QA-542

SHA Bridge No. 1700600

Architectural Survey File

This is the architectural survey file for this MIHP record. The survey file is organized reverse-chronological (that is, with the latest material on top). It contains all MIHP inventory forms, National Register nomination forms, determinations of eligibility (DOE) forms, and accompanying documentation such as photographs and maps.

Users should be aware that additional undigitized material about this property may be found in on-site architectural reports, copies of HABS/HAER or other documentation, drawings, and the "vertical files" at the MHT Library in Crownsville. The vertical files may include newspaper clippings, field notes, draft versions of forms and architectural reports, photographs, maps, and drawings. Researchers who need a thorough understanding of this property should plan to visit the MHT Library as part of their research project; look at the MHT web site (mht.maryland.gov) for details about how to make an appointment.

Last Updated: 01-24-2012

MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes X
no ____

Property Name: SHA Bridge No. 1700600 Inventory Number: QA-542

Address: MD 18B over Kent Narrows Historic district: ____ yes X no

City: Grasonville, MD Zip Code: ____ County: Queen Annes

USGS Quadrangle(s): Queenstown

Property Owner: MD SHA Tax Account ID Number: ____

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

Project: Mid-20th Century Highway Bridges of Maryland (1948-1960) Agency: ____

Agency Prepared By: ____

Preparer's Name: Geoffrey Henry URS Corporation Date Prepared: 10/22/2004

Documentation is presented in: Project Review and Compliance files

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

Criteria: X A ___ B X 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 Kent Narrows Bridge (MIHP # QA-542, Bridge 1700600) carries MD 18B (formerly part of US 50/301) over Kent Narrows and connects Kent Island with the mainland portion of Queen Anne's County. The Kent Narrows Bridge was built in 1951 as part of the state's massive road building campaign on the Western and Eastern Shores of Maryland carried out in the late 1940s and early 1950s leading up to the completion of the Chesapeake Bay Bridge in 1952. This road building campaign involved the widening and dualization of US 50 and US 301 and the replacement of obsolete and/or inadequate bridges along these routes. On Kent Island, US 50/301 absorbed a portion of existing MD 18 and the Kent Narrows Bridge was built in 1951 to replace an overhead bascule bridge at this location. In 1990 this bridge was replaced by a high level bridge over Kent Narrows and the 1951 bridge reverted to use as a bridge for local traffic only.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended X **Eligibility not recommended** ____

Criteria: X A ___ B X C ___ D **Considerations:** ___ A ___ B ___ C ___ D ___ E ___ F ___ G

MHT Comments:

Tim Tamburrino ✓ — **Reviewer, Office of Preservation Services** — 6/2/2011 — **Date**

Reviewer, National Register Program — 6/3/11 — **Date**

2018002772

Determination of Eligibility

The Kent Narrows Bridge (MIHP # QA-542, Bridge 1700600) is eligible under Criterion A on the state level with the period of significance being 1951-1990. The bridge is associated with the road building campaign conducted by the State Roads Commission in connection with the building of the Chesapeake Bay Bridge. As part of this campaign, US 50 and 301 were widened and dualized. On the Eastern Shore, a new US 50/301 was constructed to replace MD 18 and 404 as the main cross-peninsula highways. Because of this, a new and wider bascule bridge was needed to replace the two-lane bascule bridge over Kent Narrows. This bridge was replaced by a new high-level bridge over Kent Narrows in 1990. The bridge was an integral part of this route between 1951 and 1990.

The Kent Narrows Bridge (Bridge 1700600) is not associated with an individual significant on the local, state, or national level and is not eligible under Criterion B.

The Kent Narrows Bridge (Bridge 1700600) is eligible under Criterion C on the state level with the period of significance as 1951. The Kent Narrows Bridge is a rare example of a trunnion double leaf bascule bridge in Maryland, one of only three such bridges built in the 1948-1960 period in the state and one of only eight of this type built in the state. It is one of two movable bridges in Maryland designed by the New York engineering firm of Hardesty & Hanover. The firm historically has been a national leader in the development of movable bridge technology.

The Kent Narrows Bridge was not evaluated under Criterion D as a part of this study.

SHA agrees with the consultant's recommendation that SHA Bridge No. 1700600 is eligible for the NRHP under Criteria A and C.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

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

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

QA-542
MD 18B Bridge over Kent Island Narrows
Grasonville vic.
1951

Bridge No. 1700600 (MIHP # QA-542) is a 12-span steel beam and bascule bridge, built in 1952, that carries MD 18B over Kent Narrows. The bridge runs northwest-southeast, connecting Stevensville to Queenstown, and carries two lanes of vehicular traffic, one in each direction. A two-bar guard rail is located atop the concrete sidewalks. An original three-bar metal railing is located on the bascule span. The bridge is composed of 12 spans and is approximately 663 feet long. The overall width of the superstructure is almost 68 feet. The superstructure is composed of nine approach spans, two flanking spans, and one bascule span. The approach spans are steel stringers with a composite concrete deck. The flanking spans are composed of riveted plate girders and floorbeams and rolled steel stringers with a concrete deck. The bascule span is a double leaf trunnion with an open steel grate deck. The substructure consists of concrete abutments, nine concrete pile bents, and two bascule piers. A control house is located on the south end of the west bascule pier and appears to be unaltered from its original construction

