Maryland Historical Trust

Maryland Inventory of Historic Properties Number: HO-695

Name: Old Columbia 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 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_____ Date:__3 April 2001_____

Reviewer, NR Program:_Peter E. Kurtze_____ Date:___3 April 2001_____

Maryland Inventory of Historic Properties MHT Number HO-695
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

SHA Bridge No. HO 64 **Name:** Old Columbia Road over Middle Patuxent River

Location:

Street/Road Name and Number: Old Columbia Road

City/Town: Columbia **Vicinity** X

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

_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_____

Describe Setting:

Bridge HO 64 carries Old Columbia Road over the Middle Patuxent River. Old Columbia Road runs north-south over the eastern flowing Middle Patuxent River. The bridge is in a rural section of Howard County. There is moderate residential development around the bridge.

Describe Superstructure and Substructure:

Bridge HO 64 is a single span filled concrete arch bridge. The length of the bridge is 49 feet with a clear span measuring 45 feet at the springline. The bridge has a rise of approximately 10 feet from springline to the crown. The rise to run ratio is 22 percent. The spandrel walls are approximately 12 feet by 12 feet. The wingwalls are approximately 10 feet by 8 feet. There is a clear roadway width of 15 feet 5 inches, with an overall bridge width of 17 feet 4 inches. The spandrel walls have moderate deterioration on the upstream and downstream walls. There are areas of moderate patching with pneumatically applied mortar on both spandrel walls. The arch ring has fine vertical cracking and some signs of efflorescence. According to a 1994 inspection report, the bridge is in satisfactory condition with a sufficiency rating of 83.0.

Bridge HO 64 has its original parapets. The builders used a closed parapet design that consists of vertical posts securely fastened by dowels to the structure, horizontal rails, and solid panels that fill the space between the posts and the railings. The panels may be precast, and the posts and rails were built in place. The precast panels are separated by solid paneled expansion joints. A 4-inch by 6-inch ledge extends the length of the parapets on the exterior of the bridge. The parapets are in a single section totaling 47 feet. Each section has 6 incised panels separated by a triangular shaped incision block. The parapets are in fair condition with moderate to light scaling.

Discuss Major Alterations:

There have been no major alterations to this structure.

History:
When Built? circa 1920
Why Built? Unknown
Who Built? Howard County Department of Public Works
Who Designed? Unknown
Why Altered? N/A
Was this bridge built as part of an organized bridge building campaign?
No, this bridge was not built as part of any state bridge building campaign.

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 March 1996.

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

The improvement of Howard County roads and bridges resulted from several events that occurred during the first 3 decades of the twentieth century. The original Good Roads movement was aimed toward improving the primary routes throughout the state as well as the connector routes such as Old Columbia Road. A later impact of this crusade included the various geometric improvements, including roadway widening and the reconstruction of substandard and narrow bridges to withstand the new demands placed on them by heavier

motorized traffic. During the 1920s, bridges that were initially adequate when roadway reconstruction was begun became obsolete as motorized traffic became modernized.

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, this 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 Maryland's efforts from 1910 until 1945 to eliminate dangerous geometric alignments. The development of standardized plans helped to facilitate this process. However, this bridge also represents the Howard County's efforts to maintain and construct their own bridges. It has the unusual feature of a central inscribed diamond. The bridge was located in an area where a standardized bridge could not be implemented because of the length requirement, so the engineers chose to implement a graceful arched design with the newly formulated reinforced concrete technology.

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

Yes this bridge retains integrity of its character defining elements. The abutments, the barrel, the spandrel walls, and the parapets are original.

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

Yes, this bridge is a significant example of the work of Howard County in the 1920s.

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

No, further research should not be done on this bridge.

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

Johnson, Arthur Newhall
1899 The Present Condition of Maryland Highways. In *Report on the Highways of Maryland.* Maryland Geological Survey, The Johns Hopkins University Press, Baltimore.

