Maryland Historical Trust

Maryland Inventory of Historic Properties Number: CAR-291

Name: CO-42/Noble Rd over Marsh Hope Crk

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. CAR-291**
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION
MARYLAND HISTORICAL TRUST

NAME AND SHA NO.: CO 42

LOCATION

Road Name and Number: Noble Road over Marshy Hope Creek
City/Town: Smithville X vicinity
County: Caroline

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 # CO 42 carries Noble Road over Marshy Hope Creek in Caroline County, Maryland, in Maryland's Coastal Plain or Tidewater physiographic region. The bridge is located just east of #CO 41 and just west of the Delaware state line. Bridge # CO 42 is located on Noble Road just southeast of its intersection with Bloomery Road and northwest of its intersection with Hrynko Road. Noble Road runs roughly northwest to southeast at this point; Marshy Hope Creek runs roughly southwest to northeast and is non-tidal in the vicinity of this bridge.

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

Bridge # CO 42 carries a single lane of traffic in each direction. Built in 1914, this 5-span bridge consists of a concrete slab deck with a macadam overlay, concrete beams supported on concrete piers, concrete parapets with integral curb, and full-height concrete wall abutment and wingwalls. All spans measure approximately 31'-7" for a total length of 156'-6" and a clear roadway width of 20'-3". Decorative concrete corbels range along the exterior face of the bridge below the deck and parapet wall level. Both approaches to the bridge are straight and level, with no shoulders and a bituminous concrete surface.

Inspection reports from 1961 through 1970 note a small crack in the interior stringer of the southeast span. The 1985 inspection report stated that the superstructure was in poor condition and the substructure in serious condition due to the severe deterioration of the piers, as well as other deterioration such as cracked abutments and general surface deterioration of stringers and parapets. The 1987 inspection report noted the condition of the abutments and two of the four piers as poor to serious. Both the 1991 and 1993 inspection reports noted heavy spalling on one pier and minor deterioration of portions of the parapets. The 1997 inspection report noted that the deck was in overall poor condition, with deterioration in the underside and curbs. The parapets and wearing surface were in fair condition. The superstructure and substructure were in fair condition, where the primary structural elements were sound but had minor section loss, cracking, spalling and scour. As a result of the 1997 inspection report, the county is pursuing more indepth, detailed inspection and testing (core sampling) in 1998.

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. The survey identified only one bridge (CO-042) containing five spans; 37 bridges (33%) were multiple spans.

Discuss major alterations:

Piers 1 and 2 were repaired in 1989; at the same time, riprap scour protection was placed at piers 1, 2, and 3 to fill scour holes that had developed in the creek bottom at these piers. Steel W-beam guardrails were added to both approaches circa 1991. In ca. 1993, minor scour work was done on 3 of 4 piers.

HISTORY

When Built: 1914
Why Built: Statewide road improvement programs and local transportation needs
Who Built: Unknown
Who Designed: Unknown
Why Altered: The bridge was altered to repair severe deterioration of two of the piers and prevent complete failure.
Was this bridge built as part of an organized bridge building campaign?: No

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?

Road improvements in Caroline County were fueled by several events occurring during the early twentieth century. First, the Good Roads Movement, which began in the last decade of the nineteenth century, aimed to improve primary roads throughout the state as well as multiple connecting roads between counties. As the movement progressed, numerous existing roads were widened, straightened, or graded, and many new bridges were built to carry the rebuilt roads. Second, rapidly increasing automobile, truck, and bus traffic also fueled the replacement of existing narrow and weak bridges with wider and stronger concrete structures, many of which were built according to standardized specifications and plans developed by the State Roads Commission (SRC). Third, the State Roads Commission established district engineering offices during the 1910s to aid in intrastate road development, and established a separate bridge department in 1920. This fostered construction of many concrete bridges throughout the state. In the 1920s, the SRC emphasized improving the safety and comfort of primary routes while developing secondary networks and feeder roads. By the 1930s, bridges that were originally deemed adequate had become unacceptable for carrying modern traffic loads and many new structures were built as a result.

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?

Bridge # CO 42 participated in the general trend toward upgrading state roads and bridges and improving intrastate access.

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, the 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. The character-defining elements are either significantly deteriorated or have been compromised by extensive alterations or modern additions.

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

No, the bridge does not retain integrity of the primary character-defining elements of a concrete beam bridge. The character-defining elements for the superstructures of concrete beam bridges are the slab, the longitudinal beams, and the parapet or railing when integral. For the substructure, the character-defining elements are the abutments, piers, and wing walls. Two of the piers were completely rehabilitated in 1989.

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

The names of the manufacturer, designer, and/or engineer of this bridge are not known at this time.

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

No, this structure should not be given further study. Previous alterations have placed its integrity in doubt.

BIBLIOGRAPHY

Spero, P.A. C. & Company and Louis Berger & Associates
1994 *Historic Bridges in Maryland: Historic Context Report.* Maryland State Highway Administration, Baltimore.

State Roads Commission of Maryland
1958 *A History of Road Building in Maryland.* Baltimore.