The Kent Narrows Bridge (MIHP # QA-542, Bridge 1700600) carries MD 18B (formerly part of US 50/301) over Kent Narrows and connects Kent Island with the mainland portion of Queen Anne's County. The Kent Narrows Bridge was built in 1951 as part of the state's massive road building campaign on the Western and Eastern Shores of Maryland carried out in the late 1940s and early 1950s leading up to the completion of the Chesapeake Bay Bridge in 1952. This road building campaign involved the widening and dualization of US 50 and US 301 and the replacement of obsolete and/or inadequate bridges along these routes. On Kent Island, US 50/301 absorbed a portion of existing MD 18 and the Kent Narrows Bridge was built in 1951 to replace an overhead bascule bridge at this location. In 1990 this bridge was replaced by a high level bridge over Kent Narrows and the 1951 bridge reverted to use as a bridge for local traffic only.

Maryland Historical Trust Maryland Inventory of Historic Properties Form

Inventory No. QA-542

1. Name of Property (indicate preferred name)

historic	MD 18B Bridge over Kent Narrows
other	Bridge No. 1700600

2. Location

street and number	MD 18B at Kent Narrows	N/A	not for publication
city, town	Grasonville	x	vicinity
county	Queen Anne's		

3. Owner of Property (give names and mailing addresses of all owners)

name	Maryland State Highway Administration				
street and number	707 N. Calvert Street			telephone	410-545-0300
city, town	Baltimore	state	MD	zip code	21202

4. Location of Legal Description

courthouse, registry of deeds, etc.		liber	folio
city, town	tax map	tax parcel	tax ID number

5. Primary Location of Additional Data

_____ Contributing Resource in National Register District
_____ Contributing Resource in Local Historic District
_____ Determined Eligible for the National Register/Maryland Register
_____ Determined Ineligible for the National Register/Maryland Register
_____ Recorded by HABS/HAER
_____ Historic Structure Report or Research Report at MHT
__x__ Other: Statewide Inventory by SHA

6. Classification

Category
_____district
_____building(s)
__x__structure
_____site
_____object

Ownership
__x__public
_____private
_____both

Current Function
_____agriculture
_____commerce/trade
_____defense
_____domestic
_____education
_____funerary
_____government
_____health care
_____industry
_____landscape
_____recreation/culture
_____religion
_____social
__x__transportation
_____work in progress
_____unknown
_____vacant/not in use
_____other:

Resource Count

Contributing	Noncontributing	
_____	_____	buildings
_____	_____	sites
1	_____	structures
_____	_____	objects
1	_____	Total

Number of Contributing Resources previously listed in the Inventory
0

7. Description

Inventory No. QA-542

Condition

___ excellent	___ deteriorated
x good	___ ruins
___ fair	___ altered

Prepare both a one paragraph summary and a comprehensive description of the resource and its various elements as it exists today.

The Kent Narrows Bridge (MIHP # QA-542, Bridge 1700600) is a 12-span steel beam and bascule bridge, built in 1951, that carries MD 18B over Kent Narrows. The bridge connects Stevensville to Queenstown and is located in an area of Queen Anne's County with marinas located to the north and south of the bridge.

The bridge runs northwest-southeast and carries two lanes of vehicular traffic, one in each direction. A concrete median separates the traffic lanes. Sidewalks carry pedestrian traffic on both sides of the bridge. The sidewalk of the bascule span is composed of metal panels, while the sidewalks of the approach spans are concrete. A two-bar guard rail is located atop the concrete sidewalks. An original three-bar metal railing is located on the bascule span. A bicycle pathway approaches the structure on each end along the north side of bridge.

The bridge spans Kent Narrows with a vertical clearance of approximately 18 feet over the boat channel. This channel is 50 feet wide. The bridge is composed of 12 spans and is approximately 663 feet long. The overall width of the superstructure is almost 68 feet. The roadway in each direction measures 27 feet wide. Each sidewalk is just over four feet wide.

The substructure consists of concrete abutments, nine concrete pile bents, and two bascule piers. The substructure east of the bascule span consists of three bents while the substructure west of the bascule span consists of six bents. Each bent consists of 12 two-foot square concrete piles, the outer ones of which lean in. The fourth bent east of the west bank has 24 piles. At the waterline, the piles are encased in a fiberglass jacket which consists of grout-filled fiberglass forms.

The large bascule piers support the bascule superstructure, counterweights, trunnion towers, and machinery rooms. They are composed of reinforced concrete with protective jackets. Two foot square precast concrete piles also support these piers. There are two timber-pile dolphins at each end of the bascule pier. The abutments feature steel bulkheads with concrete caps and timber wales, located just below the cap, at the toes of the slope protection at both abutments.

