

Maryland Historical Trust

Maryland Inventory of Historic Properties number: AL-I-B 384

Name: MS. 40 BRIDGE OVER SIDELING HILL 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 bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <input checked="" type="checkbox"/> X	Eligibility Not Recommended _____
Criteria: <input type="checkbox"/> A <input type="checkbox"/> B <input checked="" type="checkbox"/> C <input type="checkbox"/> D	Considerations: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G <input type="checkbox"/> 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>

Finney

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

MHT No. AL-I-B-084

SHA Bridge No. 1064 Bridge name US 40 scenic over Sideling Hill Creek

LOCATION:

Street/Road name and number [facility carried] US 40 scenic (McFarland Road)

City/town Bellegrove Vicinity X

County Allegany

This bridge projects over: Road Railway Water X Land

Ownership: State X County Municipal Other

HISTORIC STATUS:

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

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

Locally-designated district Other

Name of district

BRIDGE TYPE:

Timber Bridge :

Beam Bridge 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 X:

Concrete Arch X Concrete Slab Concrete Beam Rigid Frame

Other Type Name

DESCRIPTION:

Setting: Urban _____ Small town _____ Rural X _____

Describe Setting:

Bridge 1064 carries US 40 Scenic (McFarland Road) over Sideling Hill Creek in Allegany County. US 40 Scenic runs east-west and Sideling Hill Creek flows north-south. The bridge is located in the vicinity of Bellegrove.

Describe Superstructure and Substructure:

Bridge 1064 is a 1-span, 2-lane, filled concrete arch bridge. The bridge was constructed in 1925. The structure is 26.8 meters (88 feet) long and has a clear roadway width of 7.3 meters (24 feet); there are no sidewalks. The out-to-out width is 8.3 meters (27.2 feet). The arch spans 26 meters (85 feet). The superstructure consists of one concrete barrel arch which supports a cast-in-place concrete deck and pierced concrete parapets. The substructure consists of two concrete abutments and four concrete wingwalls. The bridge is posted for 27.2 tonnes (30 tons), and has a sufficiency rating of 71.4.

According to the 1997 inspection report, this structure was in fair condition with spalling, cracking and efflorescence. The concrete arch has spalling, heavy efflorescence and cracking. The abutments have scaling and spalls with exposed aggregate. The spandrel walls also have cracks and spalls.

Discuss Major Alterations:

The 1997 inspection report mentions the repair of the abutments, wingwalls, spandrel walls and bridge railing at an unknown date. The abutments were repaired with gunite. A retaining wall adjacent to the northwest wingwall was extended just prior to the 1997 inspection.

HISTORY:

WHEN was the bridge built: 1925
 This date is: Actual X Estimated _____
 Source of date: Plaque _____ Design plans _____ County bridge files/inspection form _____
 Other (specify): State Highway Administration Inspection Report/Bridge Files

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

As the nation's automotive traffic increased in the early twentieth century, local road networks were consolidated, and state highway departments were formed to supervise the construction and improvement of state roads. With a diverse topographical domain encompassing numerous small and large crossings, Maryland engineers quickly recognized the need for expedient design and construction through the standardization of bridge designs.

The concept and practice of standardization was one of the most important developments in engineering of the twentieth century. In Maryland, as in the rest of the nation, the standardized concrete types became the predominant bridge types built. In the period 1911 to 1920 (the decade in which standardized plans were introduced), beams and slabs constituted 65 percent and arches 35 percent of the extant 29 bridges built in Maryland during this period. In the following decade, 1921-1930, the beam (now the T-beam) and slab increased to 73 percent and the arch had declined to 27 percent of the 129 extant bridges; in the next decade (1931-1940), the beam and slab achieved 82 percent and arches had further declined, constituting only 18 percent of the total of extant bridges built on state-owned roads between 1931 and 1946.

Although beam and slab bridges became the utilitarian choice, it appears that the arch was selected when aesthetic as well as other site conditions were considered. The architectural treatment of extant arch bridges supports this assessment. Many of these bridges were multiple span structures with open spandrels or masonry facing. Another decorative feature of the concrete arch bridge was an open, balustrade-style parapet. Despite the popularity of ornamental arches and the increase in use of beam and slab bridges, examples of simpler, single and multiple span closed concrete arch bridges with solid parapets continued to be constructed throughout the early twentieth century.

