Maryland Historical Trust

Maryland Inventory of Historic Properties Number: CE-1496

Name: US 40 over Principio 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 bridged received the following determination of eligibly.

MARYLAND HISTORICAL TRUST

Eligibility Recommended ___X____ Eligibility Not Recommended _____

Criteria: ____A ____B ____C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments:_____

_____

_____

Reviewer, OPS:__Anne E. Bruder_____ Date:__3 April 2001_____

Reviewer, NR Program:_Peter E. Kurtze_____ Date:___3 April 2001_____

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

MHT Number CE-1496

SHA Bridge No. 7014 **Name:** US 40 over Principio Creek

Location:

Street/Road Name and Number: US 40 (Pulaski Highway)

City/Town: Perryville **Vicinity** X

County: Cecil

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 Retractile 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 7014 carries US 40 over Principio Creek in Cecil County. US 40 runs east-west over northern flowing Principio Creek. The bridge is in a sparsely settled area. Farms with late-nineteenth century, early-twentieth century, and modern agricultural structures surround the bridge.

Describe Superstructure and Substructure:

Bridge 7014 is a single span filled concrete arch. The length of the bridge is 60 feet . The rise is approximately 12 feet 6 inches. The crown is approximately 2 feet 2 inches. The spandrel walls are approximately 14 feet high and 15 feet wide. The are decorative facias measuring approximately 6 feet long and 1 inch high just at the base of the parapet. The arch ring has a 1-inch angle and a 2-inch cove molding. The abutments are approximately 14 feet high. There is a clear roadway width of 126 feet 2 inches, with an overall width of 130 feet. According to a 1995 inspection report the bridge is in good condition with a sufficiency rating of 94.4.

The arch has fine map and transverse cracks. The western face has a small spall north of the centerline construction joint. The spall is 1-foot high, 6 inches wide, and 1 inch deep. The spall has reinforcement bar exposure and is heavily rusted. The eastern face has a diagonal crack below the second construction joint from the north. This crack has light efflorescence and moisture stains. The exterior corners of the arch are spalling with hollow soundings taken from the surrounding concrete. The abutments have vertical cracks that are slightly open. There are minor spalls near the scupper pipes. The wing walls have small vertical cracks. The spandrel walls have vertical cracks with light efflorescence. The facias have heavy efflorescence at the ends of the arch centers.

Discuss Major Alterations:

At some unknown date the State Highway Administration attached guardrails to the bridge.

When Built: 1940
Why Built:. The relocation of US 40 in Harford and Cecil County
Who Built: State Roads Commissioners
Why Altered: Safety
Was this bridge built as part of an organized bridge building campaign?
Yes, the bridge was built as part of the relocation of US 40 from Baltimore City to the Delaware Line. The route of present US 40 was traveled as early as 1733, when *Poor Richard's Almanac* noted the route of the Old Philadelphia Road (State Route 7) on the general course of the present highway. Under pressure from the federal Bureau of Public Roads in the early 1930s, the State Roads Commission planned the construction of a new road from Baltimore to Havre de Grace, in lieu of widening the Old Philadelphia Road. In 1935, the "new" Philadelphia Road opened as Maryland's first dual highway, and was christened the Pulaski Highway. This bridge was built as a component of the construction of the Pulaski Highway (US 40).

Surveyor Analysis:
This bridge may have NR significance for association with:
X A Events _Person
X C Engineering/Architectural

This bridge was determined eligible by the Interagency Review Committee in February 1996.

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

Beginning in 1934 the state received funds consisting of unexpended balances, gasoline taxes revenues, Federal appropriations and revenues derived from the $4,000,000 debenture issue. These funds were consolidated to finance road and highway projects on secondary or feeder roads, the construction of highways

in Baltimore City and the construction of numerous projects within the state. One of these projects was the realignment of the Philadelphia Road (present US 40). There was considerable controversy as to whether this improvement would provide for the reconstruction of the existing road with modifications in alignment and grade, or whether it would be better to construct an entirely new road on a new location. The alignments were studied by the State Roads Commission, the Public Works Administration, and the United States Bureau of Public Roads, and it was finally agree to build a new road on a relocation south of and generally parallel to the Baltimore and Ohio Railroad. The New Philadelphia Road was designed as a dual highway on a 150-foot right-of-way and consisted of 2 20-foot travel lanes and a 50-foot median.

Designs for bridge 7014 were approved in October of 1939 however the bridge was not constructed until 1941.
Changes were made to the original wing walls and the section of road between Oakington to Delaware, and construction did not begin until 1940. At the end of fiscal year 1938, nineteen miles remained to complete the relocation of US 40. The completion of the New Philadelphia Road from the Perryville end to the Delaware line included several bridges. These bridges generally provided for a separate bridge for each lane, except bridge 7014 where a single arch carries both lanes.

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 area that is eligible for historic designation.

Is the bridge a significant example of its type?

Yes this bridge is a representative type of the concrete arch bridges that were constructed by the State Roads Commissioners during the final phase of concrete arch construction.

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

Yes this structure retains its character defining elements, including wingwalls, abutments, spandrel walls, and the arch. The parapets have been replaced with guardrails.

