned rail line.	3 of 10
CAR-376_2012-12-19_04	"	"	"	"	"	View looking northwest across bridge along abandoned rail line.	4 of 10
CAR-376_2012-12-19_05	"	"	"	"	"	View looking east along the southwest side of bridge.	5 of 10
CAR-376_2012-12-19_06	"	"	"	"	"	View of southeastern spans, looking east.	6 of 10
CAR-376_2012-12-19_07	"	"	"	"	"	Northwest end of bridge, showing timber retaining wall. View looking northeast.	7 of 10
CAR-376_2012-12-19_08	"	"	"	"	"	View looking northwest beneath bridge deck, showing timber bents.	8 of 10
CAR-376_2012-12-19_09	"	"	"	"	"	Northeast side of bridge, view looking southeast.	9 of 10
CAR-376_2012-12-19_10	"	"	"	"	"	View looking west, showing the deterioration of piles and fallen timbers from retaining wall.	10 of 10

CAR-376

QUEEN ANNE'S RAILROAD BRIDGE, MILEPOST 6.75

CAROLINE COUNTY, MARYLAND

S. HAAS

12-2012

MD SHPO

OVERVIEW OF BRIDGE @ MILEPOST 6.75, southwest elevation, view TO NORTHEAST.

PHOTO # 1 of 10

CAR-376
QUEEN ANNE'S RAILROAD BRIDGE, MILEPOST 6.75
CAROLINE COUNTY, MARYLAND
S. HAAS
12-2012
MD SHPO
NORTHEAST ELEVATION, TO SOUTHWEST. NOTE THE DETERIORATED CONDITION OF BRIDGE.
PHOTO # 1 of 10

CAR-376
QUEEN ANNÉS RAILROAD BRIDGE, MILEPOST 6.75
CAROLINE COUNTY, MARYLAND
S. HAAS
12-2012
MD SHPO
VIEW TO SOUTHEAST ACROSS BRIDGE ALONG ABANDONED RAIL LINE.
PHOTO # 3 of 10

CAR-376

QUEEN ANNES RAILROAD BRIDGE, MILEPOST 6.75

CAROLINE COUNTY, MARYLAND

S. HAAS

12-2012

MD SHPO

VIEW TO NORTHWEST ACROSS BRIDGE ALONG ABANDONED RAIL LINE.

PHOTO # 4 of 10

CAR-376
QUEEN ANNE'S RAILROAD BRIDGE, MILEPOST 6.75
CAROLINE COUNTY, MARYLAND
S. HAAS
12-2012
MD SHPO
VIEW LOOKING EAST ALONG THE SOUTHWEST SIDE OF BRIDGE
PHOTO # 5 of 10

CAR-376

QUEEN ANNE'S RAILROAD BRIDGE, MILEPOST 6.75

CAROLINE COUNTY, MARYLAND

S. HAAS

12.2012

MD SHPO

VIEW OF SOUTHEASTERN SPANS, LOOKING EAST.

PHOTO # 6 of 10

CAR-376

QUEEN ANNE'S RAILROAD BRIDGE, MILEPOST 6.75

CAROLINE COUNTY, MARYLAND

S. HAAS

12-2012

MD SHPO

NORTHWEST END OF BRIDGE, SHOWING TIMBER RETAINING WALL. VIEW LOOKING NORTHEAST.

PHOTO # 7 of 10

CAR-376

QUEEN ANNE'S RAILROAD, MILEPOST 6.75

CAROLINE COUNTY, MARYLAND

S. HAAS

12-2012

MD SHPO

VIEW LOOKING NORTHWEST BENEATH BRIDGE DECK, SHOWING TIMBER BENTS.

PHOTO # 8 of 10

CAR-376
QUEEN ANNE'S RAILROAD BRIDGE, MILEPOST 6.75
CAROLINE COUNTY, MARYLAND
S. HAAS
12.2012
MD SHPO
NORTHEAST SIDE OF BRIDGE, VIEW LOOKING SOUTHEAST
PHOTO # 9 of 10

CAR-376
QUEEN ANNE'S RAILROAD BRIDGE, MILEPOST 6.75
CAROLINE COUNTY, MARYLAND
S. HAAS
12-2012
MD SHPO
VIEW LOOKING WEST, SHOWING THE DETERIORATION OF PILES
& FALLEN TIMBERS FROM RETAINING WALL.
PHOTO # 10 of 10