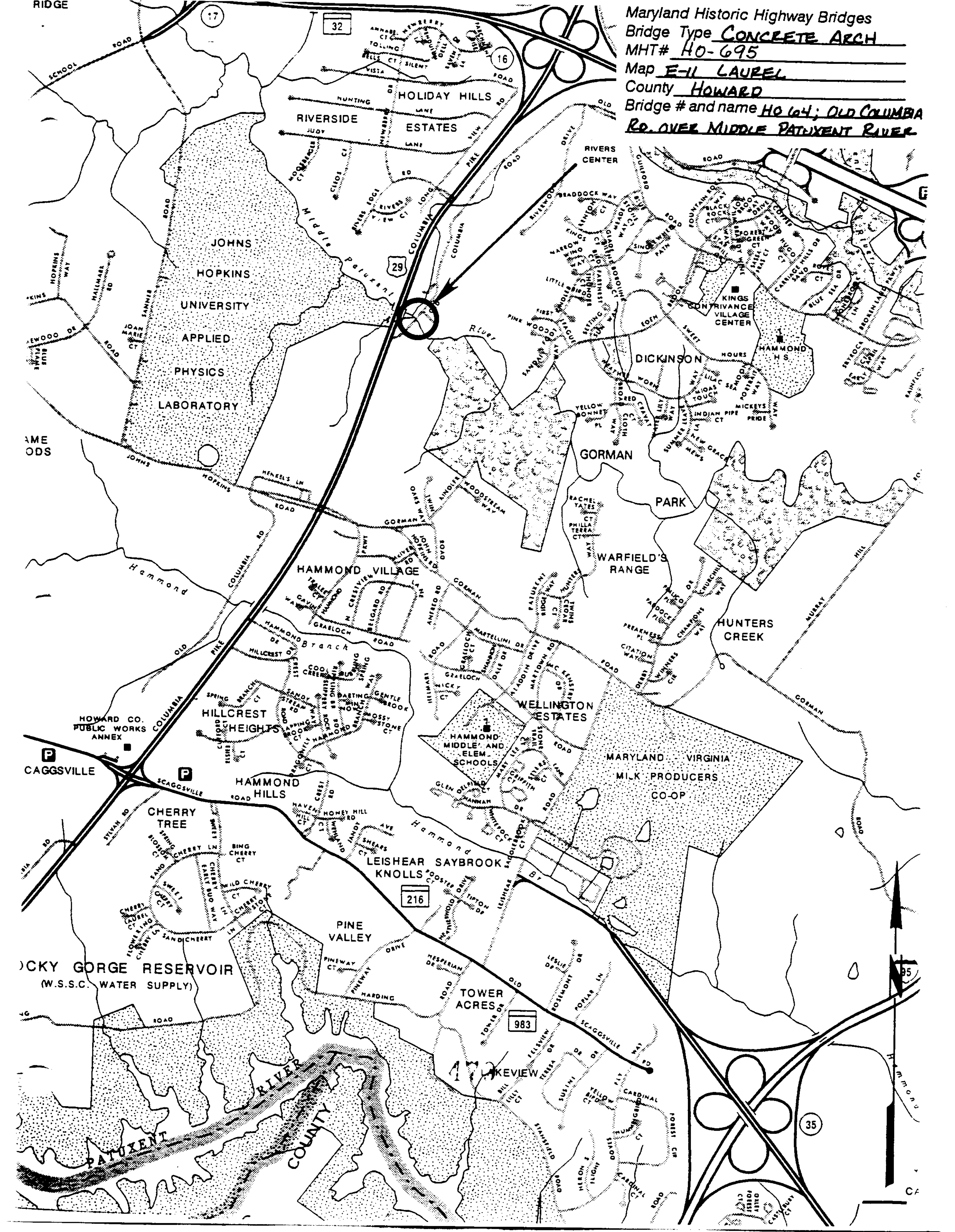
P.A.C. Spero & Company and Louis Berger & Associates
1995 Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report. Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore, Maryland.

Tyrrell, H. Grattan
1909 *Concrete Bridges and Culverts for Both Railroads and Highways.* The Myron C. Clark Publishing Company, Chicago and New York.

SURVEYOR:

Date bridge recorded December 1997
Name of surveyor Wallace, Montgomery & Associates / P.A.C. Spero & Company
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204
Phone number (410) 296-1635 **FAX number** (410) 296-1670

Maryland Historic Highway Bridges
Bridge Type CONCRETE ARCH
MHT# HO-695
Map E-11 LAUREL
County HOWARD
Bridge # and name HO 64; OLD COLUMBIA RD. OVER MIDDLE PATUXENT RIVER



