

Maryland Historical Trust

Maryland Inventory of Historic Properties number: NO-656

Name: 13034/US 40 over Forest Rd. Underpass

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>

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. HO-656

SHA Bridge No. 13034 Bridge name US 40 over Forest Road Underpass

LOCATION:

Street/Road name and number [facility carried] US 40

City/town Ellicott City Vicinity X

County Howard

This bridge projects over: Road X Railway ___ Water ___ Land ___

Ownership: State X County ___ Municipal ___ Other ___

HISTORIC STATUS:

Is bridge located within a designated historic district? Yes ___ No X

National Register-listed district ___ National Register-determined-eligible district ___

Locally-designated district ___ Other ___

Name of district _____

BRIDGE TYPE:

Timber Bridge _____:

Beam Bridge _____ Truss -Covered ___ Trestle ___ Timber-And-Concrete ___

Stone Arch Bridge ___

Metal Truss Bridge ___

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 _____

Concrete X:

Concrete Arch _____ Concrete Slab X Concrete Beam ___ Rigid Frame _____

Other _____ Type Name _____

DESCRIPTION:

Setting: Urban X Small town _____ Rural X

Describe Setting: Bridge No. 13034 carries US 40 over Forest Road in Patapsco State Park in eastern Howard County. The setting is completely wooded.

Describe Superstructure and Substructure:

Bridge No. 13034 is a single span concrete slab bridge constructed in 1936. US 40, which carries the bridge over Forest Road, is a four lane highway with a Jersey type barrier dividing eastbound and westbound traffic. The span length is 21'. The abutments are concrete. The wingwalls are stone and are parallel with US 40. The underpass forms an arch which features voussoirs of cut stone.

Discuss Major Alterations:

No major alterations have been made to this bridge.

HISTORY:

WHEN was the bridge built 1936

This date is: Actual X Estimated _____

Source of date: Plaque _____ Design plans _____ County bridge files/inspection form _____

Other (specify): SHA files

Why was the bridge built?

Unknown

Who was the designer?

Unknown

Who was the builder?

Unknown

Was the bridge altered?

The bridge has not been altered.

Was the bridge built as part of an organized bridge-building campaign?

Unknown.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:

- A - Events _____
- B- Person _____
- C- Engineering/architectural character X

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

Reinforced concrete slab bridges are a twentieth century structure type, easily adapted to the need for expedient engineering solutions. Reinforced concrete technology developed rapidly in the early twentieth century with early recognition of the potential for standardized design. The first U.S. attempt to standardize concrete design specifications came in 1903-04 with the formation of the Joint Committee on Concrete and Reinforced Concrete of the American Society of Civil Engineers.

Maryland's road and bridge improvement programs mirrored economic cycles. The first road improvement program of the State Roads Commission was a 7 year program, starting with the Commission's establishment in 1908 and ending in 1915. Due to World War I, the period from 1916-1920 was one of relative inactivity; only roads of first priority were built. Truck traffic resulting from war-related factories and military installations generated new, heavy traffic unanticipated by the builders of the early road system. From 1920 to 1929, numerous highway improvements occurred in response to the increase in Maryland motor vehicles from 103,000 in 1920 to 320,000 in 1929, with emphasis on the secondary system of feeder roads which moved traffic from the primary roads built before World War I. After World War I, Maryland's bridge system also was appraised as too narrow and structurally inadequate for the increasing traffic, with plans for an expanded bridge program to be handled by the Bridge Division, set up in 1920. In 1920 under Chapter 508 of the Acts of 1920 the State issued a bond of \$3,000,000.00 for road construction; the primary purpose of these monies was to meet the state obligations involving the construction of rural post roads. The secondary purpose of these monies was to fund [with an equal sum from the counties] the building of lateral roads. The number of hard surfaced roads on the state system grew from 2000 in 1920 to 3200 in 1930. By 1930, Maryland's primary system had become inadequate to the huge freight trucks and volume of passenger cars in use, with major improvements occurring in the late 1930s. Most improvements to local roads waited until the years after World War II.

With a diverse topographical domain encompassing numerous small and large crossings, Maryland engineers quickly recognized the need for expedient design and construction.

In the early years, there was a need to replace the numerous single lane timber bridges. Walter Wilson Crosby, Chief Engineer stated in 1906, "The general plan has been to replace these [wood bridges] with pipe culverts or concrete bridges and thus forever do away with the further expense of the maintenance of expensive and dangerous wooden structures". Within a few years, readily constructed standardized bridges of concrete were being built throughout the state.

Standard plans were developed for use in Maryland in 1912 and continued in use throughout the following decades.

Concrete embellishments varied from simple molded treatment to the application of surface masonry, as exhibited with bridge 13034.

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?

Unknown.

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

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

Is the bridge a significant example of its type?

Yes, this structure is a significant example of an elaborate concrete slab bridge which features masonry embellishment including an arched profile with voussoirs, and wingwalls with stone facing.

