

Maryland Historical Trust

Maryland Inventory of Historic Properties Number: HA-1985

Name: MD 165 over Little Deer 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 <input checked="" type="checkbox"/>	Eligibility Not Recommended <input type="checkbox"/>
Criteria: <input type="checkbox"/> A <input type="checkbox"/> B <input 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>

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

MHT Number HA-1985

SHA Bridge No. 12044 Name: MD 165 over Little Deer Creek

Location:

Street/Road Name and Number: MD 165 (Federal Hill Road)

City/Town: Rocks Vicinity X

County: Harford

Ownership: X State County Municipal Other

This bridge projects over: Road Railway X Water Land

Is the bridge located within a designated district: yes X 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

 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

X Concrete

X Concrete Arch Concrete Slab Concrete Beam
 Rigid Frame

 Other Type Name _____

Describe Setting:

Bridge 12044 carries MD 165 over Little Deer Creek in Harford County. MD 165 runs east-west over the northern flowing Little Deer Creek. The bridge is in an area that has limited residential and commercial development.

Describe Superstructure and Substructure:

Bridge 12044 is a single-span filled concrete arch bridge. The length of the bridge is 46 feet with a clear span of approximately 40 feet. The rise is approximately 9 feet. The abutments are concrete and are approximately 24 feet wide and 13 feet high. There is a clear roadway width of 24 feet, with an overall bridge width of 27 feet 2 inches. According to a 1996 inspection report the arch has medium to small size spalls along the barrel and spandrel wall joint. In addition, there is efflorescence and surface rust. The spandrel walls have medium vertical and irregular cracks with small and medium areas of delamination. The southwest wingwall has one large size area of scour. In addition that same wingwall has medium irregular cracks with efflorescence. The spandrel walls have small to medium size spalls. There is an area of general deterioration at the joint of the barrel. The bridge is in satisfactory condition with a sufficiency rating of 78.

This bridge has a pierced parapet. This type of reinforced concrete parapet consists of vertical posts securely fastened by dowels to the structure, horizontal balustrades and solid panels filling the space between the posts and the railings. Bridge 12044 has a 15-to-1 expansion joint railing. The parapet is 2 feet 11 inches tall with a cap that is 1 foot by 4 feet 3 inches. Both parapets exhibit misalignment. The west parapet is 1 inch out of alignment at the northern endblock and 7/8-inch out of alignment at the south. The eastern parapet is a 1/2-inch out alignment at the northern endblock and 1 7/8-inch at the southern end.

Discuss Major Alterations:

Bridge 12044 has undergone several alterations. Most notable is the installation of tiebar assemblies with double channel walers in the wingwalls and spandrel walls to prevent movement. Major patching has occurred on the barrel and abutments. The bridge was reconstructed in 1981. The reconstruction work matches the original construction.

When Built? 1931, 1981

Why Built? To improve the hydraulics of the road.

Who Built? State Roads Commission

Who Designed? State Roads Commission

Why Altered? To prevent bridge movement., to improve safety of the bridge.

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

No, this bridge was not built as part of an organized bridge building campaign.

Surveyor Analysis:

This bridge may have NR significance for association with:

A Events Person

C Engineering/Architectural

This bridge was determined eligible by the Interagency Review Committee in June 1996.

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

Bridge 12044 was built to replace an existing steel pony truss. The pony truss was a 4-paneled truss, 52 feet long. The truss carried a dirt road between Federal Hill and Cleremont Mills. Little Deer Creek was flooding the truss. The pony truss was not in poor condition. The State Roads Commission stipulated in the construction contract for the concrete arch that:

“...existing superstructure upon removal shall remain property of the Commission and shall be piled neatly adjacent to the site as directed.”

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

No, the bridge is not located in an area that is eligible for historic designation.

Is the bridge a significant example of its type?

Yes this bridge is a significant example of a single span concrete arch built during the 1910 to 1940 key period of significance. During this period reinforced concrete structures were characterized by increasing standardization of small slab, beam, frame, and culvert spans. Special subtypes of reinforced concrete bridges, such as the Luten arch, open spandrel ribbed arch, the rigid frame bridge and concrete girders were introduced and built as grade crossing elimination structures.