Inventory # HO-695

Name HO64 - Old Columbia Pike over Middle Patuxent River

County/State Howard / MD

Name of Photographer David Diehl

Date 2/95

Location of Negative SHA

Description South approach looking northeast

Number 1 of 4

Inventory # HO-695

Name OLD COLUMBIA PIKE OVER H064-MIDDLE PATUXENT RIVER

County/State HOWARD / MD

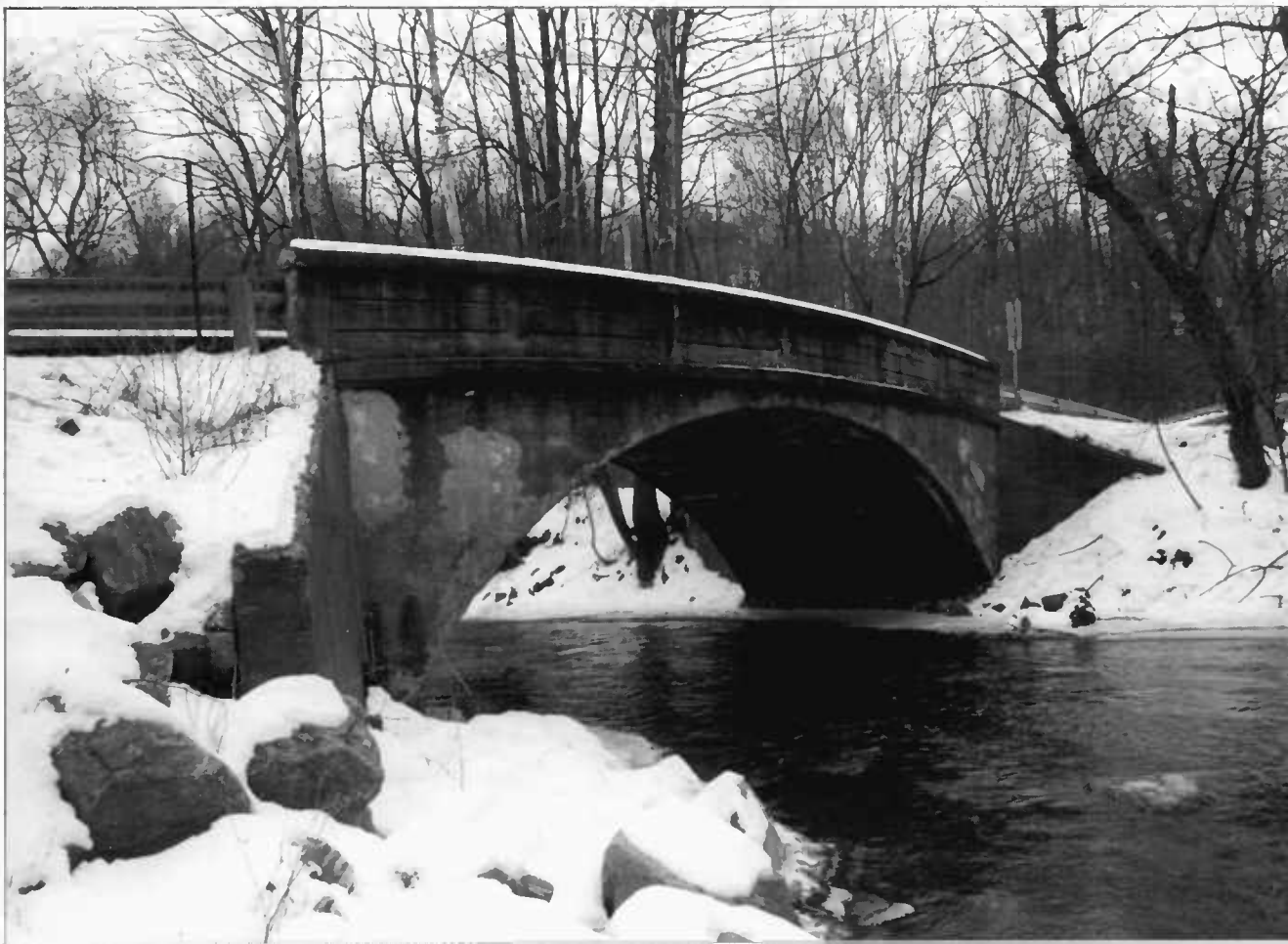
Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description NORTH APPROACH LOOKING SOUTH

