

Maryland Historical Trust

Maryland Inventory of Historic Properties Number: AA-2196

Name: MD173 (BRIDGE #2045) OVER STONY CREEK

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 bridged received the following determination of eligibly.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <u> X </u>	Eligibility Not Recommended <u> </u>
Criteria: <u> A </u> <u> B </u> <u> C </u> <u> D </u>	Considerations: <u> A </u> <u> B </u> <u> C </u> <u> D </u> <u> E </u> <u> F </u> <u> G </u> <u>None</u>
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>

gmg

CAPSULE SUMMARY
Stony Creek Bridge
(AA-2196)

This double-leaf bascule structure runs northwest-southeast over Stony Creek, connecting Riviera Beach to the south with Orchard Beach to the north. The Stony Creek Bridge (Maryland Department of Transportation Bridge No. 2045) is located along MD 173, also known as Fort Smallwood Road in this area. Fort Smallwood Road is a two-lane road, and likewise, the bridge is two lanes wide, supporting one lane of traffic in each direction as well as pedestrian sidewalks on either side of the span.

Erected in 1946, the bridge spans Stony Creek with an overall length of nearly 884 feet, with the central movable span measuring 75 feet 2 inches. The roadway is 31 feet in width, and the pedestrian walks measure five feet one inch on either side of the roadway. A control tower is located at the north side of the bridge near the center of the span.

It is not surprising that standardized bridge designs were featured during this lean period. Although most standardized plans were of the beam and slab type of construction, Waddell and Hardesty's bascule bridge at Spa Creek in Annapolis (AA-2195) became the prototype of this period for crossing narrow navigable waterways.

Dr. John Alexander Low Waddell, one the nation's early bridge engineers, founded the firm in 1887. Waddell promoted the bascule bridge form, and even patented his own form of bascule bridge. At the turn of the century, the firm's early projects included railroads and highways, but, given Waddell's considerable interest in movable bridges, they quickly were established as one of the firm's areas of expertise.

The bascule bridge at Stony Creek stands as an example of this type of bridge. The refined design of the bridge and its connection with an engineer nationally renowned for his influence in the design of movable bridges makes it particularly notable.

MARYLAND HISTORICAL TRUST
MD INVENTORY OF HISTORIC PROPERTIES

Inventory No. AA-2196

=====

1. Name of Property

=====

historic name Stony Creek Bridge
common/other name Stony Creek Bridge, also known as Bridge 2045,
MD 173 over Stony Creek

=====

2. Location

=====

street & number Fort Smallwood Rd (MD 173) not for publication
city or town Riviera Beach vicinity state Maryland code MD
county Anne Arundel code 003 zip code 21122

street & number Fort Smallwood Rd (MD 173) not for publication
city or town Orchard Beach vicinity state Maryland code MD
county Anne Arundel code 003 zip code 21226

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3. State/Federal Agency Certification N/A

=====

4. National Park Service Certification N/A

=====

5. Classification

=====

Ownership of Property (Check all that apply)

- private
- public-local
- public-State
- public-Federal

Category of Property (Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property

Contributing	Noncontributing	
<u>0</u>	<u>0</u>	buildings
<u>0</u>	<u>0</u>	sites
<u>1</u>	<u>0</u>	structures
<u>0</u>	<u>0</u>	objects
<u>1</u>	<u>0</u>	Total

Is this property listed in the National Register?

Yes Name of Listing _____
No

Maryland Inventory of Historic Properties
Stony Creek Bridge
Fort Smallwood Road
Anne Arundel County, MD

Inventory No. AA-2196
Page 2

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6. Function or Use

=====

Historic Functions (Enter categories from instructions)

Cat: TRANSPORTATION Sub: Bridge

Current Functions (Enter categories from instructions)

Cat: TRANSPORTATION Sub: Bridge

=====

7. Description

=====

Architectural Classification (Enter categories from instructions)

No Style
Other: Stripped Classicism

Materials (Enter categories from instructions)

foundation Concrete
roof N/A
walls N/A
other _____

Narrative Description (Describe the historic and current condition of the property.)

See Continuation Sheet No. 7-1

=====
8. Statement of Significance
=====

Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

- A owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or a grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years of age or achieved significance within the past 50 years.

Maryland Inventory of Historic Properties
Stony Creek Bridge
Fort Smallwood Road
Anne Arundel County, MD

Inventory No. AA-2196
Page 4

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Areas of Significance (Enter categories from instructions)

Transportation
Engineering

Period of Significance 1946

Significant Dates 1946
1988

Significant Person (Complete if Criterion B is marked above)

Cultural Affiliation Undefined

Architect/Builder Waddell & Hardesty
Maryland State Roads Commission

Narrative Statement of Significance (Explain the significance of the property.)

See Continuation Sheet No. 8-1

Maryland Inventory of Historic Properties
Stony Creek Bridge
Fort Smallwood Road
Anne Arundel County, MD

Inventory No. AA-2196
Page 5

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9. Major Bibliographical References

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(Cite the books, articles, legal records, and other sources used in preparing this form.)

