

Maryland Historical Trust

Maryland Inventory of Historic Properties number: HA-1868

Name: #12045 / MD165 OVER WEST BRANCH

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 _____	Eligibility Not Recommended <u>X</u>
Criteria: <u> </u> A <u> </u> B <u> </u> C <u> </u> D	Considerations: <u> </u> A <u> </u> B <u> </u> C <u> </u> D <u> </u> E <u> </u> F <u> </u> G <u> </u> 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>

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MARYLAND INVENTORY OF HISTORIC PROPERTIES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION
MARYLAND HISTORICAL TRUST

MHT NO. HA-1868

NAME AND SHA NO.: 12045

LOCATION

Road Name and Number: MD 165 over West Branch

City/Town: Putnam vicinity

County: Harford

Ownership: State County Municipal Other

Bridge projects over: Road Railway Water Land

Is bridge located within 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 Bridge
- Metal Truss Bridge
- Moveable 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 Type Name

DESCRIPTION

Describe the Setting:

Bridge #12045 carries MD 165, which runs in a generally southwest to northeast direction at this location, over West Branch. Charles Street intersects with MD 165 just to the north of the bridge. The bridge is located amid scattered farmsteads between the communities of Putnam to the north and Upper Crossroads to the south.

**Describe the Superstructure and Substructure:
(Discuss points identified in Context Addendum, Section C)**

Bridge #12045 carries two lanes of traffic over the West Branch. The structure consists of a single span measuring 32' in length with a total length of 32' and a clear roadway width of 27'. The structure is built with horizontally grooved concrete wingwalls and abutments and open balustrade-style concrete parapets. Modern metal guard rails run along both approaches and continue along the inside face of each parapet.

Inspection reports dating between 1979 and 1979 note increased spalling and cracking throughout.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Slightly more than two-thirds (76) of that total were single-span bridges.

Discuss major alterations:

The girders have been patched with gunite, and modern guard rails have been placed at both approaches as well as along the inside face of each parapet.

HISTORY

When Built: 1931

Why Built: Statewide road improvement programs and local transportation needs

Who Built: State Roads Commission, contract #H 108

Who Designed: Unknown

Why Altered: The bridge was repaired to correct the effects of deterioration.

Was this bridge built as part of an organized bridge building campaign?: No

SURVEYOR ANALYSIS

This bridge may have NR significance for association with:

A (Events) B (Person) C (Engineering/Architectural Character)

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

Road improvements in Harford County were fueled by several events occurring during the early twentieth century. First, the Good Roads Movement, which began in the last decade of the nineteenth century, aimed to improve primary roads throughout the state as well as multiple connecting roads between counties. As the movement progressed, numerous existing roads were widened, straightened, or graded, and many new bridges were built to carry the rebuilt roads. Second, rapidly increasing automobile, truck, and bus traffic also fueled the replacement of existing narrow and weak bridges with wider and stronger concrete structures, many of which were built according to standardized specifications and plans developed by the State Roads Commission (SRC). Third, the State Roads Commission established district engineering offices during the 1910s to aid in intrastate road development, and established a separate bridge department in 1920. This fostered construction of many concrete bridges throughout the state. In the 1920s, the SRC emphasized improving the safety and comfort of primary routes while developing secondary networks and feeder roads. By the 1930s, bridges that were originally deemed adequate had become unacceptable for carrying modern traffic loads and many new structures were built as a result.

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?

Bridge #12045 participated in the general trend toward upgrading state roads and bridges and improving intrastate access.

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

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

Is the bridge a significant example of its type?

No, this structure is not a significant example of its type. The character-defining elements have been compromised by modern additions.

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

No, the bridge does not retain integrity of the primary character-defining elements of a concrete beam bridge. The character-defining elements for the superstructures of concrete beam bridges are the slab, the longitudinal beams, and the parapet or railing when integral. For the substructure, the character-defining elements are the abutments, piers, and wing walls. Modern metal guard rails have been added along the interior face of the original open parapet walls.

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

No, this structure is not a significant example of the work of the State Roads Commission. No original drawings for this bridge could be located in the SHA files.

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

No, this structure should not be given further study. Previous alterations place its integrity in doubt.

BIBLIOGRAPHY

Spero, P.A. C. & Company and Louis Berger & Associates
1994 *Historic Bridges in Maryland: Historic Context Report.*
 Maryland State Highway Administration, Baltimore.

