

Maryland Historical Trust

Maryland Inventory of Historic Properties number: BA-2866

Name: MD 147 over HAYSTACK 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 <u> X </u>	Eligibility Not Recommended <u> </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, 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 BA-2866

SHA Bridge No. 3091 Name: MD 147 over Haystack Branch

Location:

Street/Road Name and Number: MD 147 (Harford Road)

City/Town: Mt. Vista Vicinity X

County: Baltimore

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 3091 carries MD 147 over Haystack Branch. MD 147 runs in an east west direction and crosses northern flowing Haystack Branch. MD 147 (Harford Road) is a major corridor between Baltimore City and Baltimore County with a great degree of commercial and residential development. However, at this junction there is limited development .

Describe Superstructure and Substructure:

Bridge 3091 is a single-span, filled spandrel concrete arch bridge built in 1915. The bridge is 48 feet long with a clear span measuring 32 feet. The arch has a rise of 4 feet 9 inches. There is a clear roadway width of 22 feet, with an overall bridge width of 23 feet. According to a 1997 inspection report, the concrete arch has random cracks with efflorescence, exposed reinforcement bars, and some pop-outs. In addition, there is severe scaling with exposed concrete aggregates and partially exposed reinforcement bars with signs of rust. There are map cracks with efflorescence and random spalls. The bridge is in fair condition with a sufficiency rating of 63.2.

This bridge has a solid panel type railing. This type of reinforced concrete railing consists of vertical post securely fastened by dowels to the structure, horizontal balustrades and solid panels filling the space between the posts and the railing. There are four parapets on either side of the bridge with incised end posts. The outer posts are 3 feet wide while the inner posts are 1 foot in width. The parapet is 2 feet 2 inches tall with an 8-inch cap. There are two sections of panels connecting the parapets, each incised 2 inches. Each incised section of the panel is 2 feet by 4 feet with both panels forming a 13-foot section between the parapets. In addition, there is an 8-inch ledge extending beneath the parapet.

The outside faces and the bottom line of the railing are spalling, exposing aggregates and rusty reinforcement bars along the ledge edges. There are horizontal cracks on the outside faces. On the inside faces, there is concrete surface erosion and spalling. The intermediate posts have spalls at the bottom, exposing aggregates and some reinforcement bars.

The abutments are 5 feet by 25 feet. The abutments are directly below the springline. There is heavy concrete erosion on both abutment faces exposing aggregates on the water or bottom line.

The spandrel walls have heavy spalling with exposed reinforcement bars, and efflorescence on the eastern side of the bridge. On the western side of the bridge the spalling extends 4 inches along the southeast edge, exposing aggregate. This side of the bridge also has surface spalling, surface erosion and random cracking with efflorescence.

Discuss Major Alterations:

There have been no major alterations to this bridge. However, in September 1995 the State Highway Administration provided stream control to prevent further scour of the abutments with the use of grout bags.

History:

When Built: 1915

Why Built: Expansion of Harford Road from Baltimore to Bel Air

Who Built: State Roads Commission

Why Altered: N/A

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**

The 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?

Yes, the State Roads Commission was engaged in the construction of mainline truck roads that would connect the state's county seats and major transportation hubs. Work on 6 roads within Baltimore County was undertaken concurrently with work in Baltimore City. Coordination between the two jurisdictions was needed to insure correct alignments of bridge approaches and surfaces. As a result, the State Roads Commission used almost identical bridge plans as the City. In some cases an expensive construction cost was unavoidable. This parallel construction with Baltimore City reduced the available funds for the county. As a consequence, the work was confined to 6 roads located within a short distance of the City limits.

One of these 6 roads was Harford Road. Harford Road was also known as the Baltimore to Bel Air Road. The improvement of this corridor was at the heart of the "Seven Year Plan". Beginning in 1908 a contract was let on sections of Harford Road from the City Limits to Taylor Avenue (about 3 miles). Although only a 3-mile section of the road was paved and graded, the replacement of timber bridges along the corridor would fall within the scope of the "Seven-Year Plan."

Bridge 3091 represents a non-standardized design by the staff of the State roads Commission. By 1915, standard plans had been made for all bridges with spans up to 36 feet in length. It was necessary only for the Resident Engineer (Districts were known as residences) to investigate the foundations, and then to refer to the standard plan and select the type of foundations that would fit the location and conditions. However, concrete slabs and girders as well as arches over 36 feet were designed for individual situations in 1915.

Bridge 3091 is just north of Bridge 3093, crossing Long Green Creek. The two bridges are of the same design and were constructed at the same time.

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, this bridge is not located in an are that is eligible for historic designation as a district.

Is the bridge a significant example of its type?

