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 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_____

Name: Pouderer US 1 over Mentors Run

Maryland Inventory of Historic Properties Number: NA-1904
SHA Bridge No.  12004  Name: Business US 1 over Winters Run (Winters Run Bridge)

Location:
Street/Road Name and Number:  Business US 1 (Bel Air Road)
City/Town:  Bel Air Vicinity  X
County:  Harford
Ownership:  X State X County X Municipal X Other
This bridge projects over:  Road X Railway X Water X 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 ___________________________  454
Describe Setting:

Bridge 12004 carries Business US 1 over Winters Run in Harford County. Business US 1 runs east-west over the northern flowing Winters Run. Business Route US 1 is a heavily developed area; however, at this site there is limited commercial and residential development.

Describe Superstructure and Substructure:

Bridge 12004 is a single-span filled concrete arch bridge. The length of the bridge is 77 feet with a clear span of 55 feet. The rise is approximately 12.5 feet. The abutments are concrete and are approximately 24 feet wide and 13 feet high. There is a clear roadway width of 50 feet, with an overall width of 54 feet 4 inches. According to a 1996 inspection report the arch has medium to small size spalls along the barrel and spandrel wall joint. In addition, there is efflorescence along the spandrel walls, which also show signs of medium vertical and irregular cracks with small and medium areas of delamination. The bridge is in good condition, with a sufficiency rating of 72.2.

This bridge has a pierced parapet. This type of reinforced concrete parapet consists of vertical posts securely fastened by dowels to the structure, horizontal balustrades and solid panels filling the space between the posts and the railings. Bridge 12004 has a 15-to-1 expansion joint railing. The balustrade is 2 feet 11 inches tall with a cap that is 1 foot by 4 feet 3 inches. The end blocks are approximately 20 feet long and are of the closed paneled design. Both parapets exhibit moderate scaling with cracking.

Discuss Major Alterations:

There have been no major alterations to this structure except patching and mortar repair.

When Built: 1930
Why Built: Extension of Bel Air Road between Baltimore and Bel Air
Who Built: State Roads Commission
Who Designed: State Roads Commission
Why Altered: N/A

Was this bridge built as part of an organized bridge building campaign?
Yes, this bridge was built as part of the corridor development between Baltimore City and Bel Air in Harford County.

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 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 to major transportation hubs. The 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 construction and 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 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 Bel Air 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 have fallen within the scope of the “Seven Year Plan.” By 1930 the corridor had proceeded into Harford County and new bridges were being built to accommodate the widened roads.

Bridge 12004 represents a non-standardized design by the staff of the State Roads Commission. By 1915 standard plans had been developed for all bridges with spans up to 36 feet in length. It was only necessary for the Resident Engineer (Districts were known as residences) to investigate the foundations then 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 thirty-six feet, were designed for individual situations in 1930.

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, the 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 significant example of a single span concrete arch built during the 1910 to 1940 key period of significance. During this period reinforced concrete structures were characterized by increasing standardization of small slab, beam, frame, and culvert spans. Special subtypes of reinforced concrete bridges, such as the Luten arch, open spandrel ribbed arch, the rigid frame bridge and concrete girders were introduced and built as grade crossing elimination structures.

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

Yes this bridge retains integrity of its character defining elements. Although some repairs were made to the wingwalls, the barrel, the spandrel walls, the parapets, and the abutments, all are original and have moderate deterioration.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer and why?

Yes this bridge is a significant example of the State Roads Commission’s efforts from 1910 until 1945 to eliminate dangerous geometric alignments. The development of standardized plans helped to facilitate this process.

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

No this bridge should not be given further study.

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

Surveyor:
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HA- 1984
HARFORD COUNTY, MD.

JOHN TARQUINIO

26 JAN 1995
MARYLAND SHPO S 109

- BRIDGE NO. 12004 OVER WINTERS RUN
- VIEW LOOKING SOUTH ON MD BUSINESS ROUTE 1

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26 JAN 1995
MARYLAND SHPO JHY
- BRIDGE NO. 12004 OVER WINTERS RUN
- VIEW LOOKING NORTH ON MD BUSINESS ROUTE 1
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HARFORD COUNTY, MD
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26 JAN 1995
MARYLAND SHPO S17X9
- BRIDGE NO. 12004 OVER WINTERS RUN
- VIEW LOOKING EAST

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26 JAN 1995
MARYLAND SHPO S RA
- BRIDGE NO. 12004 OVER WINTERS RUN
- VIEW FROM BRIDGE 12004 EAST TO BRIDGE 1553
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HA-1984
HARFORD COUNTY, MD
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26 JAN 1995
MARYLAND SHPO SHA
- BRIDGE NO. 12004 OVER WINTERS RUN
- VIEW OF PLAQUE ON EAST PARAPET

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