

Maryland Historical Trust

Maryland Inventory of Historic Properties number: HO-669

Name: Fiber Alley over Fiber River

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"/> X	Eligibility Not Recommended _____
Criteria: <input type="checkbox"/> A <input type="checkbox"/> B <input checked="" 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>

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

MHT Number HO-669

**Name and SHA No.** Tiber Alley over Tiber River/HO 107

**Location:**

**Street/Road Name and Number:** Tiber Alley

**City/Town:** Ellicott City      Vicinity \_\_\_\_\_

**County:** Howard

**Ownership:** \_\_ State X County \_\_ Municipal \_\_ Other

**This bridge projects over:** \_\_ Road \_\_ Railway X Water \_\_ Land

**Is the bridge located within a designated district:** X yes \_\_ no

X NR listed district \_\_ NR determined eligible district

    \_\_ locally designated \_\_ other

    Name of District Ellicott City National Register Historic 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

X Metal Girder

X 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 Setting:**

Bridge HO 107 carries Tiber Alley over the Tiber River in Ellicott City, Howard County, Maryland. Tiber Alley runs in a generally north-south direction at this location; the Tiber River runs generally east-west. The bridge is located in a small town with nineteenth-century domestic, commercial and industrial structures surrounding it. An adjoining nineteenth-century clapboard and stone structure serves as the east wall of the bridge, in place of a guardrail.

**Describe Superstructure and Substructure:**

The superstructure of HO 107 is a single span rolled steel beam structure constructed in 1935. The bridge has a span length of 34 feet, and an overall length of 38 feet. The bridge has a corrugated metal deck with a bituminous overlay. It has a metal guardrail on the west elevation. Bridge HO 107 has a clear roadway width of 16.66 feet, and an out-to-out width of 17 feet. The bridge has a sufficiency rating of 69.9.

The substructure is actually a channelized wall for the Tiber River, which has been channeled in this area. The cut stone used for this retaining wall is the same as that used in the construction of the surrounding structures. Therefore, it is highly likely that this wall's construction dates to the early-nineteenth century time period of the adjoining structures.

**Discuss Major Alterations:**

In 1984 the corrugated metal deck was replaced and the steel stringers were strengthened.

**History:**

**When Built:** 1935, deck replaced 1984

**Why Built:** Structure HO 107 was constructed to meet local transportation needs.

**Who Built:** Unknown

**Why Altered:** Structure HO 107 was altered to meet structural and safety needs.

**Was this bridge built as part of an organized bridge building campaign:** yes

**Surveyor Analysis:**

**This bridge may have NR significance for association with:**

- A Events     Person
- C Engineering/Architectural

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

There has been a bridge of some type at this crossing of the Tiber River since the construction of the surrounding structures in the early-nineteenth century. Tiber Alley serves as an access road to approximately five structures. It is likely that a bridge was built here in direct response to the need for access to and from the newly constructed structures in the early-nineteenth century; or, a bridge was erected here to allow for construction of the structures on the other

side of the Tiber River. HO 107 is likely an early-twentieth-century replacement of a much earlier structure. In the early-twentieth century many less stable timber and stone structures were replaced with more stable steel beam bridges, capable of carrying much heavier traffic, such as automobiles and trucks. It is probable that HO 107 is a typical example of this surge of replacements in Howard County.

**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?**

It is not likely that construction of, or alterations to, HO 107 had a significant impact on the growth and development of the area because this bridge is an early-twentieth century replacement of an earlier structure. However, construction of the original structure certainly would have had a significant impact on the development of the area.

**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:**

HO 107 is located in the Ellicott City National Register Historic District. Though the bridge post-dates the period of construction of the most of the district, the bridge blends in with the historic landscape, and does not detract from the visual or historic character of the district.

**Is the bridge a significant example of its type?**

Bridge HO 107 is a unique example of a steel beam bridge. The stone masonry walls of the channeled Tiber River act as the abutments for the bridge. The east side of the bridge rests on, but is not supported by, the iron supports of an adjoining stone and clapboard structure, the center of which spans the Tiber River as well. The unique engineering and construction features, combined with the fact that the alterations made to this bridge since 1935 have not been major structural repairs, cause this bridge to be considered a unique, and therefore significant example of its type.

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

Longitudinal I-beams are considered a primary character defining element. There is no record in the county bridge inspection files of these beams ever having been replaced. However, it is noted that in 1984 the steel stringers were strengthened for structural support.

The bridge deck is considered a secondary character defining element. The county inspection files note that the corrugated metal deck was replaced and a new bituminous overlay was put down in 1984. It is probable that similar repairs have been made in the past, as well as cleaning, painting and guardrail replacement, although no record of that appears in the inspection reports.

Stone masonry abutments are considered primary character defining elements. Bridge HO 107 rests on stone masonry retaining walls. While not the typical style, these retaining walls act as abutments for the bridge. The retaining walls were put in when the Tiber River was channeled, sometime in the early-nineteenth century.

Bridge HO 107 is currently in good condition. Repairs that have been made to the structure have been relatively minor or replacements in kind. The fact that the original substructure and the unique construction techniques have not been changed dramatically over the course of the last 100 plus years, leads to the conclusion that the bridge does retain a certain amount of integrity of the elements described in the Context Addendum.

**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 work of the designer or engineer.

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

No, this bridge does not need to be given further study.