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

Yes this bridge retains integrity of its character defining elements. Although some repairs were made to the wingwalls, the barrel, the spandrel walls, the parapets, and the abutments, all are original and have only moderate deterioration.

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

Yes this bridge is a significant example of the use of standardized plans by the State Roads Commission construction between 1910 and 1945.

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

No, this bridge should not be given further study.

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.

State Roads Commission

1958 *A History of Road Building in Maryland*. State Roads Commission of Maryland, Baltimore, Maryland.

Tyrrell, H. Grattan

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

HA-1985

SURVEYOR:

Date bridge recorded December 1997

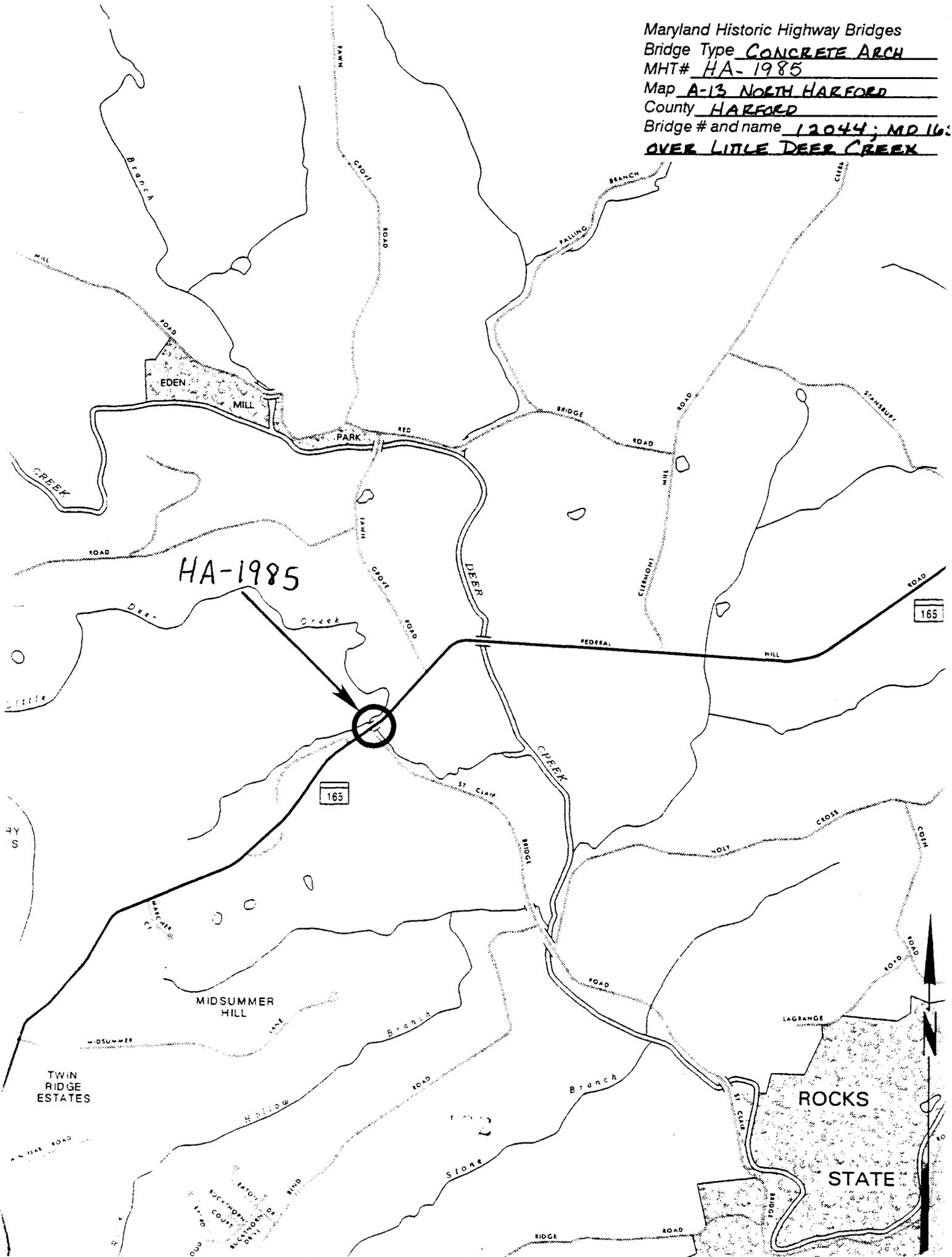
Name of surveyor Wallace, Montgomery & Associates / P.A.C. Spero & Company