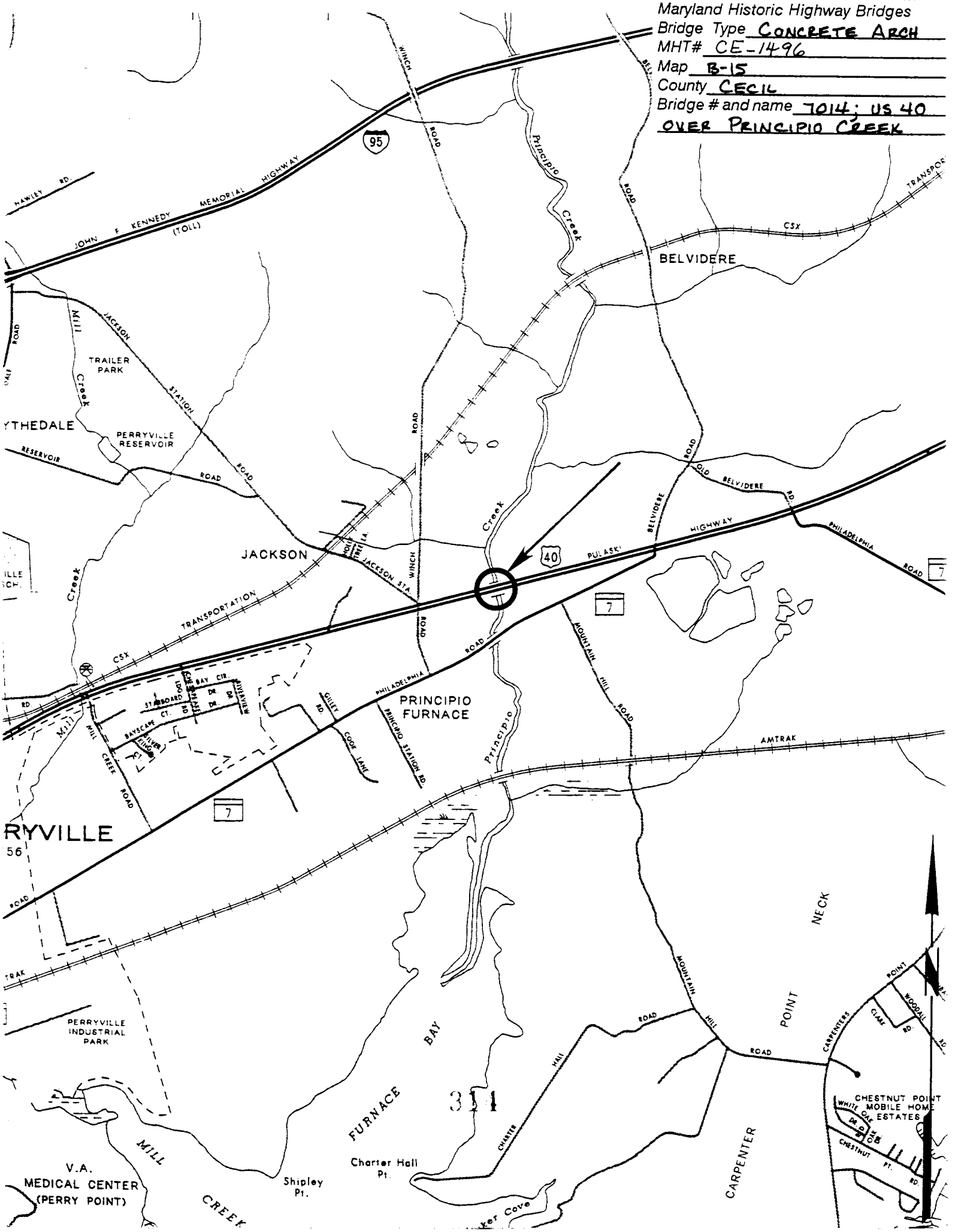
Should this bridge be given further study before significance analysis is made?

No, this bridge requires no further study.

Bibliography:
County inspection/bridge files _____ **SHA inspection/bridge files** ___X___
Other (list):

Surveyor:
Name: Stacie Y. Webb **Date:** September 1995
Organization: State Highway Admin. **Telephone:** (410) 545-8559
Address: 707 N. Calvert Street, Baltimore, Maryland
Edited by P.A.C. Spero & Company, December 1997

Maryland Historic Highway Bridges
Bridge Type CONCRETE ARCH
MHT# CE-1496
Map B-15
County CECIL
Bridge # and name 7014; US 40 OVER PRINCIPIO CREEK



CE-1496
CECIL COUNTY, MD
MATT HURLEY
FEB 14 1995
~~MARYLAND SHPO~~ SHA
BRIDGE NO 7014
LOOKING DOWNSTREAM
1 OF 3

CE-1496
CECIL COUNTY, MD
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BRIDGE NO 7014
LOOKING UPSTREAM
2 OF 3

7014

CE-1496

CECIL COUNTY MD

MATT HURLEY

FEB 14 1995

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BRIDGE NO 7014

STENCIL ON GUIDERAIL, UPSTREAM SIDE,
JUST EAST OF BRIDGE

3 OF 3