The superstructure is composed of nine approach spans, two flanking spans, and one bascule span. The approach spans are steel stringers with a composite concrete deck. The flanking spans are composed of riveted plate girders and floorbeams and rolled steel stringers with a concrete deck. The bascule span is a double leaf trunnion with an open steel grate deck. Longitudinal steel stringers and four transverse riveted plate girder floorbeams support the deck system. Four longitudinal riveted plate bascule girders support these beams. The bascule counterweights are composed of transverse riveted frames and plate girders embedded in reinforced concrete. The main bascule girders support the counterweights. Steel framed trunnion towers anchored to the bascule piers support the bascule girders and counterweights.

An operator's house is located on the south end of the west bascule pier and is unaltered from its original appearance. It is constructed of scored concrete panels. The top story has stainless steel trim which is fluted and forms corner pilasters and a cornice. Decorative rondels are present along the cornice. The operator's house has aluminum sash windows.

Stoplights are located at each end of the bridge to control traffic. Two automatic traffic arms are located at each end of the bridge. One arm in each direction has a stop sign. The arms at the northeast and southwest corners of the bridge also possess lights that point toward the waterway. The traffic arms each have the initials "WRRSC" on the base. The back of the lights state "Western Railroad Supply Chicago." The bridge lacks a dedication plaque. The dates "1952-82" are inscribed in the concrete parapet at the northeast and southwest corners of the bridge.

The bridge's main alterations include a deck rehabilitation and replacement in 1982. The current deck, median, and concrete parapets appear to date to this time period or more recently. A fixed, high-level bridge is located just north of MD 18B. It was opened in 1990 to ease traffic congestion on US 50 between the Bay Bridge and Ocean City. The new bridge provides a 65 foot clearance for boat traffic. Current State Highway Administration statistics show that the MD 18B bridge is opened approximately 3,781 times per year.

8. Significance

Inventory No. QA-542

Period	Areas of Significance	Check and justify below		
__ 1600-1699	__ agriculture	__ economics	__ health/medicine	__ performing arts
__ 1700-1799	__ archeology	__ education	__ industry	__ philosophy
__ 1800-1899	__ architecture	x engineering	__ invention	__ politics/government
x 1900-1999	__ art	__ entertainment/ recreation	__ landscape architecture	__ religion
__ 2000-	__ commerce		__ law	__ science
	__ communications	__ ethnic heritage	__ literature	__ social history
	__ community planning	__ exploration/ settlement	__ maritime history	x transportation
	__ conservation		__ military	__ other: _____

Specific dates	1951; 1982- rehabilitation	**Architect/Builder**	Hardesty & Hanover
Construction dates	1951		

Evaluation for:

__x__ National Register _____Maryland Register _____not evaluated

Prepare a one-paragraph summary statement of significance addressing applicable criteria, followed by a narrative discussion of the history of the resource and its context. (For compliance projects, complete evaluation on a DOE Form – see manual.)

Statement of Significance

The Kent Narrows Bridge (MIHP # QA-542, Bridge # 1700600) carries MD 18B (formerly part of US 50/301) over Kent Narrows and connects Kent Island with the mainland portion of Queen Anne's County. The Kent Narrows Bridge was built in 1951 as part of the state's massive road building campaign on the Western and Eastern Shores of Maryland carried out in the late 1940s and early 1950s leading up to the completion of the Chesapeake Bay Bridge in 1952. This road building campaign involved the widening and dualization of US 50 and US 301 and the replacement of obsolete and/or inadequate bridges along these routes. On Kent Island, US 50/301 absorbed a portion of existing MD 18 and the Kent Narrows Bridge was built in 1951 to replace an overhead bascule bridge at this location. In 1990 this bridge was replaced by a high level bridge over Kent Narrows and the 1951 bridge reverted to use as a bridge for local traffic only.

Historic Background and Support

A roadway bridge crossing Kent Narrows and connecting Kent Island on the west with the mainland portion of Queen Anne's County on the east has existed since colonial days. Along with a railroad bridge (no longer extant) built by the Baltimore & Ohio Railroad in the early twentieth century, this roadway bridge served as the link between the Kent Island communities of Matapeake, Chester, Romancoke, and Stevensville and the rest of the county. By the early twentieth century, this road was designated as part of both MD 18 and MD 404 and served as part of the major east-west route across the Eastern Shore of Maryland. At Stevensville, the road forked, with the northern fork (MD 18) continuing on to Love Point. There, ferries provided passenger and freight service to Baltimore. The southern fork (MD 404) continued to Matapeake where there was ferry service provided to Annapolis. Kent Narrows itself was a maritime passage between the Chester River and Severn Bay. Thus, the bridges over the Kent Narrows were in a sense an important junction between land and water transportation in Queen Anne's County, and the provision of a moveable bridge at this location was deemed a necessity.

Planning for a Chesapeake Bay Bridge between Queen Anne's County and the Annapolis area began in earnest following the publication of the 1938 Primary Bridge Program. Although it was temporarily delayed by World War II, the bridge's construction was made a high priority by Maryland Governors William Preston Lane, Jr. and Theodore McKeldin.[1] The planning for the highway feeder system for the bridge was complex. US 301 was to be widened and dualized on the Western Shore, as was US 50 from Washington to Annapolis. The two US highways were to continue together across the Chesapeake Bay Bridge and then cross Kent Island, before eventually separating at Queenstown. On the Eastern Shore, US 301 was also known as the Eastern Shore Expressway, itself a part of the Blue Star Memorial Highway. The Eastern Shore Expressway was planned to provide a controlled-access highway from the Chesapeake Bay Bridge to Warwick in Cecil County.