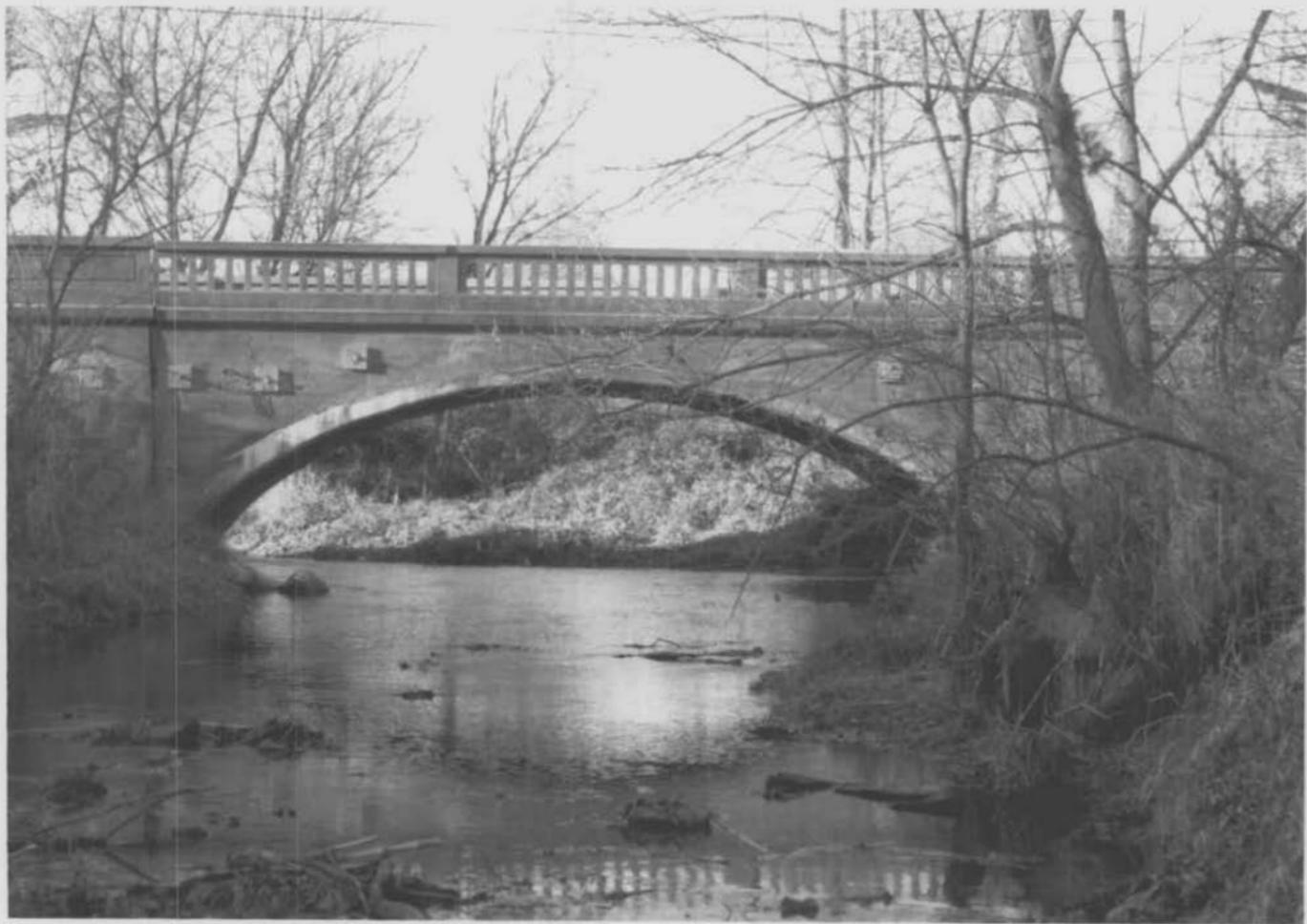
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204

