Maryland Historical Trust

Maryland Inventory of Historic Properties number: HO-659

Name: Murray Hill Rd. (Wilmer Brown Rd.) over Middle Patuxent 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 _____ Eligibility Not Recommended __X____

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 MHT Number HO-659
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

Name and SHA No. Murray Hill Road over Middle Patuxent River/HO 15

Location:
Street/Road Name and Number: Murray Hill Road

City/Town: Savage 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:_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

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 15 carries Murray Hill Road over the Middle Patuxent River in Howard County, Maryland. Murray Hill Road runs in a generally east-west direction at this location; the Middle Patuxent runs generally north-south. The bridge is located in a semi-rural residential area. There is a modern housing development in close proximity to the bridge, as well as an elementary school. The Middle Patuxent has a wooded channel bank in this area.

Describe Superstructure and Substructure:HO 15 is two separate structures divided by a longitudinal roadway joint. The length of each span is 60', with a total bridge length of 62'.

The superstructure of the upstream portion is a single span steel girder bridge with a floor beam and stringer system. The deck is corrugated metal filled with bituminous concrete. The substructure of the upstream portion consists of stone masonry abutments. This portion makes up the original 1940 section of the bridge.

The superstructure of the downstream portion is a single span steel beam bridge with a concrete deck. The substructure of the downstream portion consists of stone faced concrete abutments. This portion is the modern widened section of HO 15, added in 1991.

Discuss Major Alterations:HO 15 has had two periods of major alterations. In 1976 the superstructure was rebuilt. This consisted of installation of a new floor and deck system. Repairs were also made to the stone masonry abutments at this time. This structure is the current upstream portion of the bridge.

In 1991 HO 15 was widened from a one lane bridge to a two lane bridge. In order to do this another steel beam bridge with a concrete deck was added on the downstream side of the extant bridge. The two structures were joined with a longitudinal roadway joint. The abutments for the new portion of the bridge were designed as stone faced concrete, so that they would resemble the abutments on the original portion of the bridge.

History:
When Built:1940
Why Built: local transportation needs.

Who Built:unknown
Why Altered:needs of the growing population in the vicinity of the bridge, and for structural repairs 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 __B Person
__C Engineering/Architectural

Was this bridge constructed in response to significant events in Maryland or local history: Many less stable bridges were replaced with steel beam bridges during the early part of the twentieth century to better facilitate the increase in population and the more common use of automobiles as a mode of transportation. Other than being a typical replacement of the time period, it is not likely that HO15 was constructed in response to any specific events in Maryland or local history.

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: No, construction and alteration of the structure did not have a significant impact on the growth or development of the area.

Is the bridge located in an area which 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 which may be eligible for historic designation.

Is the bridge a significant example of its type: No, this structure is not a significant example of its type.

Does the bridge retain integrity of the important elements described in the Context Addendum: Rolled wide flange beams are considered primary character defining elements. The beam system was rebuilt in 1976 on the upstream/original portion of the bridge. The floor system and deck are considered secondary character defining elements. Likewise, the floor and deck of HO15 were replaced in 1976. The channel guard rail is considered a tertiary character defining element as an additional functional feature. It too was replaced in 1976, and has had subsequent repairs since then.

The downstream portion of HO15 was added in 1991. All character defining elements of the superstructure of this portion of the bridge are new additions.

Stone masonry abutments are considered a primary character defining element. The abutments on the upstream/original portion of HO15 were repaired and repointed in 1976. The abutments of the downstream portion of the bridge were built in 1991. It is noteworthy that these abutments are a sympathetic addition, in that they were constructed to resemble

the original 1940 stone masonry abutments on the other portion of the bridge.

Rebuilding of the superstructure of the upstream/original portion of HO15 in 1976, combined with the 1991 downstream addition, jeopardizes the integrity of the bridge.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer and why: While the upstream portion of the structure is a typical example of bridge construction in the 1940's, it is not a significant example of a particular manufacturer, designer or engineer.

Should this bridge be given further study before significance analysis is made and why: No, this structure should not be given further study. Reconstruction, modifications and the 1991 downstream addition to the structure place its integrity in doubt.

HO-659

Bibliography:

Howard County
v.d Bridge Inspection Files.
Greiner, Inc.
1995 Historic Bridge Inventory Form.
Spero, P.A.C. & Company, and Louis Berger & Associates
1994 Historic Bridges in Maryland: Historic Bridge Context.
United States Geological Survey
1957 7.5' Savage Quadrangle, photorevised 1966, 1974.