The route of the new US 301/50 crossed the roadbed of MD 18/404 at numerous locations in Kent Island and Queen's County, but was essentially a newly constructed four-lane, divided highway. The provision of a modern bridge to replace the existing two-lane

[1] *Maryland-A Middle Temperament* (1989) by Robert J. Brugger. Page 563.

moveable bridge along MD 18/404 at Kent Narrows was made a high priority. The existing bridge, located just south of the location of the present Bridge 170006, was an overhead, single-leaf bascule bridge.[2] It is no longer extant.

Contract Q-168-11-215 was let out in 1950 to the New York engineering firm of Hardesty & Hanover for the design of the new four-lane Kent Island Narrows Bridge.[3] Hardesty & Hanover, who served as consulting engineers for the bridge project, has one of the longest and richest histories of any consulting engineering firm in the United States and remains a leader in the field of bridge engineering. "Today's partners carry on the traditions of innovation that have marked the firm's progress since it was founded in 1887 by Dr. John Alexander Low Waddell, one of the nation's pioneer bridge engineers."[4]

The Hardesty & Hanover firm (and its various predecessor firms) spans the history of modern transportation engineering, from designs for turn-of-the-century railroads and highways to plans for modern expressways, to the most technologically advanced movable bridges, and the repair and reconstruction of today's aging transportation infrastructure.

Movable bridges have always been one of the firm's specialties. In 1894, Dr. Waddell developed the prototype of the modern vertical lift bridge. His firm, formed as Waddell & Hardesty, has become today's Hardesty & Hanover. Since then, Hardesty & Hanover has designed hundreds of movable bridges. To date, only two movable bridges designed by Hardesty & Hanover have been built in Maryland. In 1946, the firm completed the design for the Spa Creek Bridge (Bridge 2053) in Annapolis. The Kent Narrows Bridge was completed in 1951. The firm's design for the replacement Woodrow Wilson Bridge spanning the Potomac River between Virginia and Maryland is currently under construction. Recent projects by the Hardesty & Hanover firm include the full range of movable bridge types - bascule spans, vertical-lift spans, swing spans, and rolling lift spans.

Movable spans are required for bridges crossing navigable waterways to permit passage of vessels that would otherwise be blocked by insufficient vertical clearance of structures that are either fixed or in the closed position.[5] Historically, most movable bridges have been railroad structures, and were most commonly found in flat terrain. Movable span bridges are common in cities and in other built-up areas where construction of an elaborate approach is usually out of the question.[6]

Swing bridges—which move sideways along a horizontal plane—were favored by bridge engineers during the nineteenth century for their relative ease of construction, but by the end of the century they were usually unfavorably compared to the bascule bridges being developed by Dr. Waddell and others. Bascule bridges had several advantages over swing bridges; they operate more rapidly, and another bridge for additional lanes can be built next to it. Single leaf bascules were commonly built for shorter spans, and double leaf bascules for longer spans. Double leaf bascule bridges could be raised more quickly and required smaller counterweights and moving parts than the single leaf bascule bridge. Their popularity over swing bridges is reflected in the fact that between 1924 and 1974, 430 bascule bridges were constructed nationally versus 250 swing bridges.[7]

"Bascule" refers to the bridge deck that can be raised to an inclined or vertical position. Bascule bridges consist basically of two types: the trunnion (Chicago) type and the rolling lift type. In the trunnion type the center of rotation is a horizontal steel pivot that remains

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[2] "Old and New," *Baltimore Sun* (April 12, 1952).
[3] "Kent Island Narrows Bridge, Stevensville-Queenstown Bascule Span." State Roads Commission, July 1950. Engineering plans at Maryland State Highway Administration, 707 North Calvert Street, Baltimore Maryland.
[4] Web page for Hardesty & Hanover: www.http://hardestyhanover.com.
[5] "Movable Span Bridges of Maryland," (1992), by Rita Suffness, page 3.
[6] "Fifty-year History of Movable Bridge Construction-Part 1," *Journal of the Construction Division* (September 1975), by Egbert R. Hardesty, Henry W. Fisher, and Richard W. Christie. Page 511.
[7] "Fifty-year History of Movable Bridge Construction-Part 1," *Journal of the Construction Division* (September 1975), by Egbert R. Hardesty, Henry W. Fisher, and Richard W. Christie. Page 512.

fixed or nearly so and is at or close to the center of gravity of the rotating part. The trunnion bearings, in turn, are supported on the fixed portion of the bridge such as a trunnion girder, steel columns or on the pier itself. This is a highly desirable feature where yielding foundations are unavoidable. (In the roller bearing type, a variant of the trunnion type, the center of rotation remains fixed and coincides with the center of gravity of the moving mass. The trunnion is eliminated and the load is carried by a segmental circular bearing on rollers arranged in a circular track).

The simple trunnion is also called the Chicago type, and was introduced about 1899 and named after the city that pioneered it with the Clybourne Avenue Bridge. In the Chicago type, the whole weight of the leaf and its counterweight is borne by the trunnions located at the center of gravity of the whole mass.

