# Maryland Historical Trust

Maryland Inventory of Historic Properties Number: B-4530
Name: SION AND SINGUED MIDDLE 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

MHT No. B-4530

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

Name and SHA No. Hanover Street Bridge (No. LC 5210)
Location:
Street/Road Name and Number: Hanover Street over the Middle Branch of the Patapsco River
City/Town: Baltimorevicinity
County: Baltimore
Ownership:StateCounty _x_MunicipalOther
This bridge projects over:RoadRailway _x_WaterLand
Is the bridge located within a designated district:yes _x_noNR listed districtNR determined eligible districtlocally designatedother Name of District
Bridge Type:
Timber BridgeBeam BridgeTruss-CoveredTrestleTimber-and-Concrete
Stone Arch
Metal Truss Bridge
<ul> <li>x_Movable Bridge</li> <li>_Swing _Bascule Single Leaf x_Bascule Multiple Leaf</li> <li>_Vertical Lift _Retractile _Pontoon</li> </ul>
Metal GirderRolled Girder Concrete EncasedPlate GirderPlate Girder Concrete Encased
Metal Suspension
Metal Arch
Metal Cantilever
Concrete Concrete ArchConcrete SlabConcrete BeamRigid FrameOther Type Name

B-4530

### **Description:**

## **Describe Setting:**

The Hanover Street Bridge carries Hanover Street over the Middle Branch of the Patapsco River at Baltimore's outer harbor in a roughly north-south direction. The north end of the bridge is located in an industrial area; the south end is located in Middle Branch Park.

#### **Describe Superstructure and Substructure:**

The Hanover Street Bridge is a concrete arch, double leaf bascule movable bridge. The concrete arches have open spandrels. The arch intrados are ribbed. There are 37 approach spans and one main span. The bridge is 2,290 feet long, with a clear roadway 60 feet wide. A five feet wide sidewalk lines each side of the bridge. The deck is steel open grid on the bascule span.

The bascule is a Rall rolling lift designed and patented by the Strobel Steel Construction Company of Chicago (Hool et al. 1943:17-18). A rolling lift bascule is one in which the center of rotation moves away from the opening as the span swings upward (Spero 1994:92). A plaque attached to the bridge attests to this information.

There are four identical neo-classical houses, one at each corner of the bascule span. Early bridge engineers encouraged the building of four identical houses, if there was room, in the interest of symmetry, and doubtless this was done on the Hanover Street bridge because of its great length. The houses are two stories above the road and two stories below, constructed of concrete. Colossal pilasters flank the doorways. Above the door are three rectangular windows. The two end windows contain six lights; the center contains nine. Windows on the second story, side elevations are also rectangular and contain nine lights. One story below the roadway on the outside elevation is a rectangular window. The second story below the roadway contains a door. The houses appear to be unaltered from the original.

There are three plaques attached to the bridge. The first gives the construction date of 1914-1917 and lists the members of the State Roads Commission. Henry G. Shirley is listed as Chief Engineer and John E. Greiner is listed as Consulting Engineer. The second plaque dates the rehabilitation of the bridge in 1971. The third dedicates the bridge to the Vietnam Veterans of Maryland and is dated May 30, 1993.

#### Discuss major alterations:

The north abutment slab is new. Arcades C and D suffered severe settlement of their foundations and were entirely replaced in 1990. The bascule span was rehabilitated and repainted in 1990 also. In 1992, there was a major rehabilitation of the machinery and the center opening gear and drive were replaced with an enclosed speed reducer.

B-4530

#### History:

When Built: 1916/1970/1992

Why Built: To redirect traffic away from the deteriorated Light Street Bridge.

Who Built: State Roads Commission

Who Designed: John E. Greiner under the direction of Henry G. Shirley, State Roads

Commssion

Why Altered: Rehabilitation of deteriorated parts.

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

It does not appear that this bridge was part of an organized bridge-building campaign. The bridge was built to divert traffic from the deteriorated Light Street Bridge.

#### Surveyor Analysis:

This bridge may have NR significance for association with:

x\_A Events \_B Person

x\_C Engineering/Architectural Character

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

Unknown.

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?