Phone number (410) 296-1635

FAX number (410) 296-1670

Maryland Historic Highway Bridges
Bridge Type CONCRETE ARCH
MHT# HA-1985
Map A-13 NORTH HARFORD
County HARFORD
Bridge # and name 12044; MD 165
OVER LITTLE DEER CREEK





1. HA-1985
2. MD 165 over Little Deer Creek
3. Harford Co., MD
4. Wallace, Montgomery & Assoc.
5. 12/97
6. MD SHPO
7. Elevation looking upstream
8. 1 of 4



1. HA-1985
2. MD 165 over Little Deer Creek
3. Harford Co., MD
4. Wallace, Montgomery & Assoc.
5. 12/97
6. MD SHPO
7. Elevation looking downstream
8. 2 of 4



1. HA-1985
2. MD 165 over Little Deer Creek
3. Harford Co., MD
4. Wallace, Montgomery & Assoc.
5. 12/97
6. MD SHPO
7. Looking North
8. 3 of 4



1. HA-1985
2. MD 165 over Little Deer Creek
3. Harford Co., MD
4. Wallace, Montgomery & Assoc.
5. 12/97
6. MD SHPO
7. Looking South
8. 4 of 4

**INDIVIDUAL PROPERTY/DISTRICT
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM**

Property/District Name: Bridge #12044, MD 165 over Little Deer Creek

Survey Number: HA-1985

Project: Repairs to interior Agency: SHA

Site visit by MHT Staff: no yes Name _____ Date _____

Eligibility recommended Eligibility not recommended

Criteria: A B C D Considerations: A B C D E F G
 None

Justification for decision: (Use continuation sheet if necessary and attach map)

The Interagency Historic Bridge Committee determined this bridge to be eligible for inclusion in the National Register of Historic Places under Criteria A and C. It is a concrete arch bridge building in 1931 and repaired in 1981. It continues to exhibit its architectural integrity despite various repair jobs. We therefore continue to concur with the earlier eligibility determination.

Documentation on the property/district is presented in: Project Review and Compliance Files

Prepared by: Jill Dowling, form by P.A.C. Spero

AEBrunder [Signature] 12/18/98
Reviewer, Office of Preservation Services Date

NR program concurrence: yes no not applicable

[Signature] 12/18/98
Reviewer, NR program Date

(TW)

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

- Eastern Shore (all Eastern Shore counties, and Cecil)
- Western Shore (Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
- Piedmont (Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
- Western Maryland (Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

- Paleo-Indian 10000-7500 B.C.
- Early Archaic 7500-6000 B.C.
- Middle Archaic 6000-4000 B.C.
- Late Archaic 4000-2000 B.C.
- Early Woodland 2000-500 B.C.
- Middle Woodland 500 B.C. - A.D. 900
- Late Woodland/Archaic A.D. 900-1600
- Contact and Settlement A.D. 1570-1750
- Rural Agrarian Intensification A.D. 1680-1815
- Agricultural-Industrial Transition A.D. 1815-1870
- Industrial/Urban Dominance A.D. 1870-1930
- Modern Period A.D. 1930-Present
- Unknown Period (prehistoric historic)

III. Prehistoric Period Themes:

- Subsistence
- Settlement
- Political
- Demographic
- Religion
- Technology
- Environmental Adaptation

IV. Historic Period Themes:

- Agriculture
- Architecture, Landscape Architecture, and Community Planning
- Economic (Commercial and Industrial)
- Government/Law
- Military
- Religion
- Social/Educational/Cultural
- Transportation

