Maryland Historical Trust

Maryland Inventory of Historic Properties Number: BA-2661

Name: B-0421 (Kearney Mill Rd. over Little Falls)

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 _____	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 NO. BA-2661**
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION
MARYLAND HISTORICAL TRUST

NAME AND SHA NO.: B-0421

LOCATION
Road Name and Number: Keeney Mill Road over Little Falls
City/Town: Grimesville X vicinity
County: Baltimore

Ownership: _ State X County _ Municipal _ Other

Bridge projects over: _ Road _ Railway X Water _ Land

Is bridge located within 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 Bridge

__ Metal Truss Bridge

__ Moveable 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
_ Concrete Arch _ Concrete Slab X Concrete Beam _ Rigid Frame
_ Other Type Name ___

DESCRIPTION

Describe the Setting:

Bridge B-0388 carries Keeney Mill Road over Little Falls in northern Baltimore County. Keeney Mill Road runs east and west in this location, while Little Falls flows north to south. Located in the Piedmont physiographic province, a region characterized by variegated topography created by rivers and streams cutting through the valley, the bridge is surrounded by wooded land and a late-eighteenth or early-nineteenth-century brick residence near the southwest corner.

Describe the Superstructure and Substructure:
(Discuss points identified in Context Addendum, Section C)

Bridge B-0067, a single-span concrete tee-beam structure skewed 16 degrees, has a clear span length of 20' and a total bridge length of 22'. The 18'-4" wide roadway carries two lanes of traffic. The solid concrete parapets and the concrete slab are integrated with the girders. Steel W-beam guardrails are attached to the ends of the parapets. The substructure consists of concrete abutments and flared concrete wing walls.

Details of the bridge's condition from a 1993 inspection report include an uneven, rutted surface and heavy spalling and soft concrete in the northern bay of the underside of the deck. The north parapet showed heavily spalled areas and was protected with a non-standard guardrail. The substructure exhibited spalling on the wing walls with vertical fractures apparent on the southeast wing wall, and evidence of minor scour but no undermining. Due to the structure's advanced deterioration of concrete, replacement of the bridge was recommended in 1993.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Slightly more than two-thirds (76) of that total were single-span bridges.

Discuss major alterations:

Comparison between photographs taken in 1993 and 1995 indicated that repairs were undertaken during this period. Alterations include patching of deteriorated concrete, replacement or rebuilding of both parapets, and installation of steel W-beam guardrails on all four corners of the structure.

HISTORY

When Built: 1920
Why Built: Statewide road improvement programs and local transportation needs.

Who Built: Unknown
Who Designed: Unknown
Why Altered: Advanced deterioration of the concrete
Was this bridge built as part of an organized bridge building campaign?: No

This bridge was built during the Good Roads Movement era but was not one of the primary corridors slated for improvement.

SURVEYOR ANALYSIS

This bridge may have NR significance for association with:

_ A (Events) _ B (Person) _ C (Engineering/Architectural Character)

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

In many ways, Baltimore County was a leader in modern bridge construction, affecting the materials and design of concrete structures throughout the state. Baltimore was the first of the state's counties to hire a professional engineer to oversee construction and maintenance of its roads. Early Maryland Geological Survey and State Road Commission Reports relate that the county began to build concrete bridges and culverts in 1901, and that by 1903 had constructed many good roads and replaced old wooden bridges with permanent structures. The "progressive work" by the Baltimore county engineer in 1903 was evidenced by the first reinforced concrete highway bridge built in the state. The method of reinforcing concrete using steel rods embedded in concrete beams allowed the girders to withstand heavy loads with no steel surface exposed to air, thereby significantly reducing maintenance costs.

A 1906 state highway report stated that improvement projects begun in 14 counties included the widening, straightening, and/or grading of many existing roads, as well as the construction of many new bridges to carry these rebuilt roads. The rapid increase of automobile, truck, and bus traffic during the early decades of the twentieth century prompted the replacement of old bridges with new, modern concrete structures. During the 1920s, the State Road Commission embarked upon a plan to both improve the safety and comfort of the primary roads while also building up the secondary and farm-to-market road system. The establishment of district engineering offices during the 1910s, the creation of a separate bridge department within the State Road Commission in 1920, and the development of standard statewide specifications for bridges undoubtedly aided the construction of nearly 750 concrete bridges and culverts between 1902 and 1929 in Baltimore County. Finally, the elimination of toll roads, many of which ran through the county and terminated in Baltimore city, may have induced the improvement of additional county roads in an effort to provide unlimited access through the 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?

No, the construction of this bridge did not play an active role in the growth or development of this portion of Baltimore County.

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

No, this bridge is not located within an area eligible for historic district designation.

Is the bridge a significant example of its type?

No, due to its relatively poor condition and recent replacement of both parapets, this bridge does not stand as a significant example of its type.

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

No, this bridge does not retain integrity of all of its character defining elements. Recent inspection reports detail advanced stages of deterioration on the underside of the deck, the parapets and the wing walls. According to photographs dated January 1995, both parapets were either rebuilt or replaced between 1993 and 1995.

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

No, this bridge is not a significant example of the work of the manufacturer, designer, and/or engineer. This bridge was most likely built to standard state specifications, which corresponded to the structure's span length and year.

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

No, this bridge should not receive further study.