The early decades of the twentieth century were dominated by patented designs—Strauss, Scherzer, and others—fabricated by numerous shops, many of which are no longer in existence.[8] Dr. Waddell was among several well-known engineers who produced patented bascule bridge designs. Between 1873 and 1924, 78 patents were issued for movable span designs and mechanisms. By the 1940s patented designs were mostly in the public domain.

In Maryland, the oldest extant movable bridge is the double leaf bascule Hanover Street Bridge over the Middle Branch of the Patapsco River. This Rall rolling lift design was built in 1916 in Baltimore City by the Strobel Steel Construction Company to the design of J.E. Greiner. This bridge was one of several movable bridges designed by the Greiner company, making it the leader in movable bridge design in the state during the 1920s and 1930s. There were 17 bascule bridges built in Maryland prior to 1960.The majority of the state's 22 extant movable bridges are located on the Eastern Shore.

Nationwide, the 1950s saw a decrease in the design of new movable highway bridges. Increases in vehicular travel necessitated the widening of existing primary highways, many of which required replacement of older inadequate movable bridges with new larger structures. Travelers did not want movable spans and they were not encouraged by the interstate system. In Maryland, there were instances where the design of a movable bridge was unavoidable, but by the 1950s their numbers were far outstripped by fixed span bridges. Although still occasionally built today, there are only 22 extant movable highway bridges in Maryland.

By the 1980s, the volume of tourist traffic along US 50 and over the Kent Narrows Bridge had increased to such levels that the public outcry over the frequent bridge raisings prompted a response from public officials. Traffic counts conducted in 1982 revealed that as many as 130,000 vehicles traveled over the bridge during certain summer weekends. In 1983, Maryland Congressman Roy Dyson announced a proposed schedule of sharply curtailed drawbridge openings during the peak summer traffic hours.[9]This was a stop-gap measure at best, and in 1986 Maryland transportation officials announced plans to construct a 65-foot high bridge across the channel to replace the 1951 drawbridge. Construction of the new Kent Narrows Bridge was part of an overall bridge replacement project along US 50 that included construction of new high-level bridges at Cambridge and Vienna.[10] The new US 301/50 Bridge over Kent Narrows was officially opened to eastbound traffic in November 1989, with the westbound span opening the following April. The 1951 Kent Narrows Bridge was retained and still carries local traffic along MD 18B.

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[8] "Movable Span Bridges of Maryland," (1992), by Rita Suffness, page 3.
[9] "Plan to Cut Shore Bridge Openings Outlined," *Baltimore Sun* (February 16, 1983).
[10] "Kent Narrows Project to Have Wide Impact," *Baltimore Sun* (November 4, 1987)

9. Major Bibliographical References

Inventory No. QA-542

See Continuation Sheet

10. Geographical Data

Acreage of surveyed property _____
Acreage of historical setting _____
Quadrangle name Queenstown, MD Quadrangle scale: 1:24,000

Verbal boundary description and justification
The MD 18B Bridge carries MD 18B over the Kent Island Narrows. It connects Stevensville to Queenstown. The bridge has been associated with this site since its construction.

11. Form Prepared by

name/title	Geoffrey Henry / Mary E. Crowe and Stan Popovich		
organization	URS Corporation / Hardlines Design Company	date	October 2004
street & number	200 Orchard Ridge Drive / 4608 Indianola Avenue	telephone	301-258-9780 / 614-784-8733
city or town	Gaithersburg / Columbus	state	MD / OH

The Maryland Inventory of Historic Properties was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust
DHCD/DHCP
100 Community Place
Crownsville, MD 21032-2023
410-514-7600

Maryland Historical Trust
Maryland Inventory of
Historic Properties Form

Inventory No. QA-542

Name Bridge No. 1700600, MD 18B Bridge over Kent Island Narrows
Continuation Sheet

Number 9 Page 1

Brugger, Robert J. *Maryland: A Middle Temperament*. The Johns Hopkins University Press: Baltimore, Maryland, 1988.

"Hardesty & Hanover": <www.http://hardestyhanover.com>.

Hardesty, Egbert R., Henry W. Fisher, and Richard W. Christie. "Fifty-year History of Movable Bridge Construction-Part 1," *Journal of the Construction Division* (September 1975).

"Kent Island Narrows Bridge, Stevensville-Queenstown Bascule Span." State Roads Commission, July 1950. Engineering plans at Maryland State Highway Administration, 707 North Calvert Street, Baltimore Maryland.