Le Viness, Charles T. *A History of Road Building in Maryland*.
Baltimore: State Roads Commission of Maryland, 1958.

Maryland Department of Geology, Mines, and Water Resources. *Map of Anne Arundel County, showing the Topography and Election Districts*, 1954 and 1963.

Maryland Department of Transportation, Bridge Division. 707 N. Calvert Street, Baltimore, MD. Drawing Files and Vertical Files.

Maryland Department of Transportation, Office of Bridge Development. Bridge Inventory, 1996.

Maryland Geological Survey. *Map of Anne Arundel County showing the Topography and Election Districts*, 1924 and 1931.

Narer, John, Engineer, Maryland Department of Transportation, Bridge Division. Telephone Interview, May 28, 1998.

P.A.C. Spero & Company and Louis Berger & Associates. *Historic Highway Bridges in Maryland: 1631-1960, Historic Context Report*, July 1995 (Revised October 1995).

Pitner, Carl. *Pitner's Map of Maryland and Delaware*. Washington, DC: Carl Pitner, 1933.

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10. Geographical Data
=====

Acreage of Property less than one acre

Verbal Boundary Description (Describe the boundaries of the property.)

The Stony Creek Bridge spans Stony Creek, a minor creek that runs southwest at the mouth of the Patapsco River in Anne Arundel County. The bridge is located along Fort Smallwood Road (MD 173) between Riviera Beach and Orchard Beach.

Boundary Justification (Explain why the boundaries were selected.)

The bridge has spanned this portion of Stony Creek since its construction in 1946.

=====
11. Form Prepared By
=====

name/title Andrea W. Bakewell Lowery, Architectural Historian
organization EHT Traceries, Inc. date May 20, 1998
street & number 5420 Western Avenue telephone 301/656-5283
city or town Chevy Chase state MD zip code 20815
=====

12. Property Owner
=====

name State of Maryland
street & number _____ telephone _____
city or town _____ state _____ zip code _____
=====

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. AA-2196

Section 7 Page 1 Stony Creek Bridge
name of property
Anne Arundel County, MD
county and state

=====

This double-leaf bascule structure runs northwest-southeast over Stony Creek, connecting Riviera Beach to the south with Orchard Beach to the north. The Stony Creek Bridge (Maryland Department of Transportation Bridge No. 2045) is located along MD 173, also known as Fort Smallwood Road in this area. Fort Smallwood Road is a two-lane road, and likewise, the bridge is two lanes wide, supporting one lane of traffic in each direction as well as pedestrian sidewalks on either side of the span.

Erected in 1946, the bridge spans Stony Creek with an overall length of nearly 884 feet, with the central movable span measuring 75 feet 2 inches. The roadway is 31 feet in width, and the pedestrian walks measure five feet one inch on either side of the roadway. A control tower is located at the north side of the bridge near the center of the span.

Most of the original superstructure of the bridge, including the trunnions, remains intact. Each leaf is composed of steel floorbeams that tie into riveted bascule girders. The floorbeams in turn support rolled steel stringers and an open steel grid deck grating. The deck of the bridge was replaced in 1988 by McLean Contracting. The weight of each span is balanced by a counterweight that pivots on a trunnion bearing and is supported by two sets of trunnion towers. The mechanical equipment is electrically operated.

To either side of the movable span, the two-lane approach is paved with concrete with a medium-sized aggregate. These approaches to the span have been recently repaved. Slightly elevated concrete pedestrian walkways, each just over five feet in width, are located at either side of the roadway. Most of the original steel railing has been removed and replaced with a steel mesh fencing. Concrete barriers, added in 1986, divide the roadway from the pedestrian walkways, and at each end of the barriers the original date of construction, 1946, and the date of the renovation, 1986, are inset. At the trunnions, the concrete supports rise up to form knee walls by the pedestrian walkways. These concrete walls are cast to imitate the appearance of ashlar stonework with each wall divided into striated panels. Traffic lights and wood and steel gates are located at the inner ends of each approach. Original streetlights have been removed and replaced with modern fixtures.

A control house is located on the north side of the eastern leaf of the bridge. This control house is rectangular in plan, with a width of 13 feet 4 inches and a length of 16 feet. The tower rises

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. AA-2196

Section 7 Page 2

Stony Creek Bridge
name of property
Anne Arundel County, MD
county and state

=====

from the water level to approximately 14 ½ feet above the roadway. The concrete walls, like the wing walls above the trunnions, are cast to imitate the appearance of ashlar stonework. Each panel is cast with striations perpendicular to those of the adjacent panels, enhancing the stone-like effect. The upper 6 ¾ feet of the walls are clad in stainless steel. The control house bears the influence of Stripped Classicism, and is ornamented with stylized columns at the corners and medallions at the cornice. Each stainless steel wall holds a group of three double-hung 1/1 aluminum sash windows, giving the controller views in both directions along the bridge as well as up and down the creek. A replacement single-leaf metal door is located at the southeast elevation.