While its precise influence on the growth and development of this part of Baltimore at the time of its construction is not known with certainty, it is presumed that a wider crossing at this point, with a capability to handle increased traffic loads and speeds, would have had a positive impact on the economy of the area by facilitating the transport of goods and services.

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

The area around the bridge is unlikely to be eligible for historic designation. However, if it were so designated, the bridge would certainly add to the historic and visual character of the possible district.

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

The Hanover Street Bridge is significant under Criterion A for its role in the development of transportation in Maryland during the period of Industrial-Urban Dominance, when vehicular traffic took precedence over steamboats to transport local goods to market.

244 B-4530

The bridge is significant under Criterion C in that it is the only movable bridge inventoried in this survey to have four identical neo-classical bridge tender's and operating machinery houses. That they are virtually unaltered is rarer still. At the time of its construction, it was the "largest piece of work yet undertaken by the State Roads Commission, and was the largest reinforced concrete bridge in the State, and one of the most difficult pieces of bridge engineering construction in the country" (Spero 1994:99).

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

The Hanover Street Bridge retains its integrity of location, design, setting, materials, and association. It retains its original plaque. The houses are unaltered. Replacement elements were done in-kind. There has been no disruption of the structural or visual impact of the bridge. The bridge is potentially eligible for listing in the National Register of Historic Places.

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

The Hanover Street Bridge is a significant example of the collaborative work of the State Roads Commission and the J. E. Greiner Company. The J. E. Greiner Company was established in 1908 by John Edwin Greiner, a prominent Baltimore engineer, who had previously designed railroad bridges for the Baltimore and Ohio Railroad. The Greiner Company designed many movable bridges in Maryland, and each bridge exhibits a different style and different decorative elements.

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

Further study of this bridge may provide answers to the question of its impact on the growth and development of the area of the city surrounding it.

Provide black and white prints and negatives and color slides of bridge, details, and setting labeled according to NR Bulletin 16A and Maryland Supplement to Bulletin 16A.

Provide a photocopy USGS map illustrating the location of the bridge.

Surveyor:

Name: Organization: Alice Crampton/Julie Abell Parsons Engineering-Science Telephone:

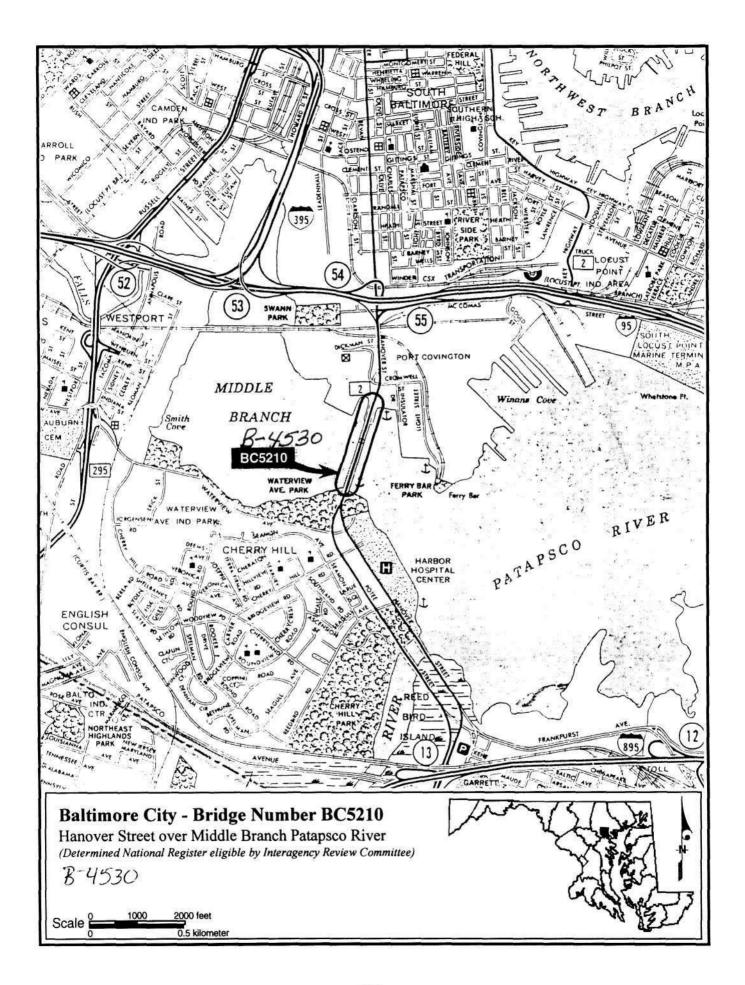
Date:

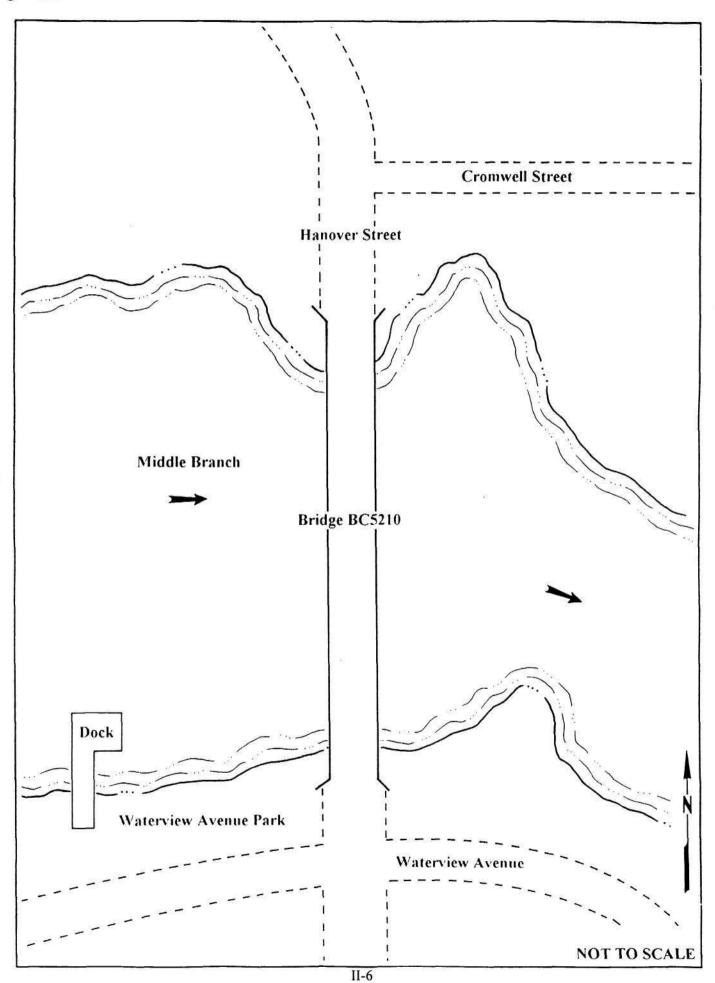
Dec. 16, 1994 (703) 591-7575

Address:

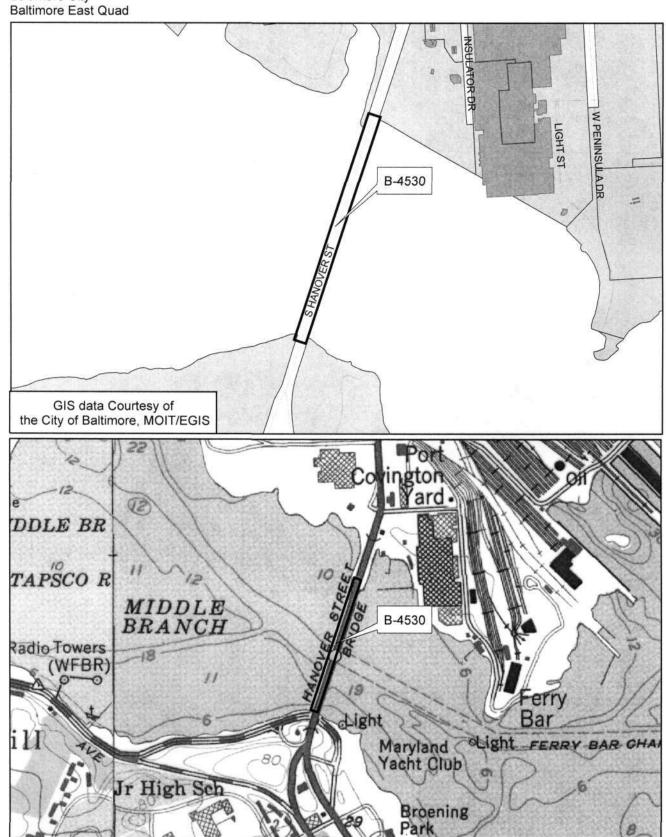
10521 Rosehaven Street

Fairfax, Virginia 22030-2899





B-4530 Hanover Street Bridge (BC5210) S. Hanover Street over Middle Branch/Patapsco River Baltimore City





Hanover Street Bridge (BC5210) Baltimore County, Maryland Julie Abell 12/94 Maryland State Highway Administration Northwest elevation 1 of 11

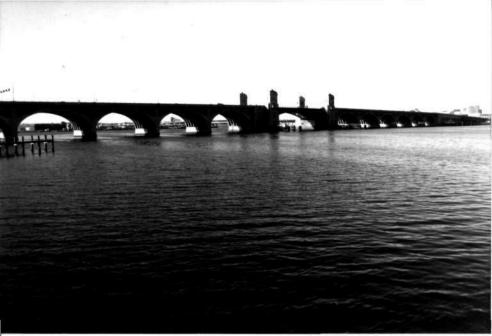


Hanover Street Bridge (BC5210) Baltimore County, Maryland 12/94

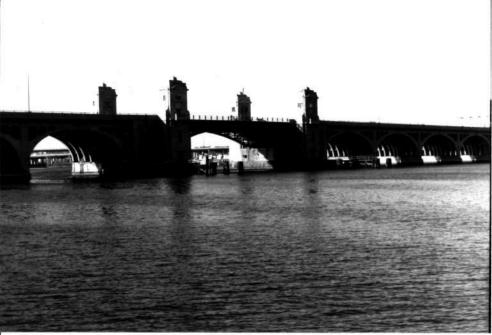
Maryland State Highway Administration

Julie Abell

Northwest elevation, detail



B-4530 Farover Street Bridge (BC5210) Baltimore County, Maryland Julie Abell Maryland State Highway Administration Southeast elevation 3 of 11



Hanover Street Bridge (BC5210) Baltimore County, Maryland Julie Abell Maryland State Highway Administration Southeast elevation, detail



Hanover Street Bridge (BC5210) Baltimore County, Maryland Julie Abell Mariland State Highway Administration Approach looking northeast



Hanover Street Bridge (BC5210) Baltimore County, Maryland Julie Abell Maryland State Highway Administration Approach looking southwest 6 of 11



# HANOVER STREET BRIDGE

# STATE ROADS COMMISSION

EMERSON C. HARRINGTON, GOVERNOR

FRANK H. ZOUCK. . . .

PHILLIPS & GOLDSBOROUGH, GOVERNOR OVINGTON E. WELLER. . . CHAIRMAN THOMAS PARRAN

O. CLINTON UHL JOHN F. MUDD ANDREW RAMSEY C. H. WILSON. W. L. MARCY, SECTY

THE RESERVE OF THE PARTY OF THE

JOHN E. GREINER.

B-4530 Hanover Street Bridge (BC5210) Baltimore County, Manyland Julie Abell 12/94 Maryland State Highway Administration

1917 plaque, 1971 plaque



Hanover Street Bridge (BC5210) Baltimore County, Maryland Julie Abell 12/94

Manyland State Highway Administration

1916 plaque



Hanover Street Bridge (BC5210) Baltimore County, Maryland

Maryland State Highway Administration

Julie Abell

12/94

9 of 11

1993 plaque



Hanover Street Bridge (BC5210) Baltimore County, Maryland Julie Abell

Maryland State Highway Administration

Bascule span, roadway defail

12/94



Hanover Street Bridge (BC5210)
Baltimore County, Maryland
Julie Abell
12/94

Manyland State Highway Administration Bridge tender's house