Number 23 of 4



Inventory # HO-695

Name HO64- OLD COLUMBIA PIKE OVER MIDDLE PATUXENT RIVER

County/State HOWARD / MD

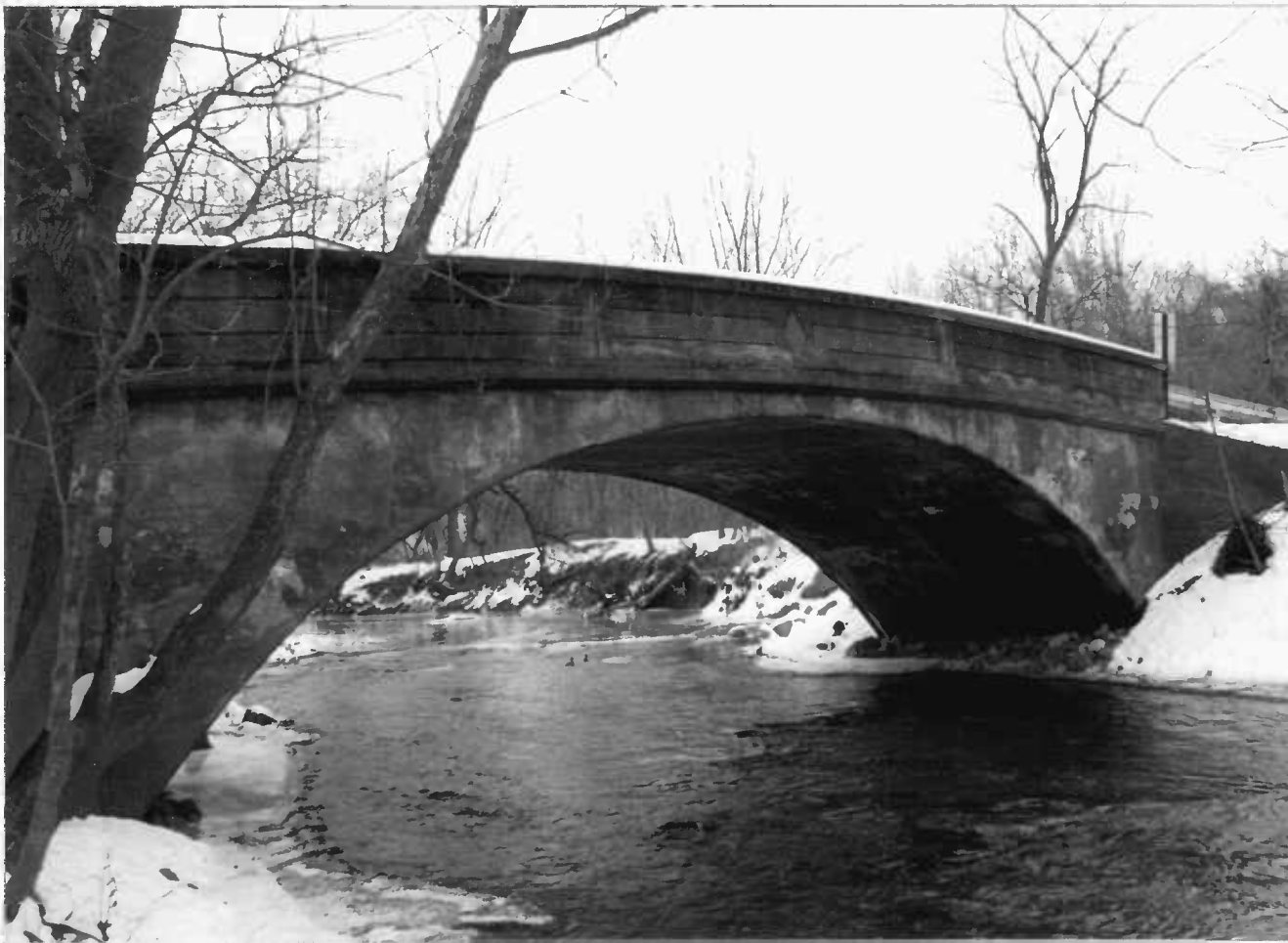
Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description WEST ELEVATION LOOKING SOUTH

Number 3 ~~10~~ of 4 ~~32~~



Inventory # HO-695

Name HO04- OLD COLUMBIA PIKE OVER MIDDLE PATUXENT RIVER

County/State HOWARD | MD

Name of Photographer DAVID DIEHL

Date 2|95

Location of Negative SHA

Description EAST ELEVATION LOOKING NORTHWEST

Number 4 of ~~32~~ 4

INDIVIDUAL PROPERTY/DISTRICT
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM

Property/District Name: Old Columbia Road Bridge Survey Number: HO-695

Tax Parcel#: N/A

Project: Maryland 216/29 Project Planning Study Agency: MDOT-SHA

Site visit by MHT Staff: ___no ___yes Name _____ Date _____

Eligibility recommended _X_ Eligibility **not** recommended _____

Criteria: __A __B _X_C __D Considerations: __A __B __C __D __E __F __G __None

Justification for decision: (Use continuation sheet if necessary and attach map)

The Old Columbia Road Bridge does not meet National Register Criteria A, B, or D. Preliminary research has not revealed any association between the bridge and events that have made a significant contribution to the broad patterns of our history (Criterion A) or the lives of persons significant in our past (Criterion B). There is no evidence that the bridge is likely to yield information important in history or prehistory (Criterion D).