State Highway Administration
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State Roads Commission of Maryland
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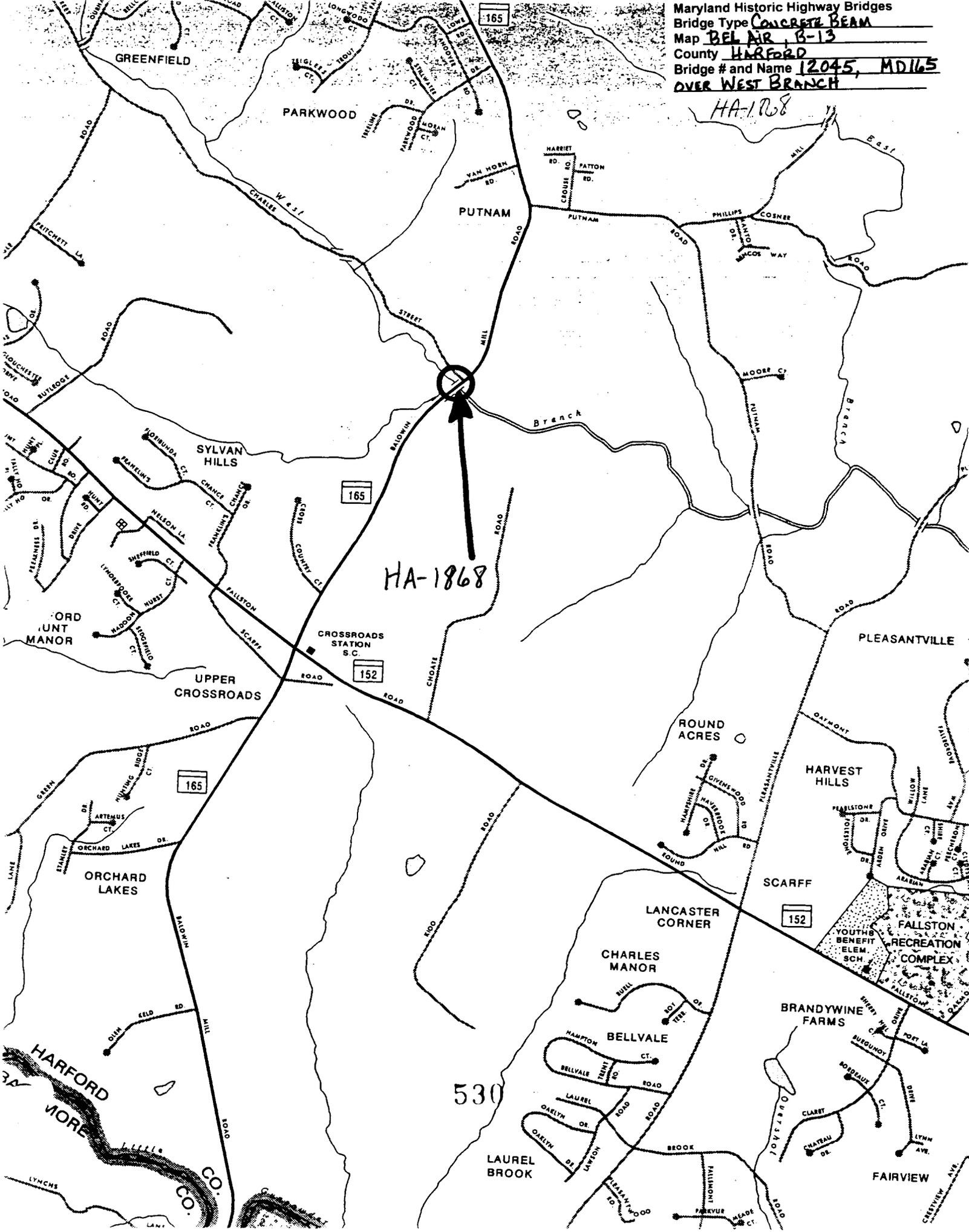
SURVEYOR INFORMATION

Name: Gabrielle M. Lanier
Organization: KCI Technologies, Inc.
Address: 5001 Louise Dr., Suite 201
 Mechanicsburg, PA 17055

Date: 13 May 1996
Telephone: (717) 691-1340

Maryland Historic Highway Bridges
Bridge Type CONCRETE BEAM
Map BEL AIR, B-13
County HARFORD
Bridge # and Name 12045, MD165
OVER WEST BRANCH