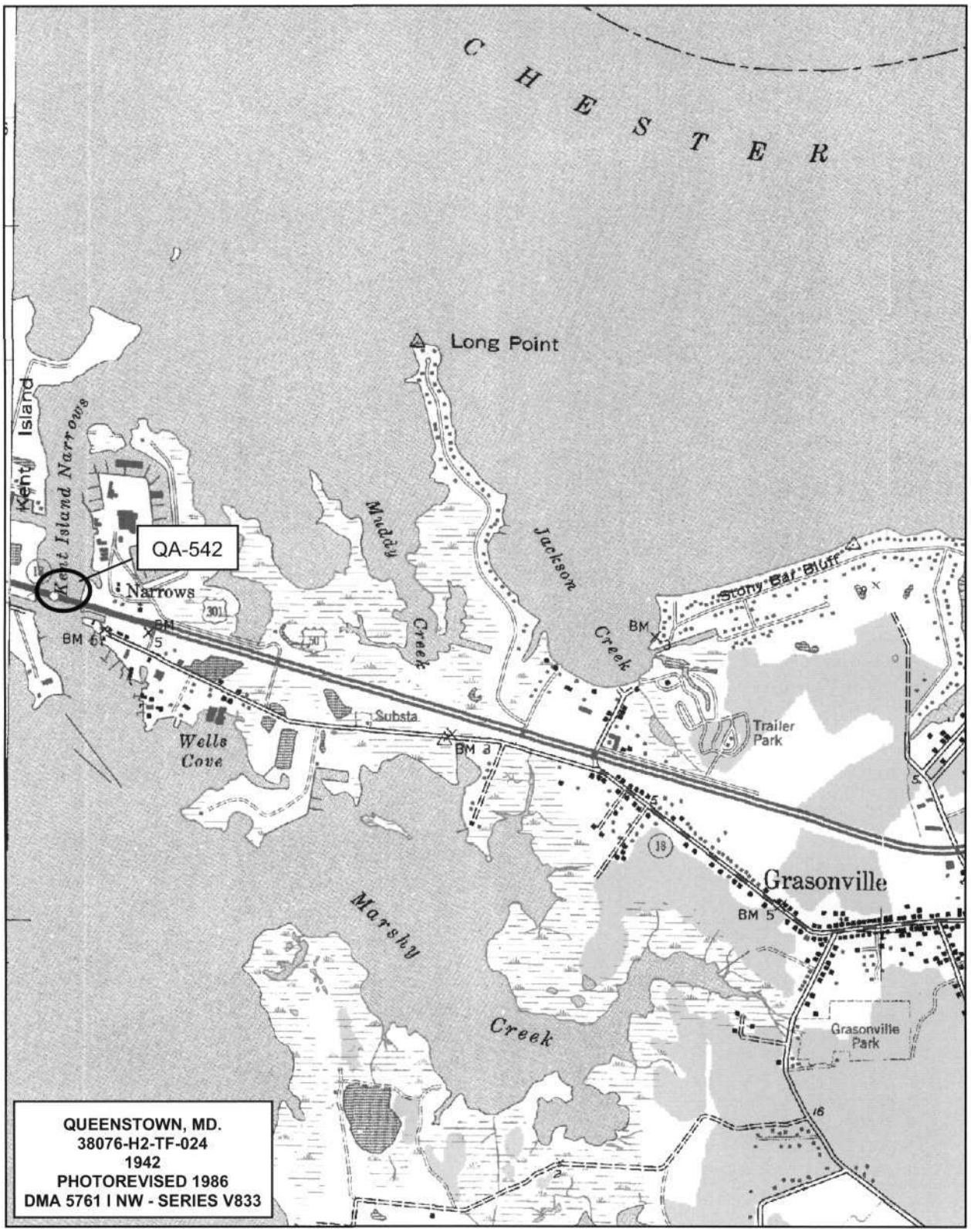
"Kent Narrows Project to Have Wide Impact," *Baltimore Sun* (November 4, 1987).

"Old and New," *Baltimore Sun* (April 12, 1952).

"Plan to Cut Shore Bridge Openings Outlined," *Baltimore Sun* (February 16, 1983).

Suffness, Rita. "Movable Span Bridges of Maryland," (1992).

Sources Consulted:
Maryland SHA Cultural Resource Library and Bridge Engineering Department, Baltimore - Reports published by or for the State Roads Commission, bridge files
Maryland Highway Administration, District 2 Office, 615 Morgnec Road, Chestertown MD, 410-778-3061.
Maryland Historical Trust Library, Crownsville - Inventory of Historic Places, National Register Nominations, Determinations of Eligibility, Cultural Resource Reports
Maryland State Archives, Annapolis - photographs from the Sarikas Collection and materials published by the State Roads Commission
Enoch Pratt Library (Maryland Room), Baltimore - vertical files dealing with Maryland bridges
Library of Congress ,Washington, DC - General information on bridges and additional Maryland bridge material
New Jersey State Library, Trenton - Engineering News-Record on microfilm
New York Public Library, (Science, Business, and Industry Library), New York - Additional SHA annual reports