BIBLIOGRAPHY

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1930 *Reports of the State Roads Commission of Maryland for the Years 1927, 1928, 1929, and 1930.* State of Maryland, State Roads Commission, Baltimore.

SURVEYOR INFORMATION

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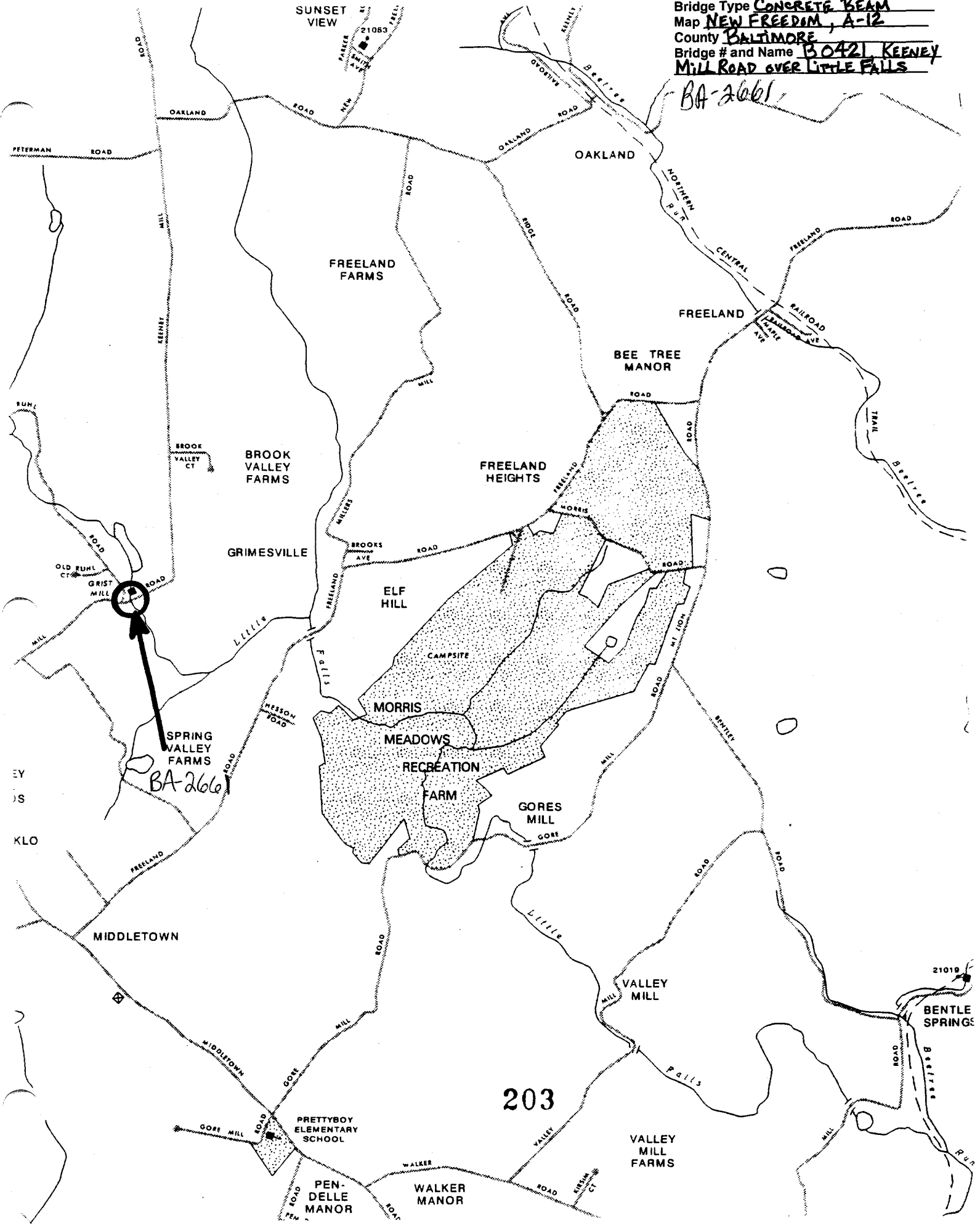
Maryland Historic Highway Bridges
Bridge Type CONCRETE BEAM
Map NEW FREEDOM, A-12
County BALTIMORE
Bridge # and Name B0421, KEENEY MILL ROAD OVER LITTLE FALLS
BA-2661




WEIGHT
LIMIT

Inventory # BA-2661

Name B0121- KEENEY MILL RD OVER LITTLE FALLS

County/State BALTIMORE COUNTY / MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description EAST APPROACH LOOKING WEST

Number 1 20 of 23 4

Inventory # BA-2661

B0421- KEENEY MILL RD OVER LITTLE FALLS

Name

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description NORTH ELEVATION LOOKING SOUTH

Number ~~21~~ 2 of ~~23~~ 4

Inventory # BA-2661

Name B0421-KEENEY MILL RD OVER LITTLE FALLS

County/State BALTIMORE COUNTY | MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description SOUTH ELEVATION LOOKING NORTHWEST

Number 3 ~~22~~ of ~~23~~ 4

Inventory # BA-2661

Name B0421 - KEENEY MILL RD OVER LITTLE FALLS

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description WEST APPROACH LOOKING EAST

Number ~~23~~ 4 of ~~23~~ 4