However, based on Criterion C, the bridge, which embodies the distinctive characteristics of a type, period, and method of construction and possesses high artistic values, is National Register-eligible. The bridge strongly reflects two trends in bridge design: the renaissance of the concrete arch bridge and the development of standardized bridge design. In addition, the bridge bears evidence of the influence of the City Beautiful movement in its stylized cast concrete ornamentation. Thus, the bridge is National Register-eligible.

Documentation on the property/district is presented in: Maryland Historical Trust Inventory Form and Maryland 29/216 Project Planning Report

Prepared by: Traceries, 5420 Western Ave., Chevy Chase, MD 20815 November 1997

Reviewer, Office of Preservation Services Date 2/10/98

NR program concurrence: X yes ___no ___not applicable

Reviewer, NR Program Date 3/31/99

MARYLAND HISTORICAL TRUST Inventory No. HO-695
MD INVENTORY OF HISTORIC PROPERTIES

1. Name of Property

historic name _____
common/other name Old Columbia Road Bridge

2. Location

street & number Old Columbia Road not for publication _____
city or town Laurel vicinity __ state Maryland code MD
county Howard County code 27 zip code _____

3. State/Federal Agency Certification N/A

4. National Park Service Certification N/A

5. Classification

Ownership of Property (Check all that apply)

____ private
_X_ public-local
____ public-State
____ public-Federal

Category of Property (Check only one box)

____ building(s)
____ district
____ site
_X_ structure
____ object

Number of Resources within Property

Contributing	Noncontributing	
0	0	buildings
0	0	sites
1	0	structures
0	0	objects
1	0	Total

Is this property listed in the National Register?

Yes ____ Name of Listing _____
No X

6. Function or Use

Historic Functions (Enter categories from instructions)

Cat: TRANSPORTATION Sub: Bridge

Current Functions (Enter categories from instructions)

Cat: TRANSPORTATION Sub: Bridge

7. Description

Architectural Classification (Enter categories from instructions)

No Style

Materials (Enter categories from instructions)

foundation Concrete
roof N/A
walls Concrete
other

Narrative Description (Describe the historic and current condition of the property.)

See Continuation Sheet No. 7-1

==========
8. Statement of Significance
==========

Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

____ A Property is associated with events that have made a significant contribution to the broad patterns of our history.

____ B Property is associated with the lives of persons significant in our past.

_X_ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

____ D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

____ A owned by a religious institution or used for religious purposes.

____ B removed from its original location.

____ C a birthplace or a grave.

____ D a cemetery.

____ E a reconstructed building, object, or structure.

____ F a commemorative property.

____ G less than 50 years of age or achieved significance within the past 50 years.

==========

Areas of Significance (Enter categories from instructions)
Transportation
Engineering

Period of Significance 1915-present

Significant Dates 1915-1930

Significant Person (Complete if Criterion B is marked above)

Cultural Affiliation Undefined

Architect/Builder Unknown

Narrative Statement of Significance (Explain the significance of the property.)

See Continuation Sheet No. 8-1

==========
9. Major Bibliographical References
==========
(Cite the books, articles, legal records, and other sources used in preparing this form.)

P.A.C. Spero & Company and Louis Berger & Associates, *Historic Highway Bridges in Maryland: 1631-1960, Historic Context Report*, July 1995 (Revised October 1995).

==========
10. Geographical Data
==========
Acreage of Property Less than one acre

Verbal Boundary Description (Describe the boundaries of the property.)

The Old Columbia Road Bridge spans the Middle Patuxent River just northeast of where Old Columbia Road intersects Route 29 north of Johns Hopkins Road in Laurel, Maryland.

Boundary Justification (Explain why the boundaries were selected.)

The bridge has been associated with this site since the time of its construction in the early twentieth century.

==========
11. Form Prepared By
==========
name/title Kathryn A. Gettings, Architectural Historian
organization Traceries date Nov. 4, 1997
street & number 5420 Western Avenue telephone 301/656-5283
city or town Chevy Chase state MD zip code 20815
==========
12. Property Owner
==========
name Howard County, Maryland
street & number 3430 Courthouse Drive telephone (410) 313-4401
city or town Ellicott City state MD zip code 21043
==========

This concrete arch bridge is located on a stretch of historic Columbia Road (originally known as the Columbia Turnpike Road). The bridge spans the Middle Patuxent River with a single-span, one-lane closed concrete arch structure. Erected between 1915 and 1930, the bridge has a length of approximately forty feet and a fifteen- to twenty-foot-wide deck. A single barrel arch spans the watercourse and stands approximately fifteen feet above the water's surface at its highest point.