Yes, this bridge is an example of a State Roads Commission design prior to the creation of standardized plans for arches.

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

The bridge retains integrity of the character defining elements of a concrete arch, including its wingwalls, abutments, spandrel walls, and parapets. The bridge retains integrity of location, design, setting, materials, workmanship, feeling, and association. However, the bridge does have serious problems.

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

No this bridge should 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.

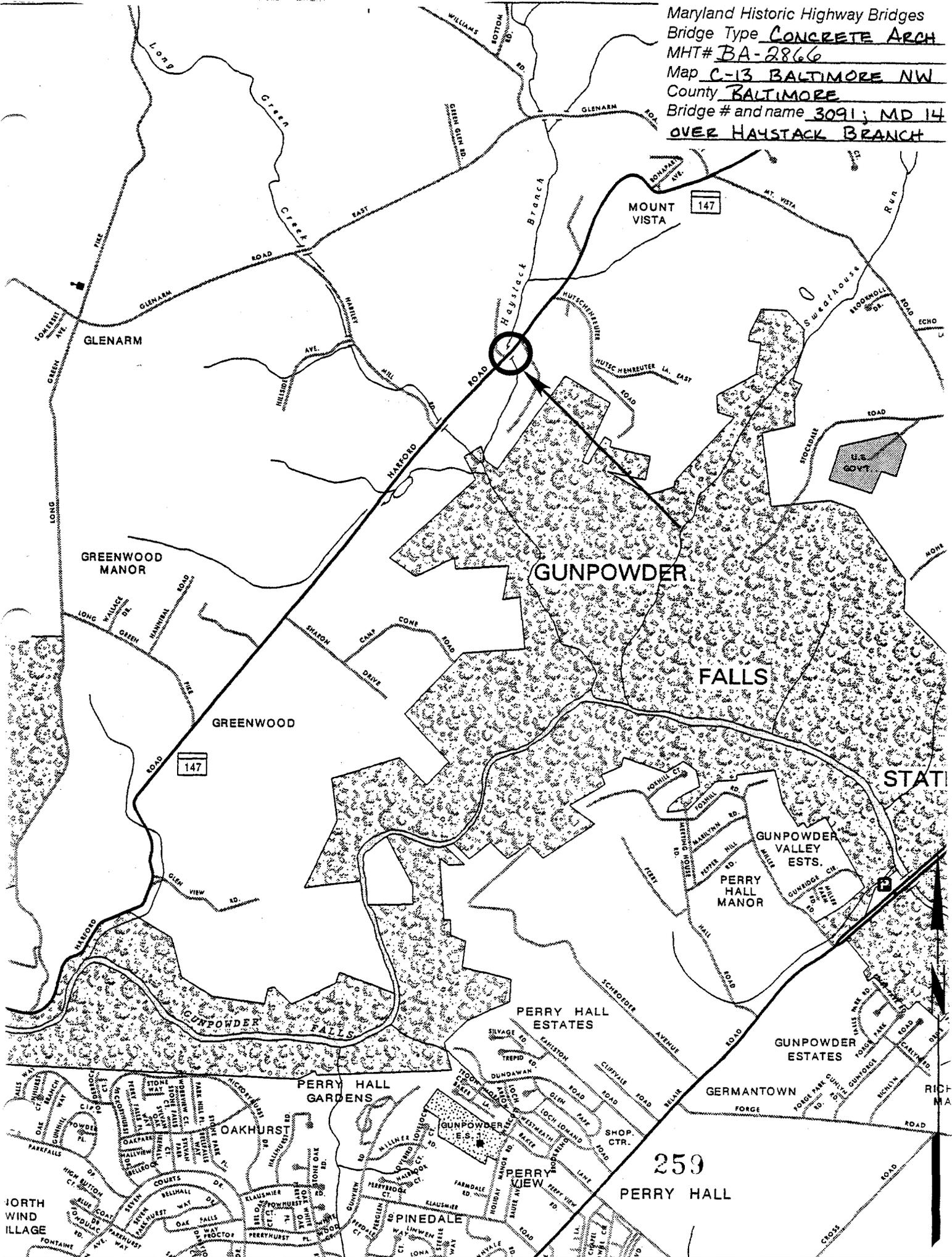
State Roads Commission

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.**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# BA-2866
 Map C-13 BALTIMORE NW
 County BALTIMORE
 Bridge # and name 3091; MD 14
OVER HAYSTACK BRANCH



259
 PERRY HALL



Inventory # BA-2866

Name 3091-MD147 OVER HAYSTACK BRANCH

County/State BALTIMORE COUNTY / MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description NORTH APPROACH LOOKING