HA-1868



HA-1868

530

CHARLES



4A-1868

HARFORD COUNTY, MD

JOHN TARQUINIO

25 JAN 1995

~~MARYLAND SHPO SITE~~

- STATE BRIDGE NO. 12045 OVER
WEST BRANCH
- VIEW LOOKING LOOKING SOUTH
ON MD 165

1/4



HA-1868

HARFORD COUNTY, MD

JOHN TARQUINIO

25 JAN 1995

~~MARYLAND SHPO SITE~~

- STATE BRIDGE NO. 12045 OVER
WEST BRANCH

- VIEW LOOKING NORTH ON
MD ROUTE 165

2/4



HA-1868

HARFORD COUNTY, MD

JOHN TARQUINIO

25 JAN 1995

~~MARYLAND SHPO STA~~

- STATE BRIDGE NO. 12045 OVER
WEST BRANCH
- VIEW LOOKING EAST

3/4



HA-1868

HARFORD COUNTY, MD

JOHN TARQUINIO

25 JAN 1995

~~MARYLAND SHPO~~ SITA

- STATE BRIDGE NO. 12045 OVER
WEST BRANCH

- VIEW LOOKING WEST

4/4

MARYLAND HISTORICAL TRUST
NR-ELIGIBILITY REVIEW FORM

Property Name: Bridge 12045 (HA-1868)

Address: MD 165 over West Branch, Putnam, Harford County, Maryland

Owner: SHA

Tax Parcel Number: N/A Tax Map Number: N/A

Project: No. HA 178A21 and HA 179A21 Agency: SHA

Site visit by SHA Staff: no yes Name _____ Date N/A

Eligibility recommended Yes Eligibility not recommended _____

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

Is property located within a historic district? X no ___ yes Name of district: _____

Is district listed? N/A no ___ yes Documentation on the property/district is presented in: Historic Bridge Inventory

Description of Property and Eligibility Determination

This structure is not eligible for listing in the National Register individually as a bridge due to lack of integrity. As discussed in Attachment 4, the 1996 inventory form, the structure is not a significant example of a concrete beam. The character-defining elements have been compromised by modern additions (I-302). The form goes on further to state that the bridge does not retain integrity of the primary CDE's—the slab, beam and parapet for the superstructure, and abutments, piers and wing walls of the substructure. This structure has undergone numerous repairs. Most of the girders have been repaired with concrete or gunnite, with one-half of the girder completely patched. Heavy efflorescence is bleeding through transverse and longitudinal cracks and there are dripping stalactites. Interior girders have also been repaired with gunnite. Repaired areas have random cracks and moderate surface erosion. Footings are exposed and are protected with grout bags. Abutment walls also have gunnite repairs and lots of random cracks with efflorescence. Both balustrade walls have heavy concrete scaling up to three inches deep for near full length, located on interior faces at the bottom of blasters. Most of the baluster posts have open cracking and concrete deterioration with several having exposed rebar. The top of the endblock has heavy scaling along top and vertical faces, apparently from collision damage. The wingwalls, the underside of the deck, and the abutments were all repaired with pneumatically applied concrete.

As evaluated by the Historic Bridge Committee, this structure has an overall rating of 2, identified as pool resource.

Prepared by: SHA Architectural and Bridge Historian Rita M. Suffness,

MARYLAND HISTORICAL TRUST REVIEW	
Eligibility recommended _____	Eligibility not recommended <u>X</u>
Criteria: <u>A</u> <u>B</u> <u>X</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, Office of Preservation Services <u>[Signature]</u>	Date <u>2/19/00</u>
Reviewer, NR program <u>[Signature]</u>	Date <u>8/23/00</u>

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**PRESERVATION VISION 2000; THE MARYLAND PLAN
STATEWIDE HISTORIC CONTEXTS**

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:

- 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. Historic Period Themes:

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

IV. Resource Type:

Category: Structure

Historic Environment: Rural

Historic Function(s) and Use(s): Transportation

Known Design Source: SHA

MARYLAND INVENTORY OF HISTORIC PROPERTIES
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MARYLAND HISTORICAL TRUST

Attachment 4A

MHT NO. HA-1868

ELIGIBLE

NAME AND SHA NO.: 12045

LOCATION

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Bridge projects over: Road Railway Water Land