V. Resource Type:

Category: SStructure _____
 Historic Environment: Rural _____
 Historic Function(s) and Use(s): Creek Crossing _____
 Known Design Source: _____

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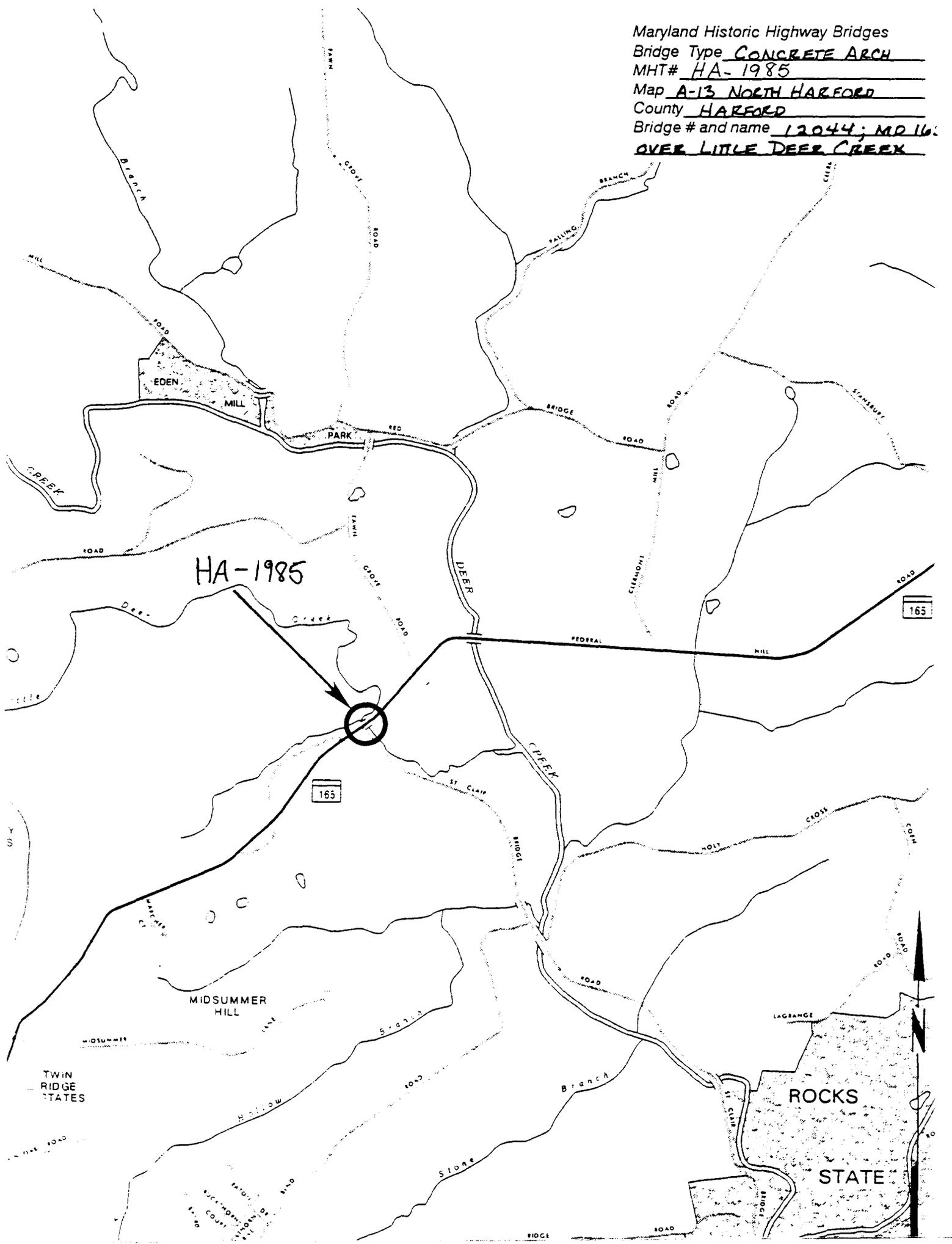
Date bridge recorded December 1997