SOUTH

Number # 1 of 4



Inventory # BA-2866

Name 3091- MD-47 OVER HAYSTACK BRANCH

County/State BALTIMORE COUNTY / MD

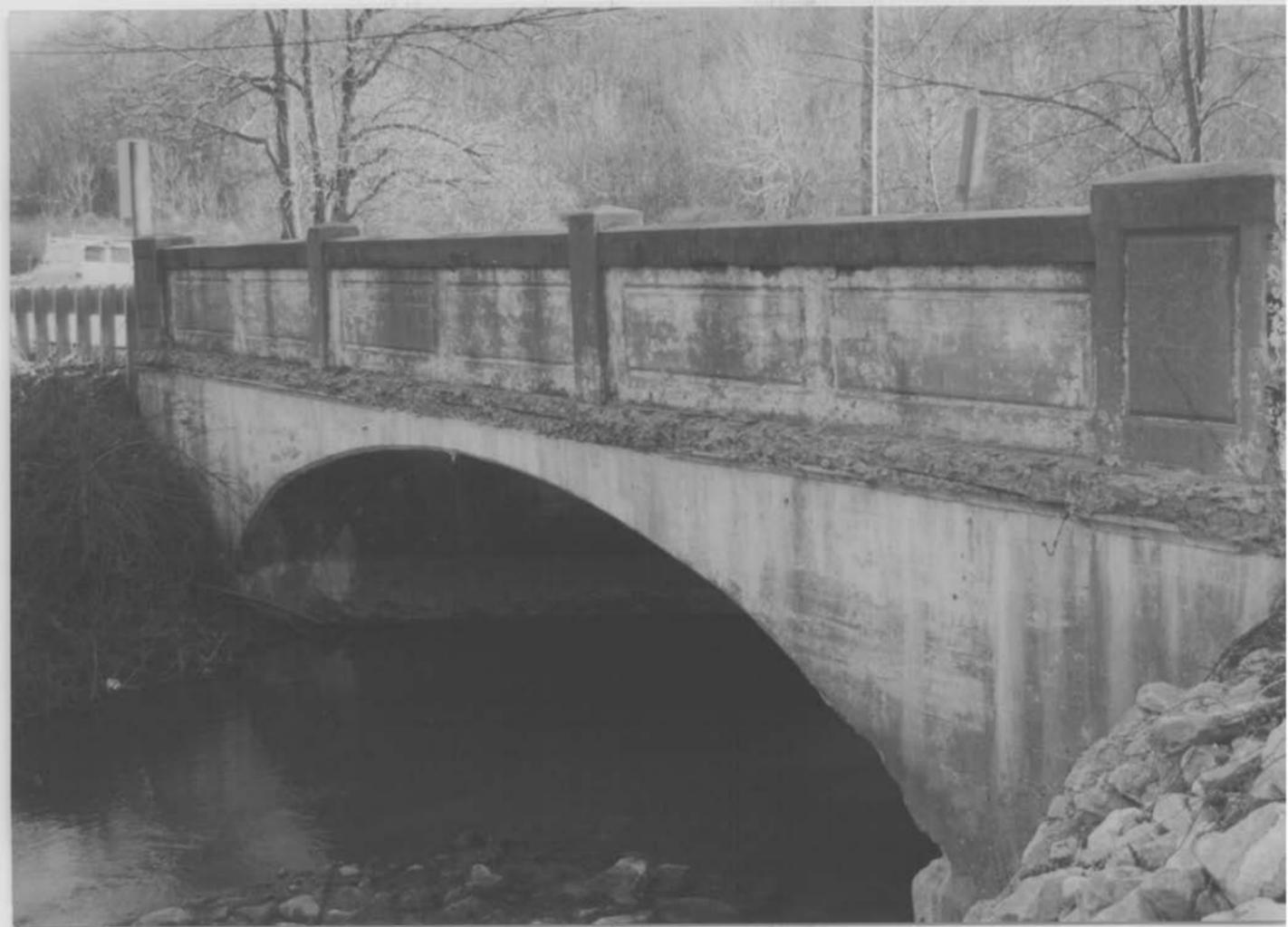
Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description EAST ELEVATION LOOKING
WEST

Number 2 of 4



Inventory # BA-2866

Name 3091-MD 147 OVER HA/STACK BRANCH

County/State BALTIMORE COUNTY / MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description WEST ELEVATION LOOKING

NORTHEAST

Number # 3 OF 4



Inventory # BA-2866

Name 3091-MD147 OVER HAYSTACK BRANCH

County/State BALTIMORE COUNTY / MD

Name of Photographer DAVE DEHL

Date 1/95

Location of Negative SHA

Description SOUTH APPROACH LOOKING
NORTH

Number # 4 of 4