The superstructure of the bridge remains in excellent condition. The elements of primary importance in this bridge, the arch ring, barrel, spandrel walls, and parapet walls, remain intact. The interior and exterior faces of the 3-1/2-foot parapet walls are decorated with cast rectangular panels, and a single lozenge-shaped panel accentuates the center of the exterior face of each wall. Square-edged concrete coping finishes the top of each parapet wall. The substructure of the bridge also remains in place. The abutments consist of poured reinforced concrete as do the wing walls above.

The bridge is in generally good condition with the only signs of deterioration being spalling on the edges of the parapet walls and the disappearance of a commemorative plaque that was bolted to the inner face of the southeast wall. The only major alteration made to the structure was the addition of metal guard rails at either end extending the length of the knee walls.

The bridge is located on a portion of Old Columbia Road which, although superseded by US 29, still carries local traffic. The bridge itself remains intact, as does the setting of the bridge. Despite the proximity of the bridge to the new US 29, the Old Columbia Road bridge's original picturesque appearance is maintained by the woodland that stands to either side of the bridge.

The Old Columbia Road Bridge (HO-64) spanning the Middle Patuxent River is one of many concrete bridges built throughout Maryland during the late-nineteenth and early-twentieth centuries. The bridge originally served a main north-south route, Columbia Turnpike. For residents of the Scaggsville and Oakland Mills area, Columbia Turnpike was the major route north to Columbia, although this area of the road was not well-developed in this area at that time. When US 29 was relocated, the road and bridge became limited to local traffic.

The bridge strongly reflects two trends in bridge design: the development of reinforced concrete and the development of standardized bridge design. In addition, the popularity of the City Beautiful movement influenced the appearance of this bridge.

In the early twentieth century, the development of reinforced concrete construction initiated a renaissance in arched bridge construction. The use of reinforced concrete allowed the arch bridge, a form that lends itself to load-bearing functions, to be constructed more easily. In addition, the use of concrete allowed more decorative features to be introduced within the bridge. Many bridges, like the bridge at Old Columbia Road, incorporated stylized designs in the cast concrete.

With the rise of road planning, standardized bridge designs were developed in Maryland. While these standardized plans were dominantly of the beam and slab type of construction, the arched bridge, like the bridge at South Entrance Road, was often utilized when aesthetic issues or site conditions required a less utilitarian structure. There exist nearly seventy extant concrete arch bridges on Maryland's state highways built between 1900 and 1940.

The form, decoration, and siting of the bridge reflect a desire of the designers to devise an aesthetically pleasing bridge. During this period, the City Beautiful movement was sweeping the nation. Designers encouraged the construction of public buildings and structures that were attractive, not merely functional.

The Old Columbia Road Bridge over the Middle Patuxent River is a good example of a concrete arch bridge complete with its minimalist architectural decoration. Similar in plan and design to the South Entrance Road Bridge (MHT-724), the Old Columbia Road span was likely funded by Howard County and constructed by a private contractor.

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. HO-695

Old Columbia Road Bridge
name of property
Howard County, Maryland
county and state

==========

Chain of Title:

Current Owners: Howard County, Maryland

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. HO-695

Old Columbia Road Bridge
name of property
Howard County, Maryland
county and state

==========

HISTORIC CONTEXT:

Geographic Organization: Piedmont

Chronological/Development Period (s):

Industrial/Urban Dominance (1870-1930)
Modern Period (1930-present)

Prehistoric/Historic Period Theme (s):

Transportation

RESOURCE TYPE(S)