The substructure of the movable span includes two sets of trunnion towers ornamented with paneled cast concrete. The top of the southeast tower houses the control tower. Timber fenders protect the trunnion towers.

The substructure of the approach spans consists of fixed beam spans divided by thirteen sets of concrete pylons. In several of the rows of concrete pylons, the supports are splayed to accommodate greater loads.

The land slopes gently down to the water on the western edge of the creek, while the ground at the eastern edge is somewhat higher. A private marina is located on the western bank on the south side of the bridge, while the other shore areas flanking the bridge are residential in nature.

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. AA-2196

Section 8 Page 1 Stony Creek Bridge
name of property
Anne Arundel County, MD
county and state

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The Stony Creek Bridge, which spans Stony Creek between Riviera Beach and Orchard Beach, is one of a number of bascule bridges built in Maryland in the twentieth century. The form of the bascule bridge dates back to the Middle Ages. In the eighteenth century, developments were made in the construction of bascule bridges with the introduction of counterweights. The trunnion bascule, as seen at Stony Creek, was developed in the late nineteenth and early twentieth centuries, but evolved from these medieval roots.¹

Spero quotes bridge engineer J.A.L. Waddell as stating that the bascule designs 'are scientific and they represent, probably, the best and most profound thought that has ever been devoted to bridge engineering.' The first important bascule bridges in the United States were constructed in the 1890s. The 1894 Van Buren Bridge in Chicago and the 1897 Michigan Avenue Bridge in Buffalo, NY are two such bridges.²

The bridge over Stony Creek was erected in 1946, replacing another structure that had been erected between 1924 and 1931.³ The old bridge, probably a timber swing span, had likely become obsolete, necessitating the construction of a new bridge in its location.⁴ Therefore, a double-leaf bascule bridge, like the one concurrently being constructed in Annapolis, was placed at this crossing, just slightly downstream from the original bridge.

The completion of the project was significant in the wake of World War II, with the economy shaken by strikes and shortages. At the close of 1946, the Chief Engineer stated:

Nationwide labor problems and strikes in basic industries soon after the war's end have brought about and are continuing to cause increasing shortages and mounting costs of all materials and labor - budgeted amounts have been rather completely upset.⁵

1 P.A.C. Spero, *Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report*. July 1995 (Revised October 1995), 106.

2 Ibid.

3 Maryland Geological Survey. *Map of Anne Arundel County showing the Topography and Election Districts*, 1924 and 1931.

4 John Narer, Engineer, Maryland Department of Transportation, Bridge Division, Telephone Interview, May 28, 1998.

5 Charles T. Le Viness, *A History of Road Building in Maryland* (Baltimore:

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. AA-2196

Section 8 Page 2

Stony Creek Bridge
name of property
Anne Arundel County, MD
county and state

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It is not surprising that standardized bridge designs were featured during this lean period. Although most standardized plans were of the beam and slab type of construction, Waddell and Hardesty's Annapolis-Eastport Bridge over Spa Creek (AA-2195) in Annapolis became the prototype of this period for crossing narrow navigable waterways. The Stony Creek Bridge is nearly identical to their double-leaf bascule bridge, also in Anne Arundel County. Although numerous bascule bridges were constructed in Maryland in the twentieth century, only seventeen remain in existence.⁶

The consulting engineering firm for the design of this standardized bridge type were Waddell and Hardesty, now known as Hardesty & Hanover. Dr. John Alexander Low Waddell, one the nation's early bridge engineers, founded the firm in 1887. Waddell promoted the bascule bridge form, and even patented his own form of bascule bridge.⁷ At the turn of the century, the firm's early projects included railroads and highways, but, given Waddell's considerable interest in movable bridges, they quickly were established as one of the firm's areas of expertise. Hardesty and Hanover have continued in this tradition, counting bascule spans, vertical lift spans, swing spans, and rolling lift spans among their recent projects today.⁸

The bascule bridge at Stony Creek stands as an example of this type of bridge. The refined design of the bridge and its connection with an engineer nationally renowned for his influence in the design of movable bridges makes it particularly notable.

Maryland State Roads Commission, 1958), 155.

6 Maryland Department of Transportation, Office of Bridge Development, *Bridge Inventory*, 1996.

7 Spero, *Historic Highway Bridges in Maryland*, 106.

8 "Company Profile Page: Hardesty and Hanover." <http://www.hardesty-hanover.com/hh-page1.htm>. Updated 28 January 1998.

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. AA-2196

Section 8 Page 3 Stony Creek Bridge
name of property
Anne Arundel County, MD
county and state

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National Register Evaluation:

Constructed in 1946, the Stony Creek Bridge in Anne Arundel County is eligible for the National Register of Historic Places.

The Stony Creek Bridge does not meet the National Register Criteria A, B, or D. Preliminary research has not revealed any association between the bridge and events that have made a significant contribution to the broad patterns of our history (Criterion A) or the lives of persons significant in our past (Criterion B). There is no evidence that the bridge is likely to yield information important in history or prehistory (Criterion D).

