

Maryland Historical Trust

Maryland Inventory of Historic Properties number: F-2-90

Name: #10081/MD 180 over Little Catocten 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"/>	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 NO. F-2-90

NAME AND SHA NO.: 10081

LOCATION

Road Name and Number: MD 180 over Little Catoctin Creek

City/Town: Petersville vicinity

County: Frederick

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 10081 carries MD 180 over Little Catoctin Creek in Frederick County. The bridge is located near the border of Maryland's Appalachian and Piedmont physiographic regions. Route 180 generally runs in an east-west direction at this location. Little Catoctin Creek runs south into the Potomac River. The bridge is situated approximately one-half mile west of the junction between MD 180 and MD 79.

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

This bridge is a single-span concrete girder bridge that extends approximately 23 feet in length with a clear roadway width of 27'. The structure consists of 5 concrete girders, horizontally grooved concrete abutments and wingwalls, and open balustrade-style concrete parapets. Approach guardrails are attached to the ends of the parapets at either end of the bridge but do not extend along the inside faces of the parapets. State Highway Administration files list the bridge as a 1932 standard design, but an internal memorandum dated 7/28/84 suggests that discrepancies in measurements may make the bridge older. The SHA Bridge Inventory lists the construction date of this bridge as "1912, 1932."

Bridge 10081 exhibits signs of deteriorating conditions in all of its superstructural and substructural elements.

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 structure may have been widened rather than built in 1932. Inspection files and one drawing cite an emergency underpinning operation undertaken in 1987; the repairs involved replacing six mudhooks, underpinning one abutment, and paving the stream invert with concrete. The bridge was included in the Special Projects listing for FY 1991 for total replacement due to deteriorating conditions.

HISTORY

When Built: Possibly 1912, 1932

Why Built: Statewide road improvement programs and local transportation needs

Who Built: State Roads Commission, contract #F173

Who Designed: Unknown; design based on 1932 SRC standards

Why Altered: Emergency underpinning was undertaken in 1987 to correct deterioration and restore the bearing capacity of one abutment.

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 Frederick 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 #10081 participated in the general trend toward upgrading state roads and bridges and improving intrastate access.

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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 may be eligible for historic designation.

Is the bridge a significant example of its type?

No, the bridge is not a significant example of its type.

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

No, this bridge does not retain integrity of its character-defining elements. 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. The bridge has undergone emergency underpinning of one abutment.

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.

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

No, this bridge does not require further study.

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BIBLIOGRAPHY

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1994 *Historic Bridges in Maryland: Historic Context Report.*
Maryland State Highway Administration, Baltimore.

State Highway Administration
Bridge Inspection Reports. On file 707 North Calvert Street, Baltimore.

As-Built Drawings. On file 707 North Calvert Street, Baltimore.