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

The bridge is an unusual example of a concrete slab with atypical elements. This structure retains the integrity of its location, design, setting, materials, workmanship, feeling and association.

Is bridge a significant example of work of a manufacturer, designer and/or engineer?
Designer, manufacturer, and/or engineer of this bridge is unknown.

Should the bridge be given further study before an evaluation of significance is made?
No further evaluation is necessary to determine National Register significance. However, additional research concerning the history of the bridge and its relationship to the surrounding landscape may be useful in providing a more complete picture of the bridge's background.

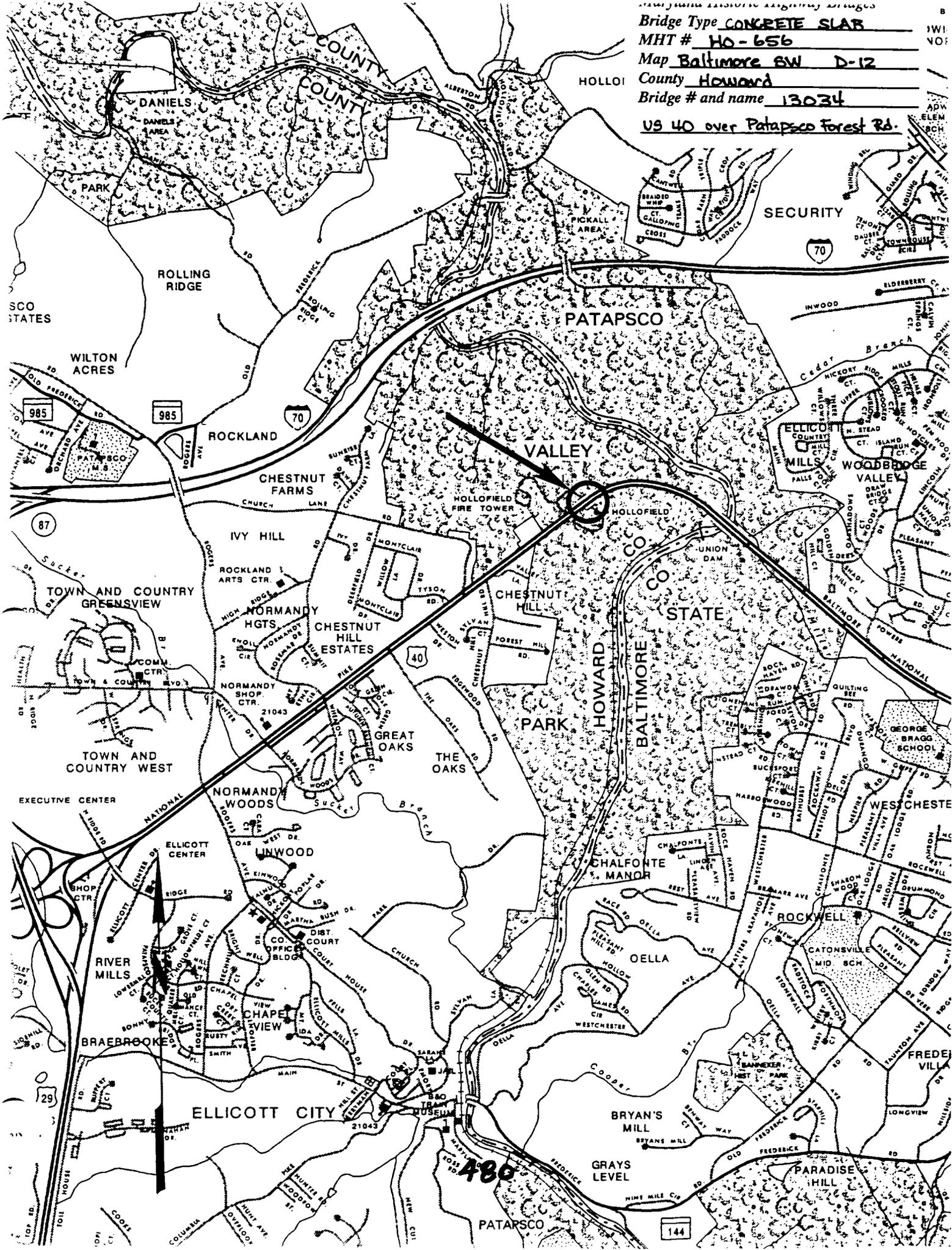
BIBLIOGRAPHY:

County inspection/bridge files _____ SHA inspection/bridge files X
Other (list):

SURVEYOR/SURVEY INFORMATION:

Date bridge recorded 8/95
Name of surveyor Leo Hirrell
Organization/Address P.A.C. Spero & Company, 40 W. Chesapeake Avenue, Suite 412, Baltimore, MD 21204
Phone number (410) 296-1635 FAX number (410) 296-1670

Bridge Type CONCRETE SLAB
 MHT # HO-656
 Map Baltimore SW D-12
 County Howard
 Bridge # and name 13034
US 40 over Patapsco Forest Rd.