However, based on Criterion C, the bridge, which embodies the distinctive characteristics of a type, period, and method of construction and possesses high artistic values, is National Register-eligible. The bridge strongly reflects two trends in bridge design: the renaissance of the bascule bridge and the development of standardized bridge design. Further, it is based on the design of an engineering firm notable for its contribution to movable spans, Waddell and Hardesty. Based on Criterion C, the bridge is National Register-eligible.

MARYLAND HISTORICAL TRUST	
Eligibility recommended <input checked="" type="checkbox"/>	Not Recommended <input type="checkbox"/>
Comments: _____ _____ _____	
Review, OPS: <u>[Signature]</u>	Date: <u>1/27/95</u>
Reviewer, NR Program: <u>[Signature]</u>	Date: <u>2/5/99</u>

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. AA-2196

Stony Creek Bridge
name of property
Anne Arundel County, MD
county and state

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MARYLAND INVENTORY OF HISTORIC PROPERTIES

Geographic Organization:

Western Shore

Chronological/Development Period (s):

Modern Period (1930-present)

Prehistoric/Historic Period Theme (s):

Architecture, Landscape, and Community
Planning
Transportation

RESOURCE TYPE(S)

Category: Structure

Historic Environment: Suburban

Historic Function (s): TRANSPORTATION/Bridge

Known Design Source: Waddell and Hardesty

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. AA-2196

Stony Creek Bridge
name of property
Anne Arundel County, MD
county and state

=====

Chain of Title:

Owned by State of Maryland

**Maryland Inventory of Historic Properties
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust**

Name and SHA No.: Stony Creek Bridge, SHA No. 2045
(MHT No.: AA-2196)

Location:

Street/Road name and Number: Fort Smallwood Road, (MD 173)

City/Town: Riviera Beach and Orchard Beach _____ vicinity

County: Anne Arundel

Ownership: State _____ County _____ Municipal _____ Other

This bridge projects over: _____ Road _____ Railway Water _____ Land

Is the bridge located within a designated district: _____ yes no

_____ NR listed district _____ NR determined eligible district

_____ locally designated _____ other

_____ Name of District

Bridge Type:

_____ Timber Bridge
_____ Beam Bridge _____ Truss-Covered _____ Trestle _____ Timber-and-Concrete

_____ Stone Arch

_____ 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

If other: _____ Type Name

Description:

Describe Setting:

This double-leaf bascule structure runs northwest-southeast over Stony Creek, connecting Riviera Beach to the south with Orchard Beach to the north. The Stony Creek Bridge (Maryland Department of Transportation Bridge No. 2045) is located along MD 173, also known as Fort Smallwood Road in this area. The land slopes gently down to the water on the western edge of the creek, while the ground at the eastern edge is somewhat higher. A private marina is located on the western bank on the south side of the bridge, while the other shore areas flanking the bridge are residential in nature.

Describe Superstructure and Substructure:

Erected in 1946, the bridge spans Stony Creek with an overall length of nearly 884 feet, with the central movable span measuring 75 feet 2 inches. The roadway, which accommodates two lanes of traffic, is 31 feet in width, and the pedestrian walkways measure five feet one inch on either side of the roadway. A control tower is located at the north side of the bridge near the center of the span.

Most of the original superstructure of the bridge, including the trunnions, remains intact. Each leaf is composed of steel floorbeams that tie into riveted bascule girders. The floorbeams in turn support rolled steel stringers and an open steel grid deck grating. The deck of the bridge was replaced in 1988 by McLean Contracting. The weight of each span is balanced by a counterweight that pivots on a trunnion bearing and is supported by two sets of trunnion towers. The mechanical equipment is electrically operated.

To either side of the movable span, the two-lane approach is paved with concrete with a medium-sized aggregate. These approaches to the span have been recently repaved. Slightly elevated concrete pedestrian walkways, each just over five feet in width, are located at either side of the roadway. Most of the original steel railing has been removed and replaced with a steel mesh fencing. Concrete barriers, added in 1986, divide the roadway from the pedestrian walkways, and at each end of the barriers the original date of construction, 1946, and the date of the renovation, 1986, are inset. At the trunnions, the concrete supports rise up to form knee walls by the pedestrian walkways. These concrete walls are cast to imitate the appearance of ashlar stonework with each wall divided into striated panels. Traffic lights and wood and steel gates are located at the inner ends of each approach. Original streetlights have been removed and replaced with modern fixtures.

A control house is located on the north side of the eastern leaf of the bridge. This control house is rectangular in plan, with a width of 13 feet 4 inches and a length of 16 feet. The tower rises from the water level to approximately 14 ½ feet above the roadway. The concrete walls, like the wing walls above the trunnions, are cast to imitate the appearance of ashlar stonework. Each panel is cast with striations perpendicular to those of the adjacent panels, enhancing the stone-like effect. The upper 6 ¾ feet of the walls are clad in stainless steel. The design of the tower bears the influence of Stripped Classicism, and the house is ornamented with stylized columns at the corners and medallions at the cornice. Each stainless steel wall holds a group of three double-hung 1/1 aluminum sash windows, giving the controller views in both directions along the bridge

as well as up and down the creek. A replacement single-leaf metal door is located at the southeast elevation.