The National Pike (U.S. 40) between Hancock and Cumberland was originally chartered in 1792 by Maryland as a turnpike from Frederick to Cumberland. The road was financed by various Maryland banks, and construction began in 1816, reaching Cumberland and the National Road in 1821. The turnpike ceased operations in 1889 when a storm wrecked bridges on the road, and the bridges were not rebuilt. The road had fallen into disrepair by the early twentieth century, when the "Good Roads" Act of 1916 provided federal funding for road improvements. The National Pike was designated U.S. 40 in the mid-1920s.

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?

There is no evidence that the construction of this bridge had a significant impact on the growth and development of this area.

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

Unknown

Is the bridge a significant example of its type?

The bridge is a potentially significant example of a concrete arch bridge, possessing a high degree of integrity.

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

The bridge retains the character-defining elements of its type, as defined by the Statewide Historic Bridge Context, including arch ring, barrel, spandrel walls, parapets, abutments and wingwalls.

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

This bridge is not a significant example of the work of a manufacturer, designer, and/or engineer.

Should the bridge be given further study before an evaluation of its significance is made?

No further study of this bridge is required to evaluate its significance.

BIBLIOGRAPHY:

County inspection/bridge files _____ SHA inspection/bridge files X

Other (list): _____

Johnson, Arthur Newhall

1899 *The Present Condition of Maryland Highways. In Report on the Highways of Maryland.* Maryland Geological Survey, The Johns Hopkins University Press, Baltimore.

P.A.C. Spero & Company and Louis Berger & Associates

1995 *Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report.* Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore, Maryland.

Raitz, Karl. ed.

1996 *The National Road.* The Johns Hopkins University Press, Baltimore and London.

State Roads Commission

1958 *A History of Road Building in Maryland.* Published by author, Baltimore.

Tyrrell, H. Grattan

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

SURVEYOR:

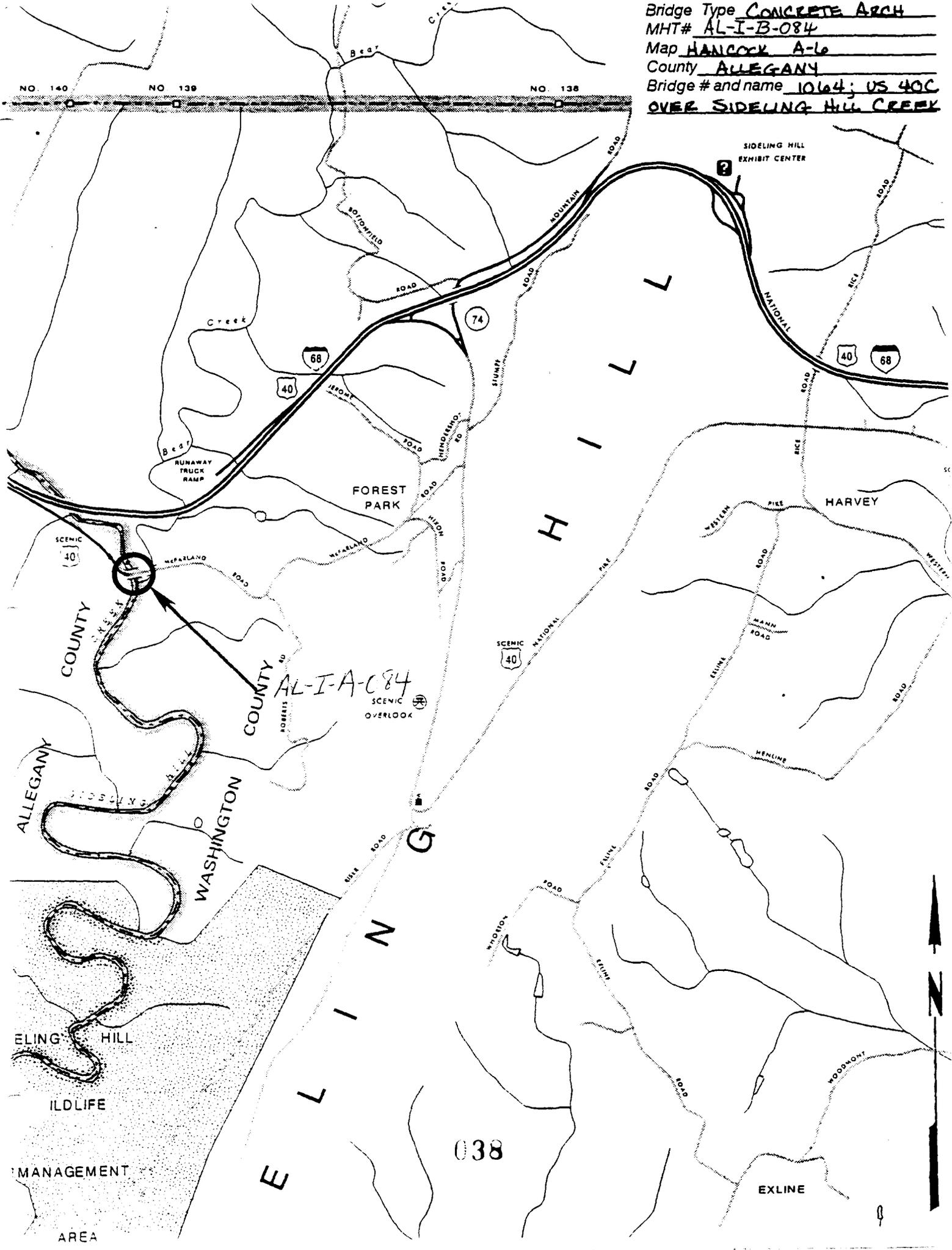
Date bridge recorded December 1997

Name of surveyor Wallace, Montgomery & Associates / P.A.C. Spero & Company

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

Phone number (410) 296-1635 FAX number (410) 296-1670

Bridge Type CONCRETE ARCH
MHT# AL-I-B-084
Map HANCOCK A-6
County ALLEGANY
Bridge # and name 1064; US 40C
OVER SIDELING HILL CREEK



AL-I-A-084
SCENIC OVERLOOK

038





1. AL-1-B-084
2. 1064, U.S. 40 SCENIC OVER SIDELING HILL CREEK
3. ALLEGANY COUNTY
4. WALLACE, MONTGOMERY & ASSOC.
5. 12/97
6. MD SHPO
7. NEW RETAINING WALL NORTHWEST CORNER
8. 1 OF 5



1. AL-1-B-084
2. 1064, U.S. 40 SCENIC OVER SIDELING HILL CREEK
3. ALLEGANY COUNTY
4. WALLACE, MONTGOMERY & ASSOC.
5. 12/97
6. MD SHPO
7. ELEVATION LOOKING DOWNSTREAM
8. 2 OF 5



1. AL-1-B-084
2. 1064, U.S. 40 SCENIC OVER SIDELING HILL CREEK
3. ALLEGANY COUNTY
4. WALLACE, MONTGOMERY & ASSOC.
5. 12/97
6. MD SHPO
7. ELEVATION LOOKING DOWNSTREAM
8. 3 OF 5



RESTRICTED BRIDGE

SINGLE UNIT
20000 LBS GVW

COMBINATION UNIT
20000 LBS GVW

1. AL-1-B-084
2. 1064, U.S. 40 SCENIC OVER SIDELING HILL CREEK
3. ALLEGANY COUNTY
4. WALLACE, MONTGOMERY & ASSOC.
5. 12/97
6. MD SHPO
7. LOOKING WEST
8. 4 OF 5



1. AL-1-B-084
2. 1064, U.S. 40 SCENIC OVER SIDELING HILL CREEK
3. ALLEGANY COUNTY
4. WALLACE, MONTGOMERY & ASSOC.
5. 12/97
6. MD SHPO
7. LOOKING EAST
8. 5 OF 5