**Bibliography:**

Howard County Bridge Inspection Files

Spero, P.A.C. & Company, and Louis Berger & Associates **Historic Bridges in Maryland: Historic Bridge Context**, September 1994.

**Surveyor:**

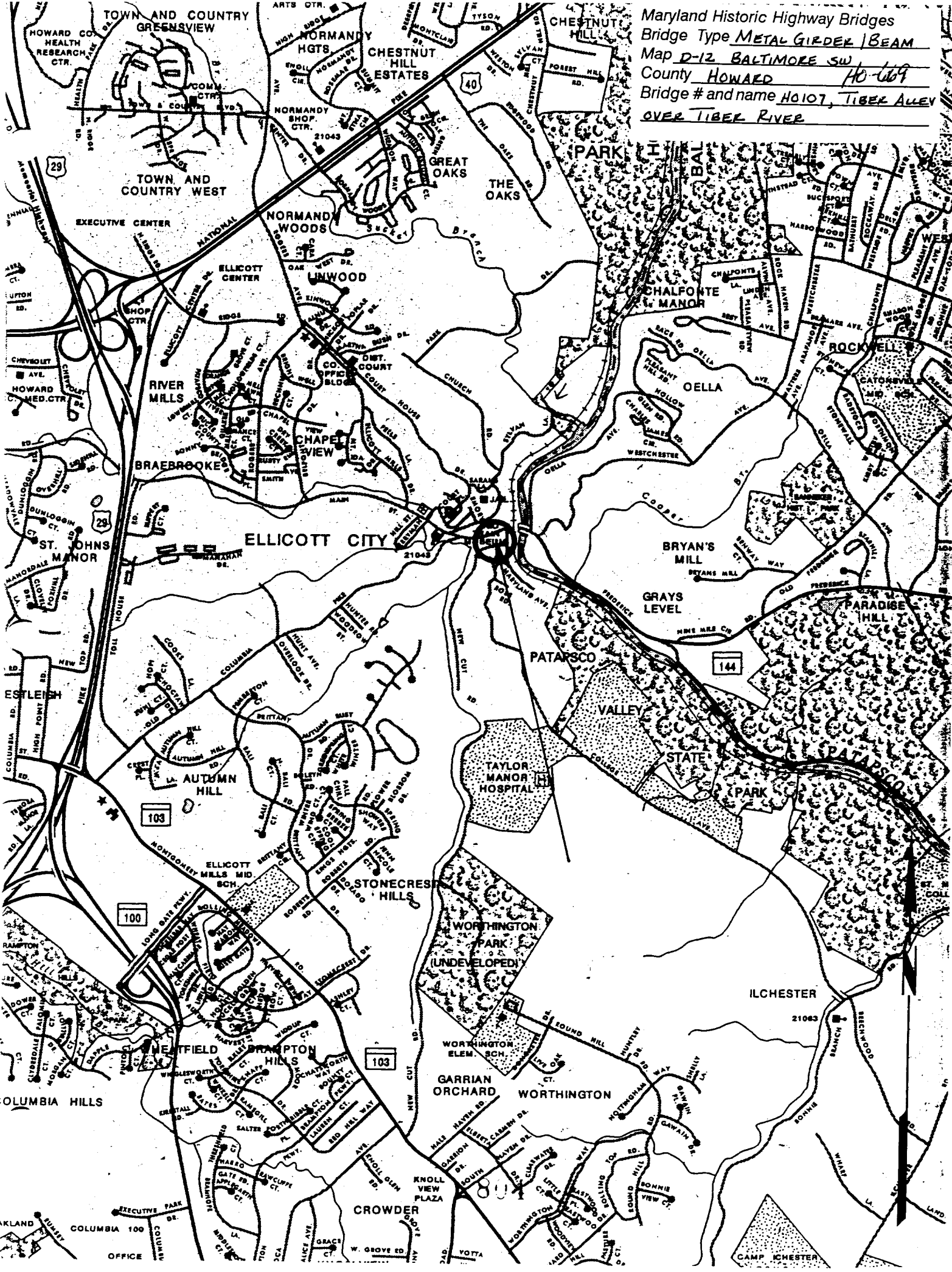
**Name:** Stephanie L. Bandy **Date:** August 1995

**Organization:** State Highway Admin. **Telephone:** (410) 321-2213

**Address:** 2323 West Joppa Road Brooklandville, MD 21022

Revised by P.A.C. Spero & Company, July 1998

Maryland Historic Highway Bridges  
Bridge Type METAL GIRDER / BEAM  
Map D-12 BALTIMORE SW  
County HOWARD HO-669  
Bridge # and name HO107, TIBER AVEY  
OVER TIBER RIVER





WEIGHT  
LIMIT  
30 000  
POUNDS

STOP

Inventory # HO-669

Name HO107-TIBER ALLEY OVER TIBER RIVER

County/State HOWARD MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description SOUTH APPROACH LOOKING  
NORTH

Number 1 of 3  
2 of 36

1996 49502714 6 \*01





Inventory # HO-669

Name HO107-TIBER ALLEY OVER TIBER RIVER

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description NORTH APPROACH LOOKING SOUTH

Number 2 of 3



Inventory # H0-669

Name HD107-TIGER ALLEY OVER TIGER RIVER

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description EAST ELEVATION LOOKING

NORTHWEST

~~#3~~ 3  
Number 7 of 20

DISCONTINUED 9/90