The substructure of the movable span includes two sets of trunnion towers ornamented with paneled cast concrete. The top of the southeast tower houses the control tower. Timber fenders protect the trunnion towers.

The substructure of the approach spans consists of fixed beam spans divided by thirteen sets of concrete pylons. In several of the rows of concrete pylons, the supports are splayed to accommodate greater loads.

Discuss major alterations:

This bridge remains much as it appeared originally, but some of the superstructure of the bridge has been altered. The original railing has been altered, and the door to the control house has been replaced. The concrete of the approach spans has been patched in places over time.

History:

When Built: 1946

Why Built: To replace an obsolete bridge.

Who Built: State Roads Commission (WC Hopkins, Bridge Engineer)

Who Designed: State Roads Commission based on plans designed with Waddell and Hardesty, Consulting Engineers, for Annapolis-Eastport Bridge.

Why Altered: Rehabilitation of deteriorated parts.

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

It does not appear that this bridge was part of an organized bridge-building campaign. The bridge over Stony Creek was erected in 1946, replacing another structure that had been erected between 1924 and 1931.¹ The old bridge, probably a timber swing span, had likely become obsolete, necessitating the construction of a new bridge in its location.² Therefore, a double-leaf bascule bridge was placed at this crossing, just slightly downstream from the original bridge.

Surveyor Analysis:

This bridge may have NR significance for association with:

Criterion A: Events Criterion B: Person
 Criterion C: Engineering/Architectural Character

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

It is not believed that this bridge was constructed in response to significant events in Maryland or local history.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

While its precise influence on the growth and development of this part of Anne Arundel County at the time of its construction is not known with certainty, it is presumed that a more efficient crossing at this point would have had a positive impact on the economy of the area by facilitating the transport of goods and service.

Is the bridge located in an area that may be eligible for historic designation and would the bridge add to or detract from the historic and visual character of the possible district?

The area around the bridge is unlikely to be eligible for historic designation. However, if it were so designated, the bridge would certainly add to the historic and visual character of the possible district.

¹ Maryland Geological Survey. *Map of Anne Arundel County showing the Topography and Election Districts, 1924 and 1931.*

² John Narer, Engineer, Maryland Department of Transportation, Bridge Division, Telephone Interview, May 28, 1998.

Is the bridge a significant example of its type?

The Stony Creek Bridge is significant under Criterion C for its outstanding design and as an intact example of the bascule bridge, a bridge type popular in twentieth century Maryland. Furthermore, it is notable for its association with a prominent engineering firm that specialized in movable bridges, Waddell and Hardesty.

Does the bridge retain integrity of the important elements described in the Context Addendum?

The Stony Creek Bridge retains its integrity of location, design, setting, and association. Minor alterations have been made to the control house, and most of the original railings have been replaced with safety fencing of a different design, but the bridge's movable span retains its original appearance, including original concrete piers, concrete wing walls, and steel railings. There has been no disruption of the structural or visual elements of the bridge. The bridge is potentially eligible for listing in the National Register of Historic Places.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer and why?

The Stony Creek Bridge is a significant example of the work of the State Roads Commission and the Commission's use of standardized designs. Furthermore, the bridge provides a good example of the work of engineering firm of Waddell and Hardesty, who consulted on the original design as used at Spa Creek (AA-2195). Dr. John Alexander Low Waddell, a nationally prominent bridge engineer established Waddell and Hardesty, in 1887. Waddell promoted the form of the bascule bridge, and the firm quickly became known for its expertise in movable bridges, a reputation that continues today at the firm, now known as Hardesty and Hanover.

Should this bridge be given further study before significant analysis is made and why?

Further study of this bridge may provide answers to the question of its impact on the growth and development of this area of Anne Arundel County surrounding the bridge.

Provide black and white prints and negatives and color slides of bridge, details, and setting labeled according to NR Bulletin 16A and Maryland Supplement to Bulletin 16A.

Provide a USGS map illustrating the location of the bridge.

