

Maryland Historical Trust

Maryland Inventory of Historic Properties number: BA-2867

Name: MD 147 OVER BRANCH OF LONG GREEN 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 <u> X </u>	Eligibility Not Recommended <u> </u>
Criteria: <u> </u> A <u> </u> B <u> X </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>

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

MHT Number BA-2867

SHA Bridge No. 3093 Name: MD 147 over Branch of Long Green Creek

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 3093 carries MD 147 over a branch of Long Green Creek. MD 147 runs in an east west direction and crosses northern flowing Long Green Creek. MD 147 (Harford Road) is a major corridor between Baltimore City and Baltimore County with a great degree of both commercial and residential development. However, at this junction there is limited development . The Dietl Farm (MHT BA-1920) is downstream from the bridge.

Describe Superstructure and Substructure:

Bridge 3093 is a single-span filled spandrel concrete arch bridge built in 1915. The bridge is 41 feet long with a clear span measuring 27 feet. The arch has a rise of 3 feet 6 inches. There is a clear roadway width of 22 feet, with an overall width of 24 feet. This bridge has a solid panel type railing. This type of reinforced concrete railing consists of vertical posts securely fastened by dowels to the structure, horizontal parapets and solid panels filling the space between the posts and the railing. There are 4 parapets on either side of the bridge with the 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 2 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.

According to a 1997 inspection report, the concrete arch is spalling along the west end of the intrados of the arch approximately 2 feet toward the centerline of the arch running longitudinally along the construction joint. In addition, there are 2 4-foot spalls with exposed reinforcement bars approximately 3 inches wide along the intrados. The remaining portion of the surface has moderate to heavy efflorescence with some random cracking. The bridge is in satisfactory condition with a sufficiency rating of 76.0.

The abutments are 5 feet by 20 feet. The inspection report also described light to moderate concrete scale on the faces of the abutments, and the railings show spalling and heavy scale.

Discuss Major Alterations:

There have been no major alterations to this bridge.

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

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?

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 for 6 roads within Baltimore County was undertaken concurrently with work within Baltimore City. Coordination between the two jurisdictions was needed to insure correct alignments of bridge approaches, and surfaces. The State Roads Commission was forced to build with almost identical plans as the City was using. 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 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 fell within the scope of the "Seven Year Plan."

Bridge 3093 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.

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?

Yes, the bridge is located in an area that may be eligible for historic designation as a district. The bridge is downstream from the Dietl Farm (MHT BA-1920) and is outside the Long Green Valley Historic District. If the existing district was expanded or the farm was made into a rural district this bridge would not detract from the historic and visual character of the 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 standard plans for concrete arch bridges.

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 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

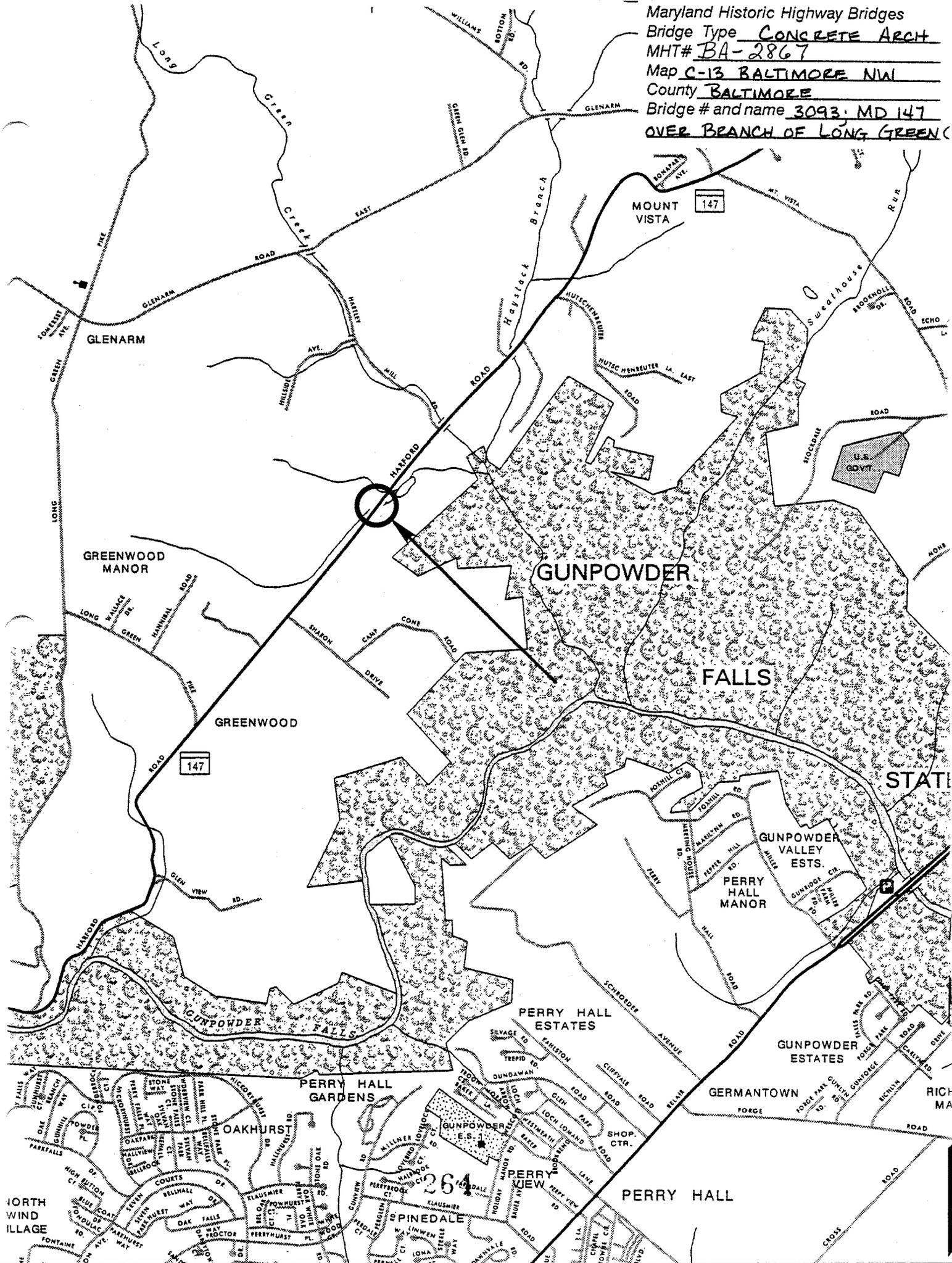
MHT# BA-2867

Map C-13 BALTIMORE NW

County BALTIMORE

Bridge # and name 3093; MD 147

OVER BRANCH OF LONG GREEN





Inventory # BA-2867

3093- MD 147 OVER A BRANCH OF LONG
Name GREEN CREEK

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description SOUTH APPROACH LOOKING
NORTH

Number # 1 OF 4



Inventory # BA-2867

3093-MD 147 OVER A BRANCH OF LONG

Name GREEN CREEK

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 11/95

Location of Negative SHA

Description EAST ELEVATION LOOKING
NORTHWEST

Number

2 OF 4



Inventory # BA-2867

3093- MD 147 OVER A BRANCH OF
Name LONG GREEN CREEK

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 3094



Inventory # BA-2867

3913-MD 147 OVER A BRANCH OF LONG
Name GREEN CREEK

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DEHL

Date 11/95

Location of Negative SHA

Description NORTH APPROACH LOOKING
SOUTH

Number of # 4 OF 4 4 of 4