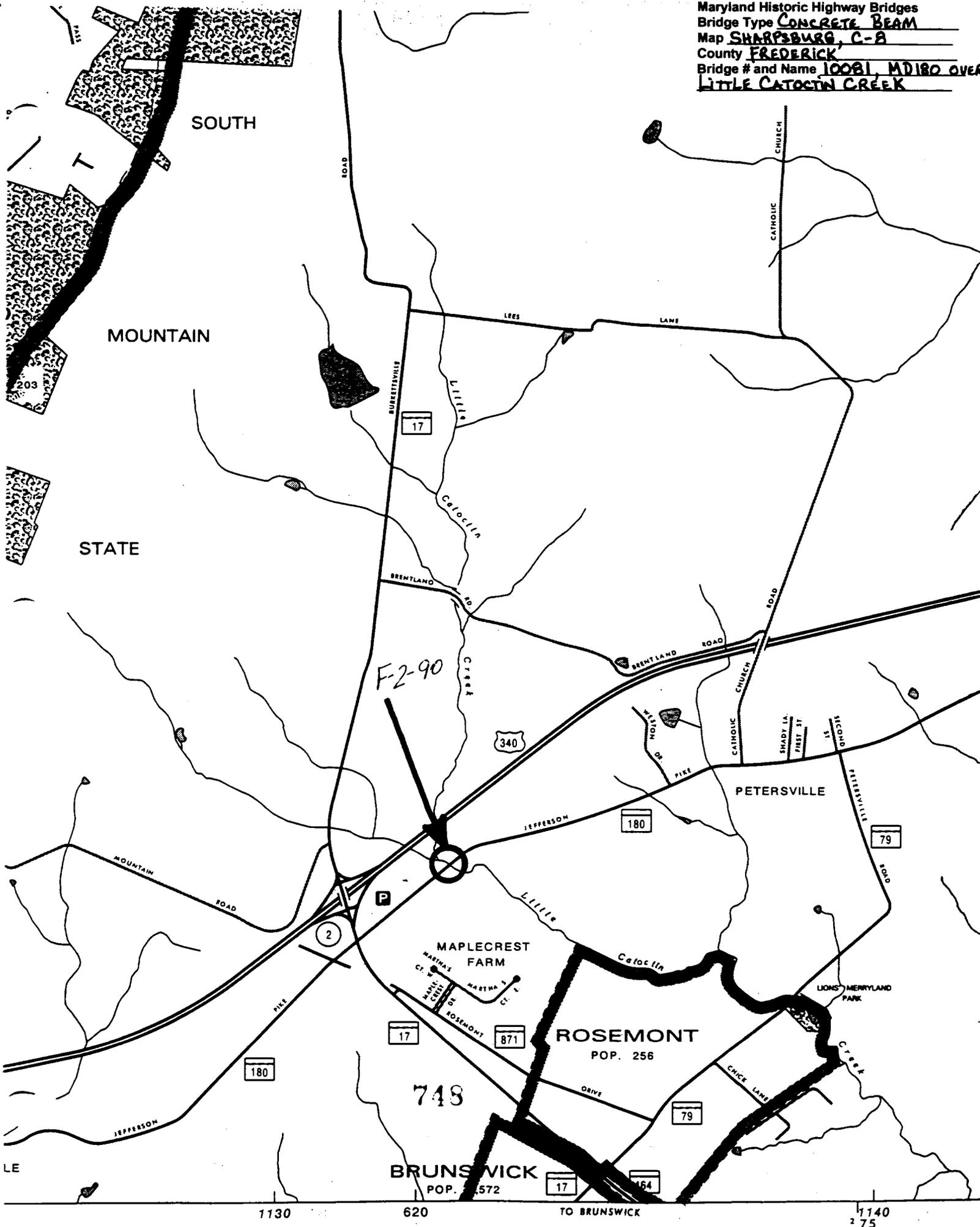
State Roads Commission of Maryland
1958 *A History of Road Building in Maryland.* Baltimore.

SURVEYOR INFORMATION

Name: Gabrielle M. Lanier/Stephen Linhart
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Date: 13 May 1996
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Maryland Historic Highway Bridges
Bridge Type CONCRETE BEAM
Map SHARPSBURG, C-A
County FREDERICK
Bridge # and Name 10081, MD180 OVER
LITTLE CATOCIN CREEK





Inventory # F-2-90

Name 10081 - MD 180 OVER LITTLE CATOCTIN CREEK

County/State FREDERICK COUNTY/MD

Name of Photographer FRANK JULIANO

Date 1/95

Location of Negative SHA

Description EAST APPROACH

Number 1 of 36 4



Inventory # F-2-90

Name 10081-MD180 OVER LITTLE CATOCTIN CREEK

County/State FREDERICK COUNTY MD

Name of Photographer FRANK JULIANO

Date 1/95

Location of Negative SWA

Description ELEVATION LOOKING SOUTH

Number 2 of 36 4



Inventory # F-2-90

Name 10081-MD 180 OVER LITTLE CATOCTIN CREEK

County/State FREDERICK COUNTY / MD

Name of Photographer FRANK JULIANO

Date 1/95

Location of Negative SHA

Description WEST APPROACH

3
Number 35 of 36 4



Inventory # F-2-90

Name 10081 - MD 180 OVER LITTLE CATOCTIN CREEK
County/State FREDERICK COUNTY/MD
Name of Photographer FRANK JULIANO
Date 1/95

Location of Negative SHA

Description ELEVATION LOOKING NORTH

Number 436 of 314