Surveyor:

Name: Andrea Bakewell Lowery
Organization: EHT Traceries, Inc.
Address: 5420 Western Avenue
Chevy Chase, MD 20815

Date: May 22, 1998
Telephone: (301) 656-5283

Project Number: SP803B42—Historic Bridge Inventory

27 May-1998

[NR = National Register Eligible NR/D = District X = Not Eligible]

MHT Survey Number	Name/#	Street	Type	SHA NR Determination	SHPO Opinion	Remarks
AA-2195	Annapolis-Eastport Bridge over Spa Creek	MD 181 (Compromise St.)	S	NR		
AA-2196	Stony Creek Bridge	MD 173 (Ft. Smallwood Rd.)	S	NR		
CT-1214	Patuxent River Bridge	MD 231 (Hallowing Point Rd./ Prince Frederick Hughesville Rd.)	S	NR		

AA-2196

MOVABLES

Bridge Number	Bridge Name	Date Built	Comments
<u>ANNE ARUNDEL</u>			
2045	+MD 173 (Fort Smallwood Road) over Stony Creek (Stony Creek Bridge)	1946	2-lane, double leaf bascule with sidewalks on both sides of roadway, control tower located on north side of bridge near center of span. Original superstructure, including trunnion remains intact. 1986-concrete barriers added to separate sidewalks and roadway. Example of the work of Waddell and Hardesty, a firm established in 1887 and known for its expertise in movable bridges.
2053	+MD 181 (Compromise Street) over Spa Creek (Annapolis-Eastpoint Bridge)	1946	2-lane double leaf bascule with sidewalks. Control house located on west side of northern leaf of bridge. Example of work of Waddell and Hardesty.
<u>BALTIMORE CITY</u>			
BC5210	+Hanover Street over Middle Branch Patapsco River (Hanover Street Bridge)	1916	Concrete arch, double leaf bascule. Bascule is a Rall rolling lift designed by Strobel Steel Construction Co. of Chicago. North abutment slab is new, 1971-Bridge rehabilitated, 1990-foundations of arcades C and D replaced, 1992-major rehabilitation of machinery--center opening gear and drive replaced with enclosed speed reducer Has 4 identical neo-classical 'tender' houses, 37 approach spans and one main span. HYBRID
<u>CALVERT</u>			
4008	+MD 231 (Hallowing Point Road) over Patuxent River (Patuxent River Bridge, Benedict Bridge)	1950-51	2-lane center-bearing swing span with I-beam approach spans. Control house located at center pivot pier. Erected as part of construction boom following WWII. HYBRID
<u>DORCHESTER</u>			
09001	+MD 14 over Marshyhope Creek (Brookview Bridge)	1931	2-lane double leaf rolling lift bascule with concrete T-beams and concrete encased steel stringer on approach spans. 1993-original timber deck on bascule span replaced with concrete filled steel grid and bascule leaves locked in closed position. Eight concrete girder spans and bascule span. HYBRID
09008	+MD 795 (Maryland Avenue) over Cambridge Creek (Cambridge Bridge)	1939-1940	Double leaf rolling lift bascule. Bridge tenders house has had original roof altered to a flat roof and several windows replaced. Seven spans HYBRID
<u>KENT/QUEEN ANNE'S</u>			
140027	MD 213 over Chester River (Chester River Bridge)	1930	1967-Timber deck replaced with steel grid deck. 1988-89-bascule girders and superstructure were removed and repaired off-site. 1990-approach spans were replaced with precast sections and bascule span rehabilitated. Double leaf rolling lift bascule. 38 spans. HYBRID

AA-2196

TALBOT

20023 +MD 331 over 1932 Riveted through truss, center-bearing swing span with steel six-panel Pratt through truss approach spans. Tender house located off the bridge on the northwest approach. Eight concrete slab spans & movable span. **HYBRID**

(Dover Bridge)

WICOMICO

22009 +MD 991 over 1927 Located in Salisbury Historic district. 1933-repairs to bulkhead. 1981-replaced all floor beams and stringers of bascule span, repaired sidewalk supports, exterior of tender's house covered with aluminum siding, original windows replaced. Double leaf bascule of Chicago trunnion style. Three spans

(Wicomico River Bridge)

WORCESTER

23002 +MD 12 over 1932 Single leaf trunnion bascule span. 1954-new floor installed on bascule, 1990-floorbeams replaced. Two spans

(Snow Hill Bridge)

23004 +MD 675 over 1920 Located in Pocomoke City Survey District. Double-leaf trunnion bascule. 1988-50 ft. section of bridge collapsed into the river when two supporting piers failed, resulted in extensive overhaul. 1978-repairs made to bascule machinery-including replacing trunnion bearings, rebuilding trunnion assemblies, replacing the drive machinery on both east and west piers. Seven spans

(Pocomoke City Bridge)

23007 +US 50 over 1942 Double leaf rolling lift bascule. 73 spans, 72 concrete slabs

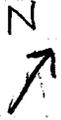
(Ocean City Bridge)