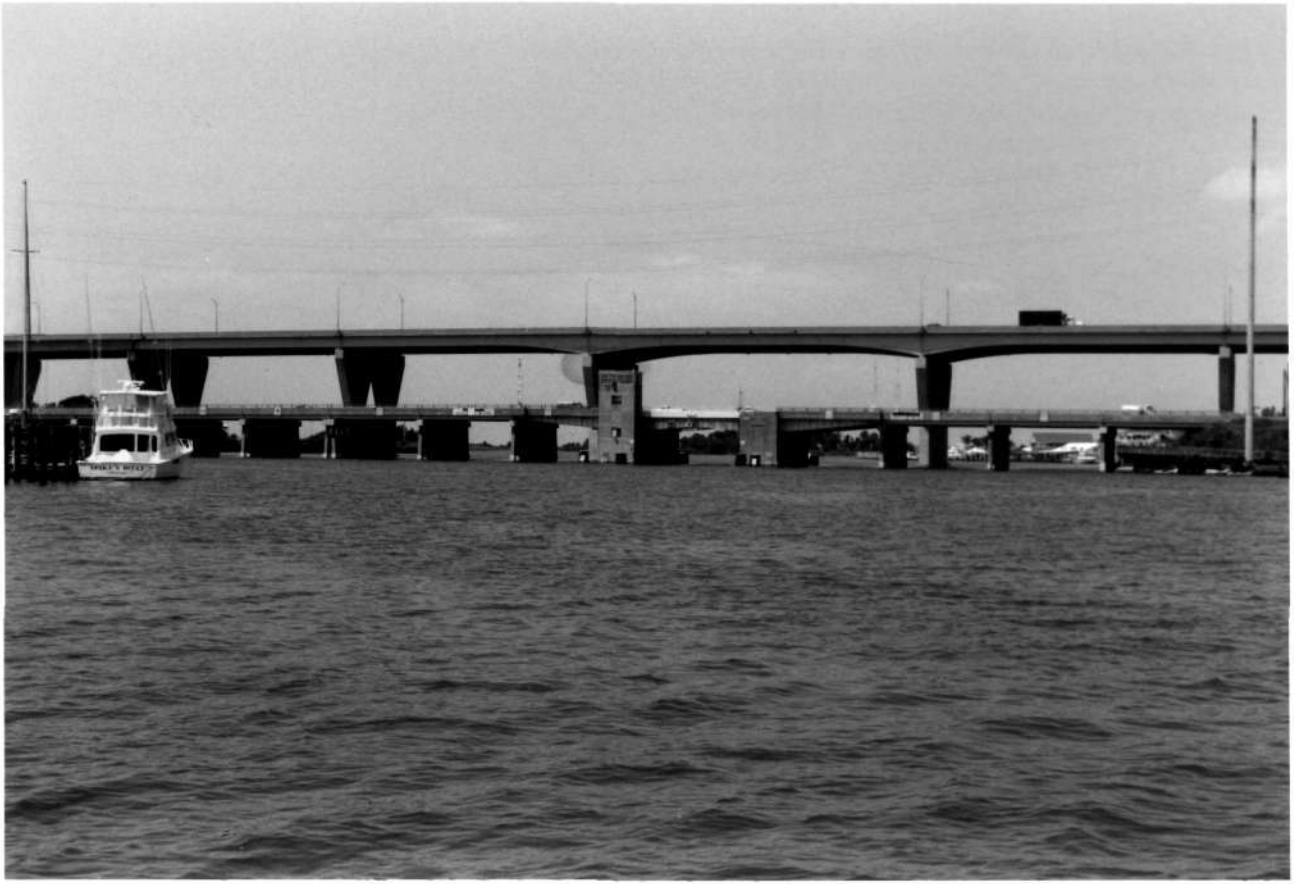


1:24,000

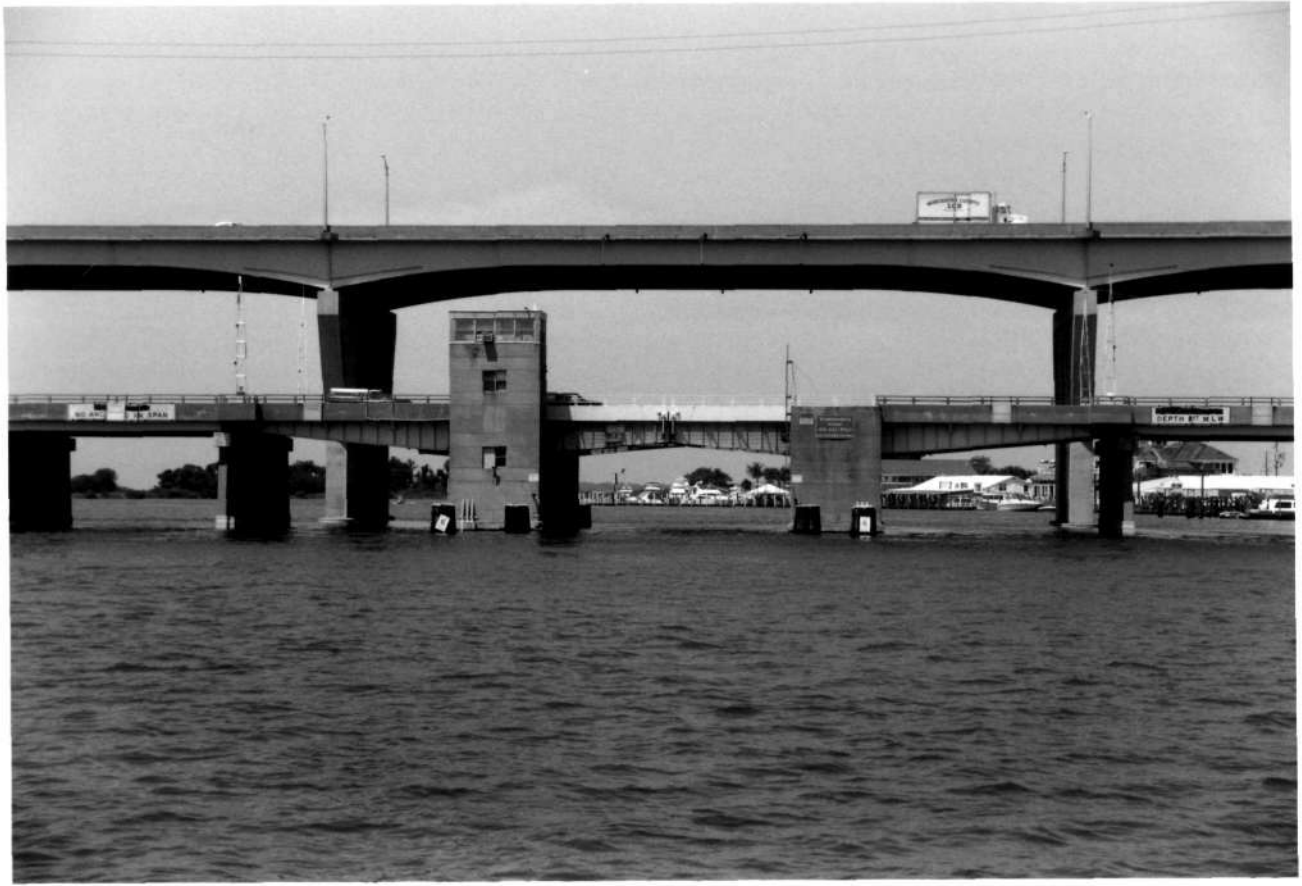
0 0.125 0.25 0.5 0.75 1 Miles

0 0.25 0.5 1 1.5 2 Kilometers

MIHP # QA-542
Bridge 1700600
MD 18B over Kent Island Narrows
Grasonville Vicinity
Queen's Anne County
Queenstown, MD. Quadrangle



MHP # QA-542
Bridge # 1700600, MD 18B over Kent Island Narrows
Queen Anne's County, MD
Photographer: Stan Popovich, Hardlines Design Company
Date: 6/9/03
Location of Negative: MD SHPO
looking north at south elevation
1/11



MHP # QA-542
Bridge # 1700600, MD 18B over Kent Island Narrows
Queen Anne's County, MD
Photographer: Stan Popovich, Hardlines Design Company
Date: 6/9/03
Location of Negatives: MD SHPO
looking north at bascule span
2/11


IN SPAN

MIHP # QA-542
Bridge # 700600, MD 18B over Kent Island Narrows
Queen Anne's County, MD
Photographer: Stan Popovich, Hardlines Design Company
Date: 6/9/03
Location of Negative: MD SHPO
looking northeast at bascule span
3/11


G IN SPAN
CLOSED

MHP # QA-542
Bridge # 1700600, MD 18B over Kent Island Narrows
Queen Anne's County, MD
Photographer: Stan Popovich, Hardlines Design Company
Date: 6/9/03
Location of Negative: MD SHPO
looking southwest at bascule span
4/11


10

MHP # QA-542
Bridge # 1700600, MD 18B over Kent Island Narrows
Queen Anne's County, MD
Photographer: Stan Popovich, Hardlines Design Company
Date: 6/9/03
Location of Negative: MD SHPO
looking southeast at piers on west end of bridge