Is bridge located within designated district?: yes no

NR listed district NR determined eligible district

locally designated other

Name of District

BRIDGE TYPE

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Moveable Bridge

Swing Bascule Single Leaf Bascule Multiple Leaf

Vertical Lift Retractable Pontoon

Metal Girder

Rolled Girder Rolled Girder Concrete Encased

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Concrete Arch Concrete Slab Concrete Beam Rigid Frame

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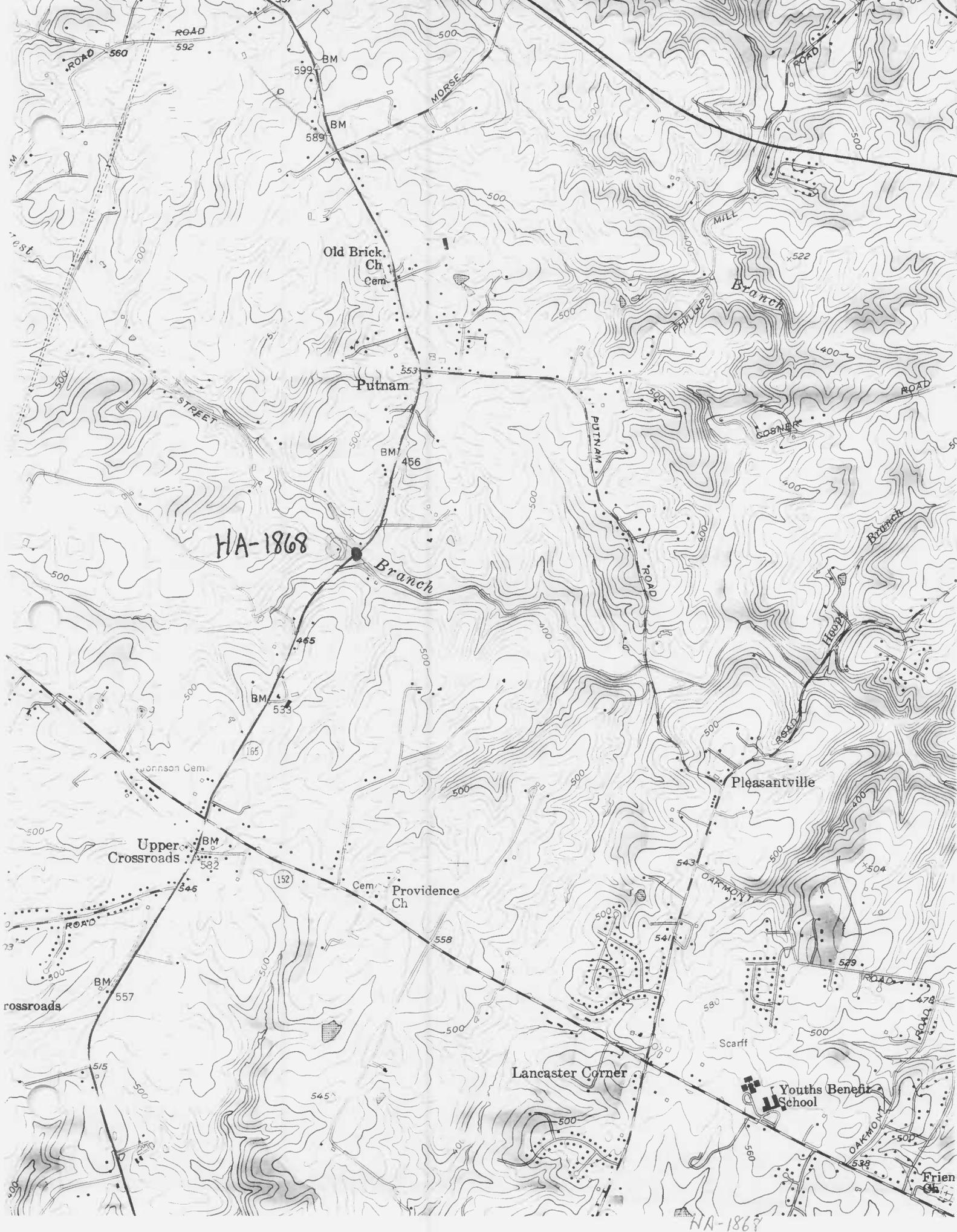