HYBRID

AA-2196

MD Bridge No. 2045

STONY CREEK BRIDGE



Residential

Pedestrian walkways

Stoney Creek Bridge
Marina

Roadway

STONY

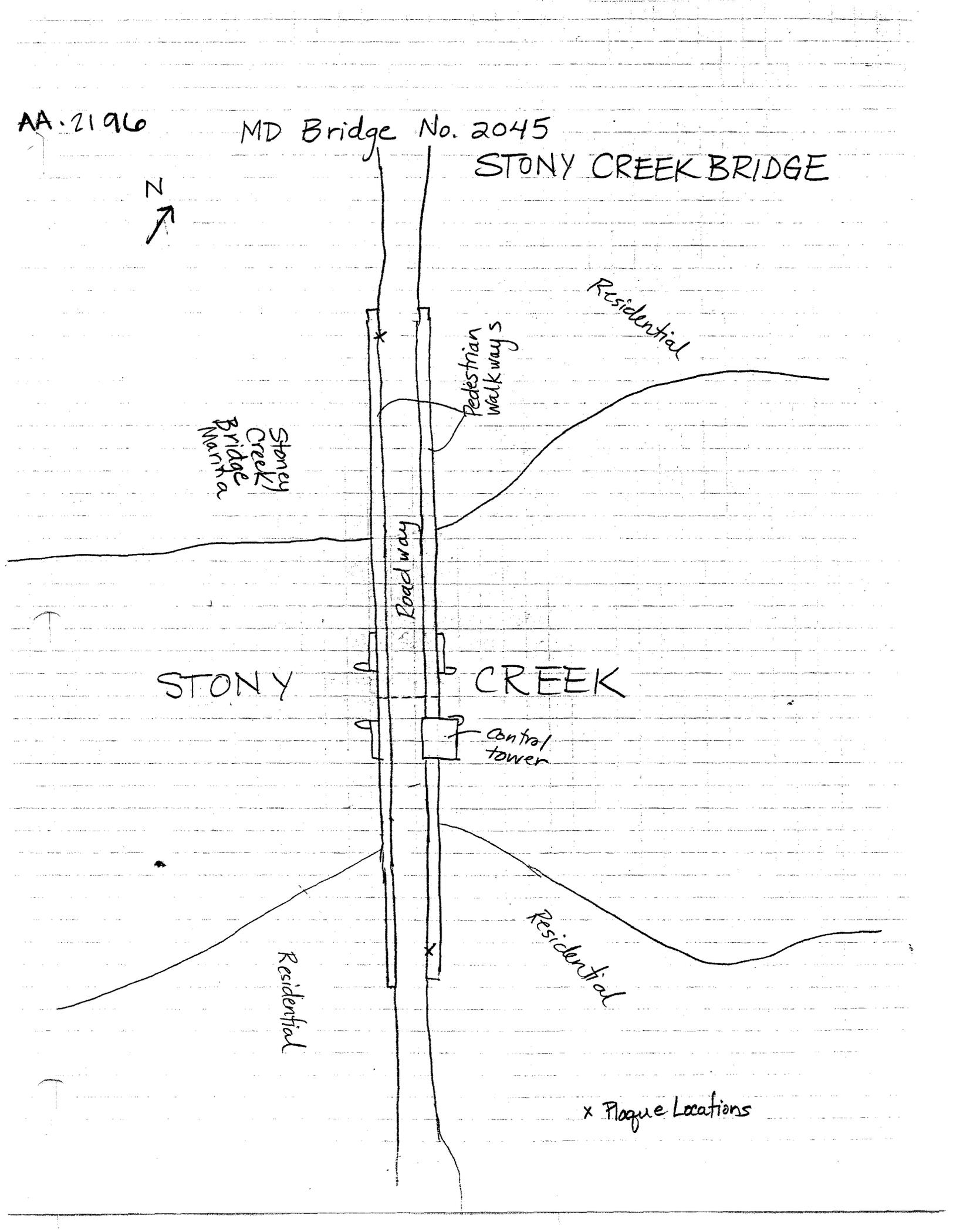
CREEK

Control tower

Residential

Residential

x Plaque Locations





AA-2196

10'
4336
4335
4334
4332000m.N.
39°07'30"
76°30'

32°30" GIBSON ISLAND 7 MI. 368 369 370000m.E

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1975



ROAD CLASSIFICATION

Primary highway, all weather, hard surface	Light-duty road, all weather, improved surface
Secondary highway, all weather, hard surface	Unimproved road, fair or dry weather
Interstate Route	State Route



CURTIS BAY, MD.
NE/4 RELAY 15' QUADRANGLE
N3907.5—W7630/7.5

1969
PHOTOREVISED 1974
AMS 5662 II NE—SERIES V853

JEST

(GIBSON ISLAND)
5702 III SW



AA-2196

Stony Creek Bridge
Anne Arundel County, MD
Traces

5/98

Maryland SHPO

Bridge, looking west

Photo 1 of 11



AA-2196

Stony Creek Bridge

Anne Arundel County, MD

Traceries

5/98

Maryland SHPO

Bridge, looking west

2 of 11



AA-2196

Stony Creek Bridge

Anne Arundel County, MD

Traceries

5/98

Maryland SHPO

Bridge, looking east

photo 3 of 11



AA-2196
Stony Creek Bridge
Anne Arundel County, MD
Traceries
5/98
Maryland SHPO
Bridge, looking East
Photo 4 of 11