480

144



Inventory # H0-656

Name 13034-US RT 40 OVER PATAPSCO FOREST RD.

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description EAST APPROACH

Number 1 of 4
8 of 16



Inventory # H0-656

Name 13034-US RT 40 OVER PATRASCLO FOREST RD

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description WEST APPROACH

Number 2 of 4



Inventory # H0-656

Name 13034 - US RT 40 OVER PATASCO FOREST RD

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

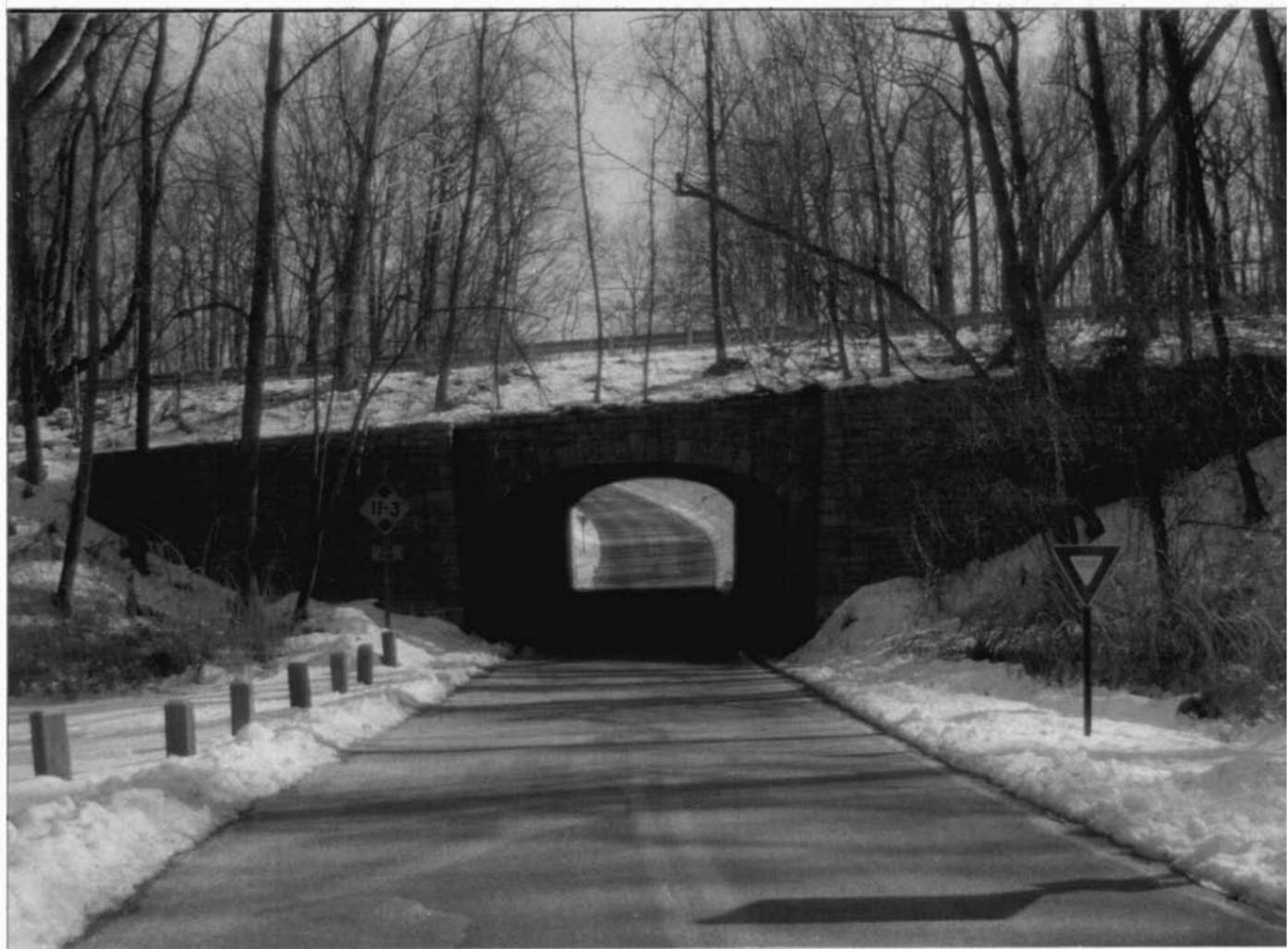
Date 2/95

Location of Negative SHA

Description SOUTH ELEVATION

Number 3 of 4

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Inventory # H0-656

Name 13034-WS RT 400VER PATAPSCO FOREST RD.

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SWA

Description NORTH ELEVATION

Number 4 of 4

STATE COLLEGE PHOTOGRAPHY