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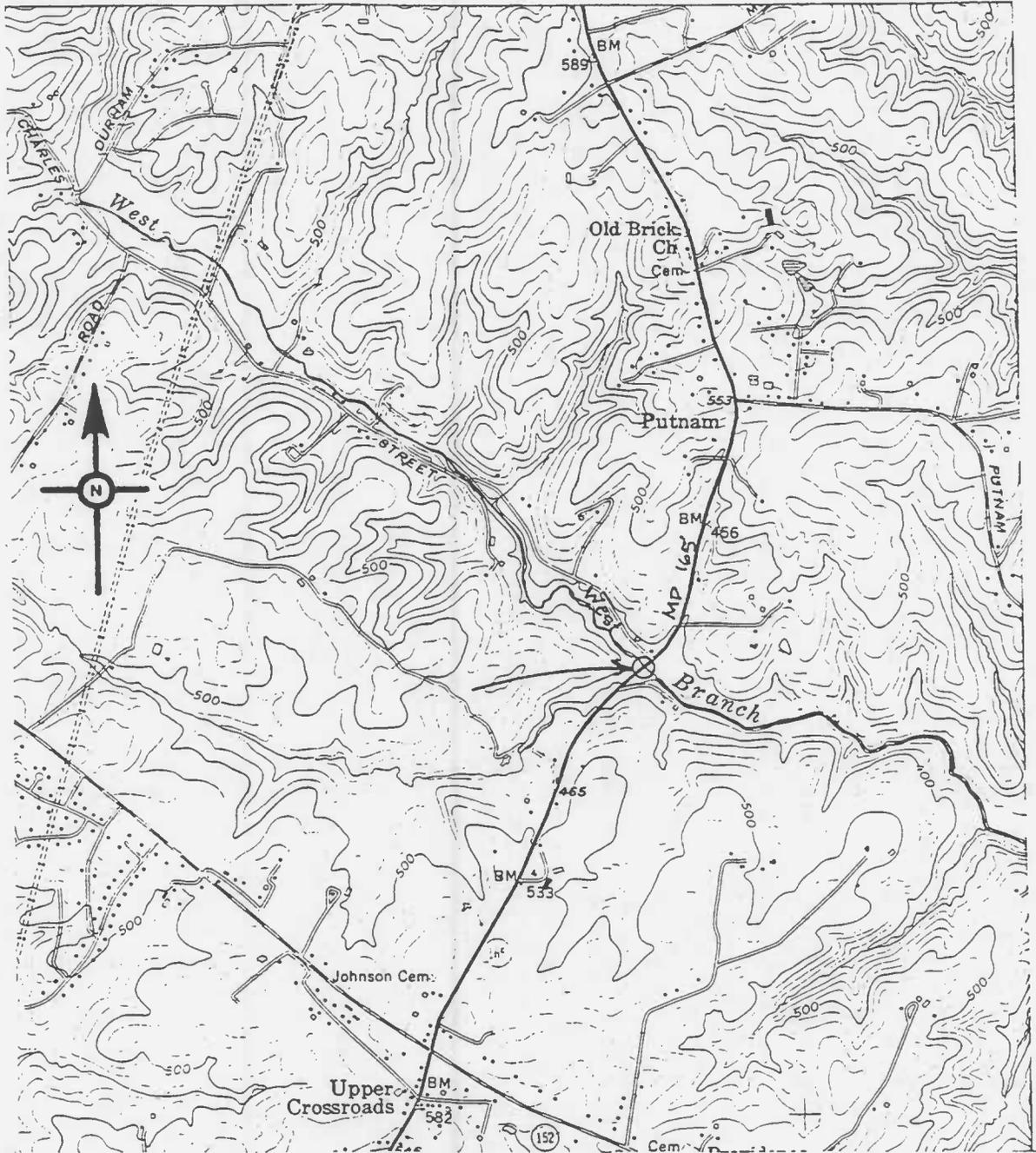


HA-1868

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MHT NO. HA-1868



Bridge # 12045 (MHT # HA-1868)
MD 165 over West Branch
Jarrettsville, MD Quadrangle (USGS 1974)



HP 1868

Bridge 12045

W.D. 165 over West Bank

Bridge Engineers, St. P., 9-97

Looking South



ALA 186E

Bridge 12045

md 165 over west branch

Bridge Engineer, 7-9-71

West elevation



H/A 1868

Bridge 12045

M 0165 over West Branch

Bridge in question, SEA 1-72

East Elevation