AA-2196

Stony creek Bridge

Anne Arundel County, MD

Tracenes

5/98

Maryland SHPO

Bridge, looking East

Photo 5 of 11



AA-2196

Stony Creek Bridge

Anne Arundel County, MD

Traceries

5/98

Maryland SHPO

Bridge, looking SE

Photo 6 of 11



AA-2196

Stony Creek Bridge

Anne Arundel County, MD

Traceries

5/98

Maryland SHPO

Control Tower, looking SE

Photo 7 of 11



AA-2196

Stony Creek Bridge

Anne Arundel County, MD

Traceries

5/98

Maryland SHPO

Bridge, looking North

Photo 8 of 11



AA-2196

Stony Creek Bridge

Anne Arundel County, MD

Traceries

5/98

Maryland SHPO

Control Tower, looking north

photo 9 of 11



AA-2196

Stony Creek Bridge

Anne Arundel County, MD

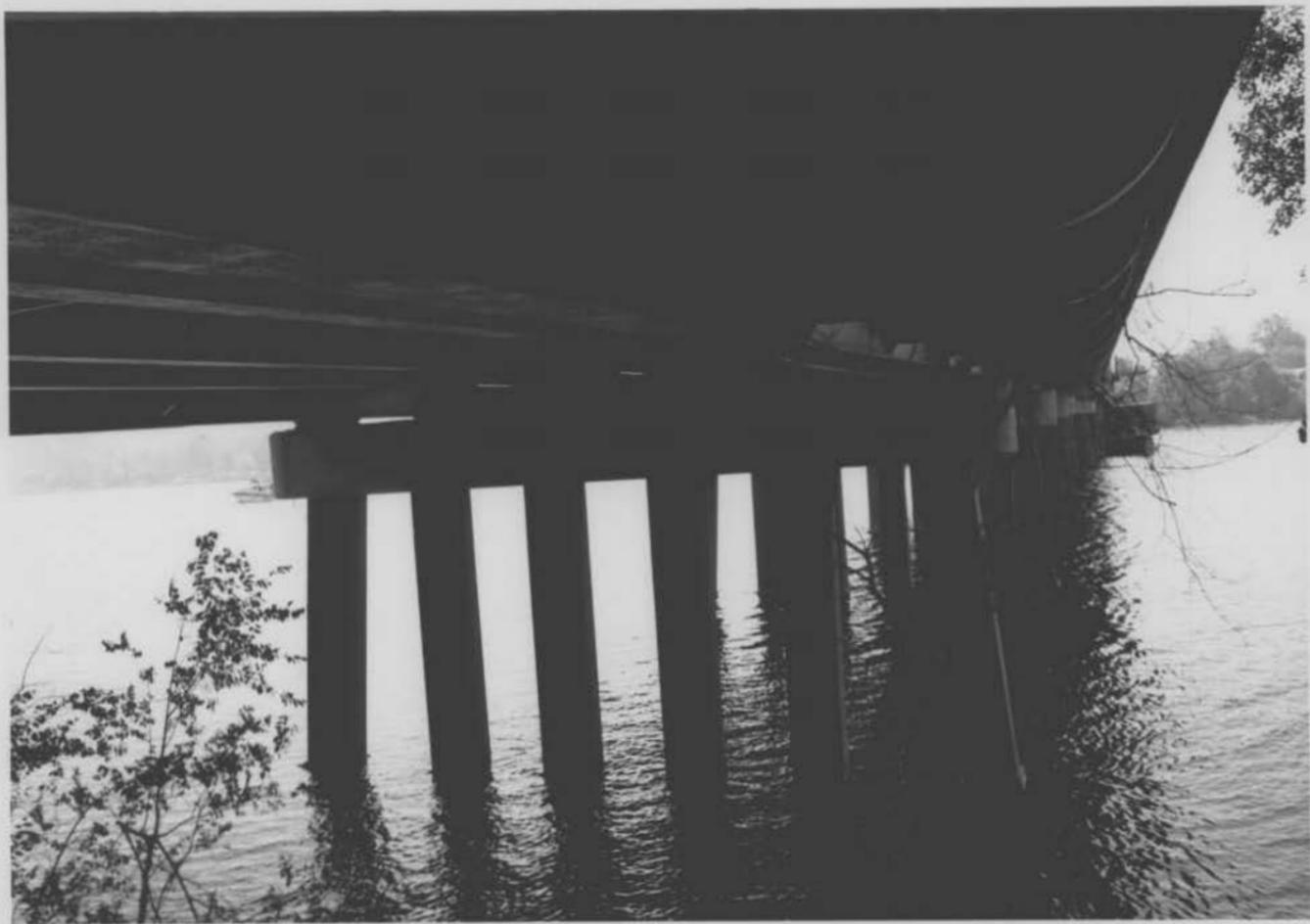
Traceries

5/98

Maryland SHPO

W wall, North end of Bridge

Photo 10 of 11



AA-2196

Stony Creek Bridge

Anne Arundel County, MD

Traceries

5/98

Maryland SHPO

Piers, looking East

Photo 11 of 11