Surveyor:

Name: Stephanie L. Bandy **Date:**August 1995
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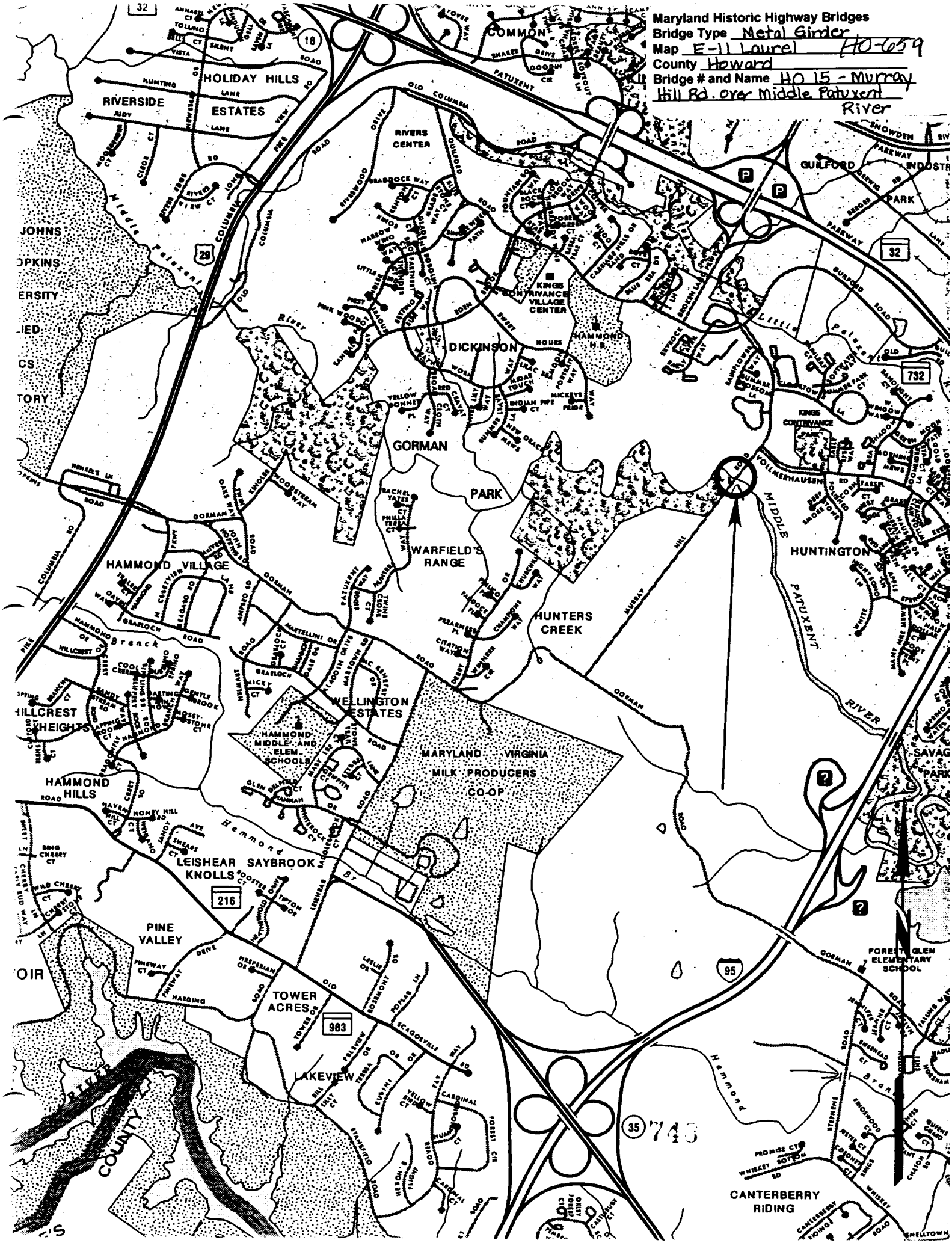
Maryland Historic Highway Bridges
Bridge Type Metal Girder
Map E-11 Laurel HO-659
County Howard
Bridge # and Name HO 15 - Murray Hill Rd. over Middle Patuxent River



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HO 15

MURRAY HILL ROAD OVER MIDDLE PATUXENT RIVER

HOWARD CO., MD

C. HALL

?/98

MD SHPO

SOUTH APPROACH

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MURRAY HILL ROAD OVER MIDDLE PATUXENT RIVER

#015

HOWARD CO, MD

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NORTH APPROACH

1 OF 8

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HO 15

MURRAY HILL ROAD OVER MIDDLE PATUXENT RIVER

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EAST PARAPET

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-HO15

MURRAY HILL ROAD OVER MIDDLE PATUXENT RIVER

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WEST PARAPET, SW VIEW

1 OF 8

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HOIS

MURRAY HILL ROAD OVER MIDDLE PATUXENT RIVER

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EAST ELEVATION

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HO15

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West Elevation

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Murray Hill Road over Middle Patuxent River

HO-65a

HC15

MURRAY HILL ROAD OVER MIDDLE PATUXENT RIVER

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EAST PARAPET, NE VIEW

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HO 15

MURRAY HILL ROAD OVER MIDDLE PATUXENT RIVER

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WEST PARAPET, NW VIEW

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