5/11

MHP # QA-542
Bridge # 1700600, MD 18B over Kent Island Narrows
Queen Anne's County, MD
Photographer: Stan Popovich, Hardlines Design Company
Date: 6/9/03
Location of Negative: MD SHPO
looking west down deck of bridge
6/11

MIHP # QA-542
Bridge # 1700609 MD 18B over Kent Island Narrows
Queen Anne's County, MD
photographer: Stan Papovich, Headlines Design Compan
Date: 6/9/03
Location of Negatives: MD SHPO
looking east down deck of bridge
7/11

MHP# QA-542
Bridge # 1700600, MD 18B over Kent Island Narrows
Queen Anne's County, MD
Photographer: Stan Popovich, Hardlines Design Company
Date: 6/9/03
Location of Negatives: MD SHA
looking northwest at bascule span deck
8/11

MIHP # QA-542
Bridge # 1700600, MD 18B over Kent Island Narrows
Queen Anne's County, MD
Photographer: Stan Papovich, Hardlines Design Company
Date: 6/9/03
Location of Negatives: MD SHPO
looking southeast at control tower
9/11


STOP

MHP # QA-542
Bridge # 1700600, MD 18B over Kent Island Narrows
Queen Anne's County, MD
Photographer: Stan Popovich, Headlines Design Company
Date: 6/9/03
Location of Negatives: MD SHPO
detail of traffic arm
10/11


NO
SWIMMING
FISHING
CRABBING
FROM
BRIDGE
1952-82
1700600

MHT # QA-542
Bridge # 1700600, MD 18B over Kent Island Narrows
Queen Anne's County, MD
Photographer: Stan Popovich, Hardlines Design Company
Date: 6/9/03
Location of Negatives: MD SHPO
detail of date at northeast corner
11/11