Category: Structure

Historic Environment: Rural

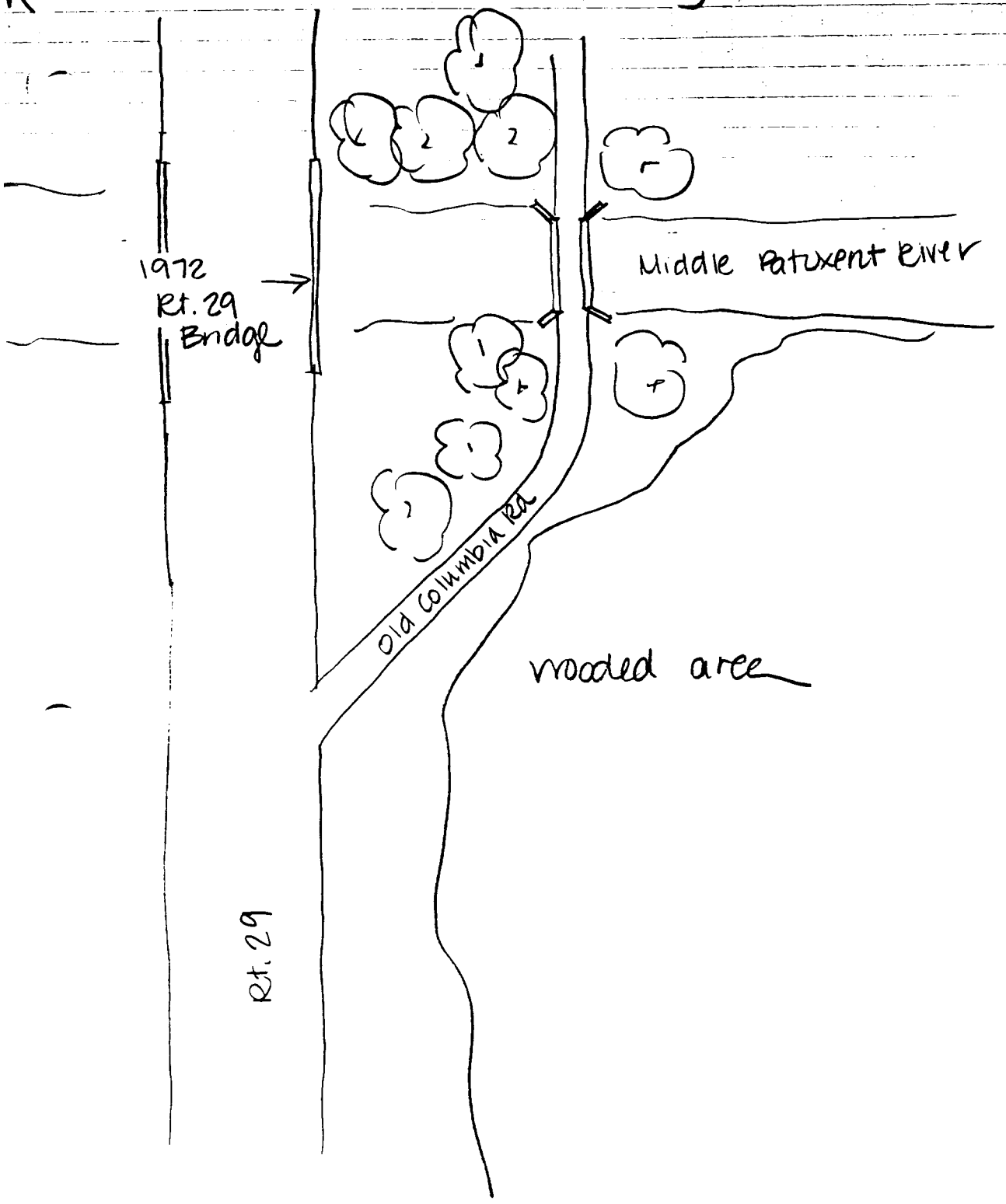
Historic Function (s): TRANSPORTATION/Bridge