Caroline County Department of Public Works
Bridge Inspection Reports (1961 through 1993). On file in DPW building, Wilmuth Street, Denton.

SURVEYOR INFORMATION

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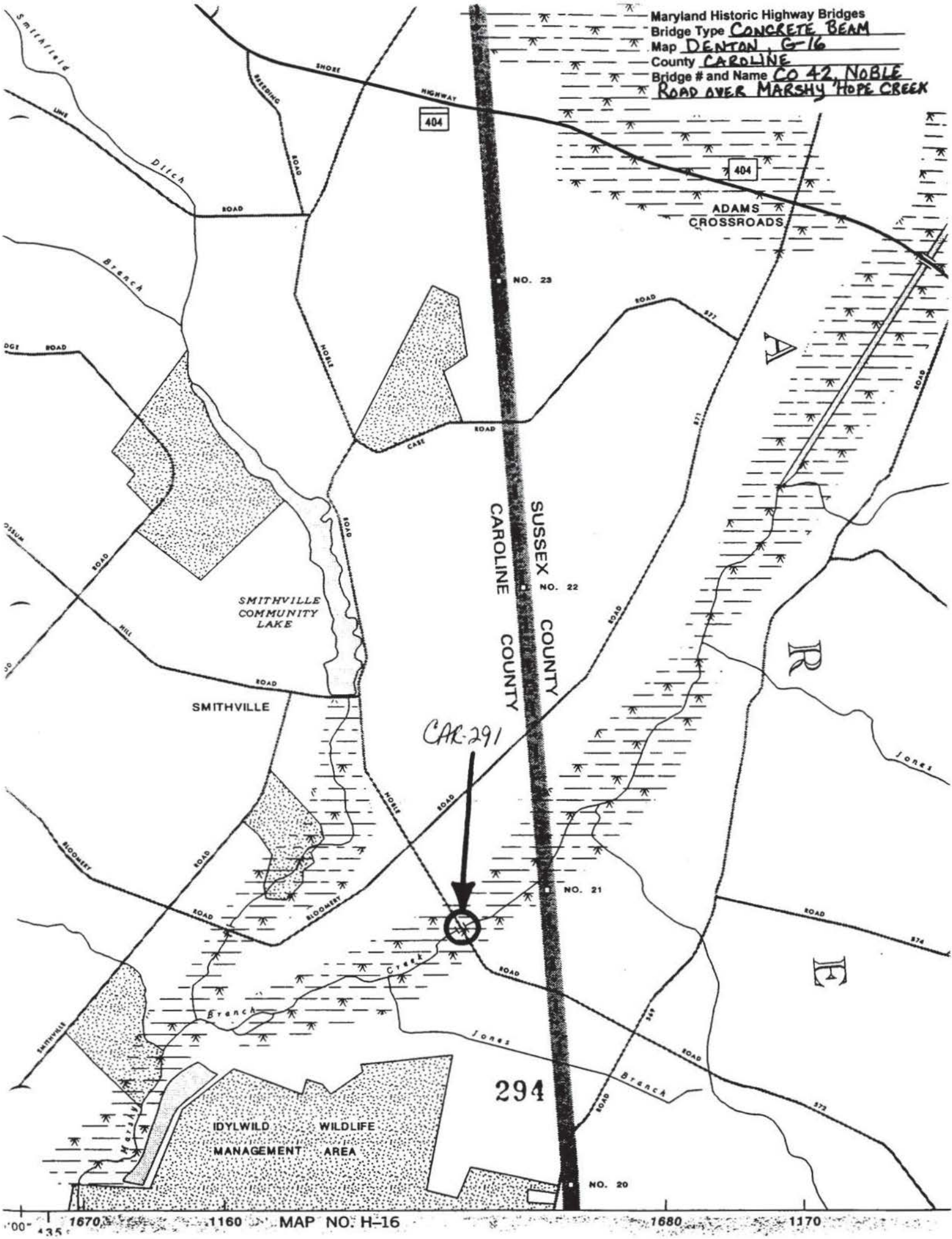
Maryland Historic Highway Bridges
Bridge Type CONCRETE BEAM
Map DENTON, G-16
County CAROLINE
Bridge # and Name CO 42, NOBLE ROAD OVER MARSHY HOPE CREEK



CAR-291

CAROLINE COUNTY, MD

MATT HICKSON

2-2-95

~~MARYLAND SHPO~~ SHA

BRIDGE NO. CO-42, LOOKING DOWNSTREAM (WEST)

1 OF 4

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CAROLINE COUNTY, MD
MATT HICKSON
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~~MARYLAND SHPO~~ SHA
BRIDGE NO. CO-42, LOOKING UPSTREAM (EAST)
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BRIDGE NO. CO-42, LOOKING NW ON NOBLE ROAD
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CAROLINE COUNTY, MD

MATT HICKSON

2-2-95

~~MARYLAND SHPO~~ SHA

BRIDGE NO. CO-42, LOOKING SE ON NOBLE ROAD

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