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

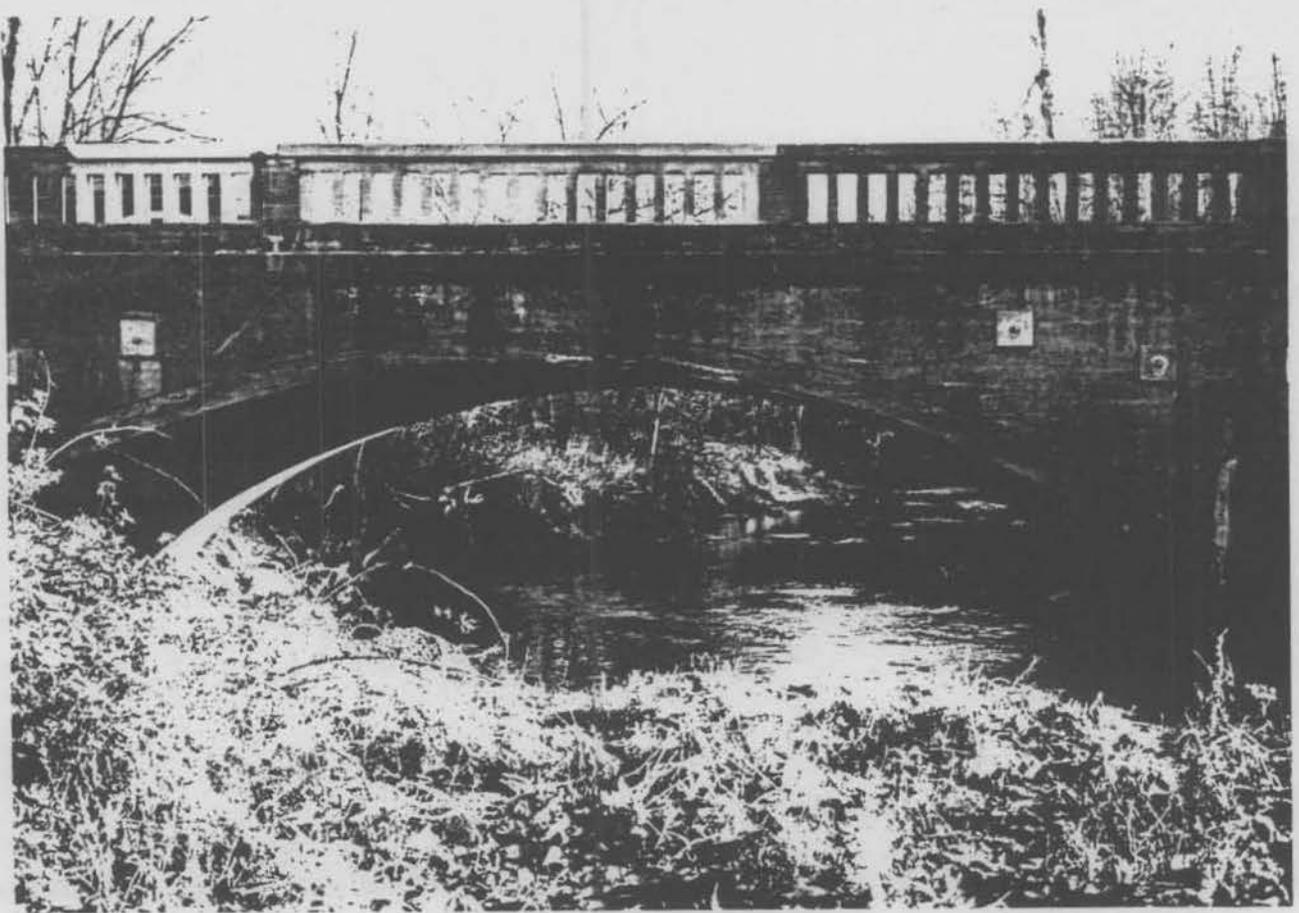
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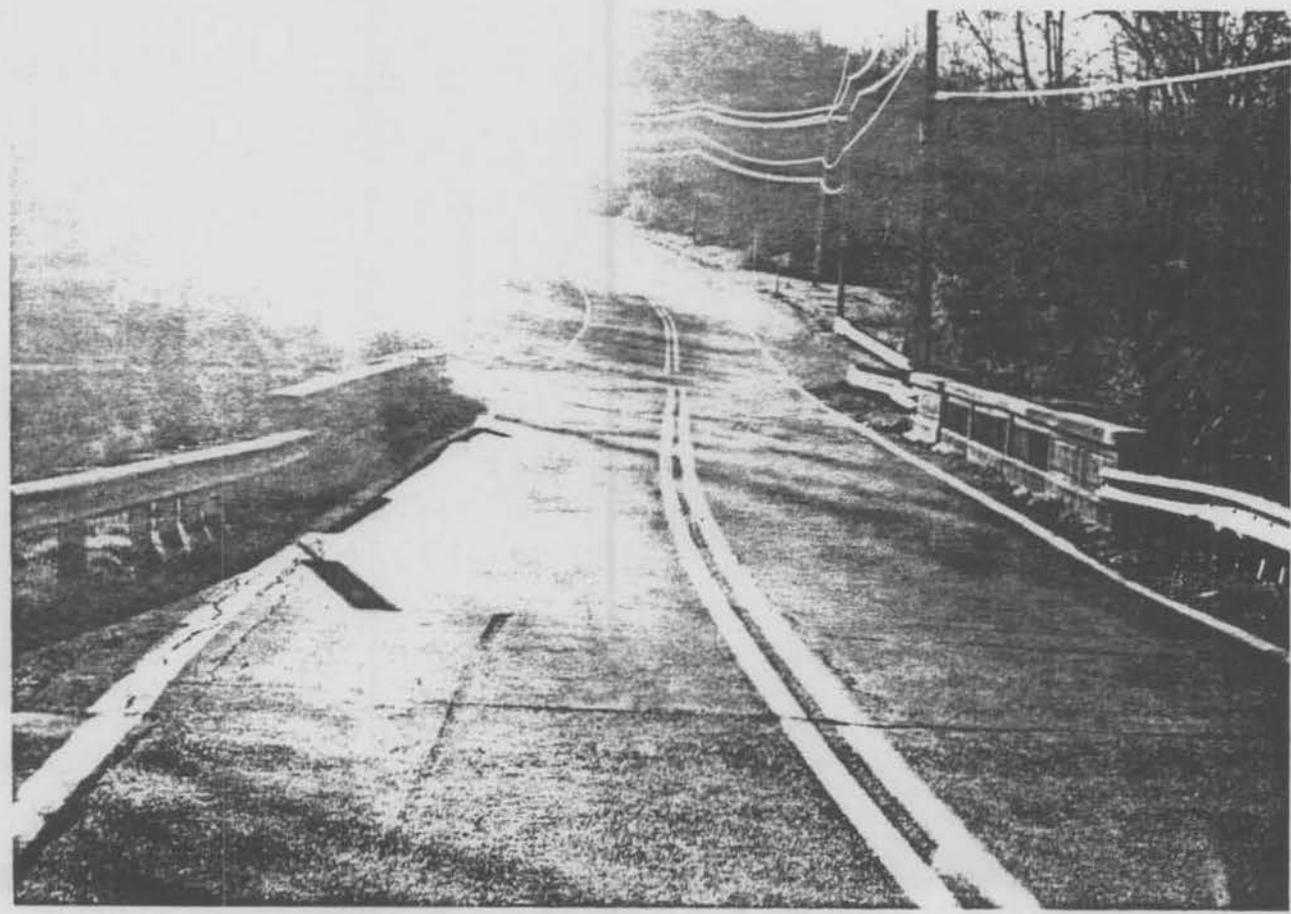
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MHT# HA-1985
Map A-13 NORTH HARFORD
County HARFORD
Bridge # and name 12044; MD 165
OVER LITTLE DEER CREEK



HA-1985



HA-1985



HA-1985

BRIDGE NO. 1204400
MD 165 OVER LITTLE DEER CREEK



NORTH APPROACH



EAST SPANDREL