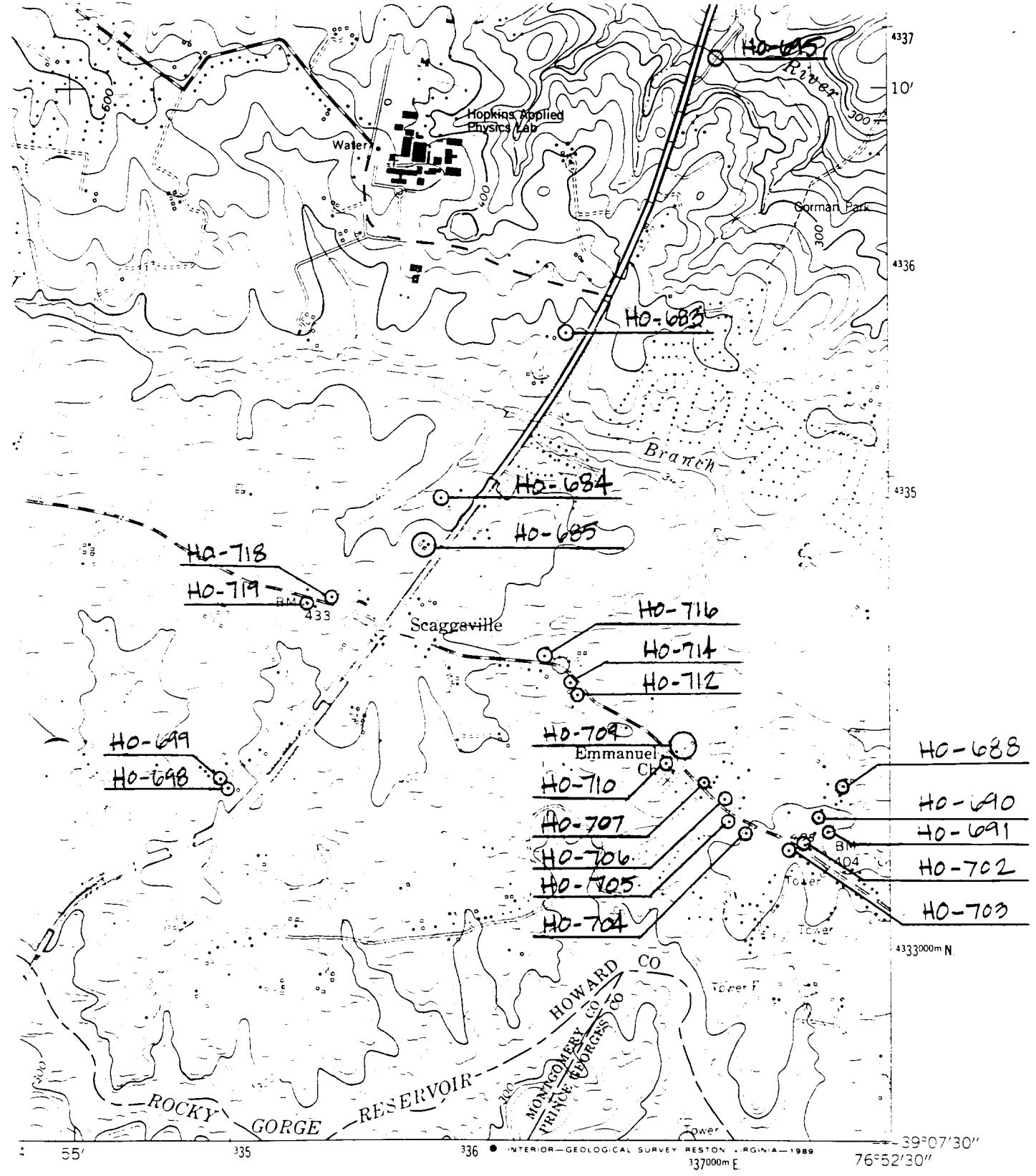
Known Design Source: Unknown

Old Columbia Rd Bridge
Laurel, Howard County, MD

RESOURCE SKETCH MAP

HO-695





INTERIOR—GEOLOGICAL SURVEY RESTON, VIRGINIA—1989

MILE

ROAD CLASSIFICATION

Heavy-duty	———	Light duty	═══
Medium-duty	———	Unimproved dirt	- - - - - - -

U. S. Route State Route

(LAUREL) 5662 III SE

QUADRANGLE LOCATION

To place on the predicted North American Datum 1983 move the projection lines 8 meters south and 26 meters west as shown by dashed corner ticks

CLARKSVILLE, MD.

NW/4 LAUREL 15' QUADRANGLE

39076-B8-TF-024

1957

PHOTOREVISED 1979

DMA 5662 III NW—SERIES V833

HO-695
OLD COLUMBIA ROAD BRIDGE
HOWARD COUNTY, MD
TRACERIES
OCTOBER 1997
MD SHPO
GENERAL VIEW OF ROADWAY - LOOKING NE
1 OF 4

HO-695
OLD COLUMBIA ROAD BRIDGE
HOWARD COUNTY, MD
TRACERIES
OCTOBER 1997
MD SHPO
BRIDGE SPAN LOOKING SE
2 OF 4

HO-695
OLD COLUMBIA ROAD BRIDGE
HOWARD COUNTY, MD
TRACERIES
OCTOBER 1997
MD SHPO
BRIDGE SPAN - LOOKING NORTH
3 OF 4

HO-695
OLD COLUMBIA ROAD BRIDGE
HOWARD COUNTY, MD
TRACERIES
OCTOBER 1997
MD SHPO
KNEE WALL - INTERIOR LOOKING EAST
4 OF 4