

Maryland Historical Trust

Maryland Inventory of Historic Properties number: CE-1459

Name: McClintock Rd. over Basin
Basin Run

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 <input checked="" type="checkbox"/>	Eligibility Not Recommended <input type="checkbox"/>
Criteria: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	Considerations: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G <input type="checkbox"/> None
Comments: _____	

Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u>3 April 2001</u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u>3 April 2001</u>

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. CE-1459

SHA Bridge No. CE-091 Bridge name McCauley Road over Basin Run

LOCATION:

Street/Road name and number [facility carried] McCauley Road

City/town Oakwood Vicinity X

County Cecil

This bridge projects over: Road Railway Water Land

Ownership: State County Municipal Other

HISTORIC STATUS:

Is bridge located within a designated historic district? Yes No

National Register-listed district National Register-determined-eligible district

Locally-designated district Other

Name of district _____

BRIDGE TYPE:

Timber Bridge _____:
Beam Bridge _____ Truss -Covered _____ Trestle _____ Timber-And-Concrete _____

Stone Arch Bridge _____

Metal Truss Bridge

Movable Bridge _____:
Swing _____ Bascule Single Leaf _____ Bascule Multiple Leaf _____
Vertical Lift _____ Retractable _____ Pontoon _____

Metal Girder _____:
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 _____

Amey

DESCRIPTION:

Describe Setting:

Bridge CE-091 carries McCauley Road over Basin Run near the town of Oakwood. McCauley Road runs generally in a north-south direction in the area while Basin Run flows to the west. The area is relatively undeveloped with a few residential buildings around the

Describe Superstructure and Substructure:

Bridge CE-091 is a single-span Pratt pony truss measuring approximately 53' in total length. It has three panels with diagonal endposts. The top chord is built-up sections of back to back channels connected by lattice work. The bottom chord consists of two parallel flat bars, and bottom chord bracing is flat bar in an X arrangement between floorbeams. The floor system has timber stringers and I shaped floorbeams. All verticals are built-up sections of plates, angles, and lattice work. The diagonal members are eye-bars. Connections are both riveted and pinned. It is a single lane bridge with a timber plank deck. There are no sidewalks on the bridge and the truss members are protected by a wooden railing. The abutments are stone with wingwalls at varying degrees.

Discuss Major Alterations:

Repair plans dated March 1992 called for steel floorbeams, timber stringers, timber plank deck and curbs removed and replaced, truss members repaired, entire truss repainted and abutments repaired during the rehabilitation. All of this work has been done.

HISTORY:

WHEN was bridge built (actual date or date range) c.1885-1900

This date is: Actual _____ Estimated _____

Source of date: Plaque _____ Design plans _____ County bridge files/inspection form _____

Other (specify) County bridge listings give a date of 1900 or earlier. Three similar metal truss Pratt bridges designed by Charles H. Latrobe were erected in the county in the 1880s (CE-002, CE-007, and 7057) as part of a bridge building campaign by the county commissioners. This bridge may have been part of that campaign.

WHY was bridge built? To provide a reliable crossing of McCauley Road over Basin Run, to meet local transportation needs. It may also have been part of a county metal truss bridge building campaign.

WHO was the designer possibly Charles H. Latrobe

WHO was the builder _____

WHY was bridge altered? [check N/A _____ if not applicable] Safety/structural needs

Was bridge built as part of organized bridge-building campaign? Yes X No _____

Charles H. Latrobe was commissioned in the mid-1880s by the Cecil County commissioners to prepare specifications for the superstructures and substructures of at least three metal truss bridges in the county-CE-002, CE-007 and 7057 (Porters Bridge/Richardsmere Bridge). This bridge may have been part of that metal truss bridge building campaign.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:

- A - Events X
- B- Person _____
- C- Engineering/architectural character X

Was bridge constructed in response to significant events in Maryland or local history? No _____ Yes X

If yes, what event?

This bridge was one of a large number of metal truss bridges erected in Maryland in the late nineteenth and early twentieth centuries. These bridges, which were stronger and more reliable than the majority of their predecessors, were part of a major advance in bridge technology in Maryland and throughout the nation in the third quarter of the nineteenth century. The bridge was also likely part of a small metal-truss road building campaign in the 1880s on the part of the Cecil County commissioners.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth & development of the area? No ___ Yes X

Because of their solidity, metal truss bridges such as the Rolling Mill Road bridge provided reliable crossings, largely free from the dangers of floods and other disasters that regularly destroyed many of their predecessors. By assuring travelers that Rolling Mill Road could be safely and reliably passed throughout the year, this bridge promoted small-scale residential, commercial, agricultural, and industrial development along the road and other thoroughfares that fed into it. Though their impacts were quite localized, bridges such as this, taken *en masse*, were an important factor in the development of rural areas throughout the state.

Is the bridge located in an area which may be eligible for historic designation? No ___ Yes X
Would the bridge add to X or detract from _____ historic & visual character of the possible district?

The bridge may be eligible as part of a historic district with the c.1840 Rowlandsville Mill (MHT #CE-789) to its northeast and the c.1860 Christy House (MHT #CE-781) just to its east. It might also be eligible as part of a larger Rowlandsville historic district. Surprisingly, the bridge was not surveyed during the comprehensive survey of Cecil County. It is apparently located very close to the Rowlandsville Iron Bridge over the Octoraro (MHT #CE-884), which is a Pratt through-truss, not a pony truss.

Is the bridge a significant example of its type? No ___ Yes X

Between 1840 and the Civil War, under the impetus of a rapidly expanding railroad system, the majority of early American metal truss bridge forms were patented and introduced. In Maryland, the earliest metal truss bridges carried rail lines, which required their great strength and reliability. From the War through the end of the century, metal truss technology was improved, steel began to replace iron, and the use of trusses was expanded to carry roads as well as rail lines.

Numerous metal truss bridges were erected in Baltimore, the original hub of the metal truss in the state, from the 1850s through the 1880s. From Baltimore, the use of the metal truss spread out to other parts of the state, particularly the Piedmont and Appalachian Plateau. Many bridge and iron works were established in the eastern United States to design and fabricate truss members, which were then shipped to sites in Maryland and elsewhere to be erected. More than 15 different bridge companies located in Maryland, Ohio, Pennsylvania, New York, Virginia, and Indiana are known to have shipped metal truss bridges to sites throughout Maryland. Bridges were first fabricated in Maryland, and shipped to sites within the state and beyond, by the companies of seminal bridge designer Wendel Bollman.

Early in the twentieth century, concrete bridges began to compete with metal truss bridges throughout the state at small to moderate crossings. With the development of uniform standards for concrete bridges by the State Roads Commission in the 1910s, the construction of smaller metal truss bridges significantly declined throughout the state. The metal truss still remained the bridge of choice for large crossings, however. In the 1920s, heavier members began to be used at these bridges. Reflecting even heavier load requirements and increased lengths, metal truss bridges erected in the state in the 1930s and 1940s were heavy and solid, rather than light and delicate like their late-nineteenth- and early-twentieth-century predecessors.

Numerous Pratt truss bridges were erected throughout the country between 1844, when the type was patented by Thomas and Caleb Pratt, and the early twentieth century. The Pratt has diagonals extended across one panel in tension and verticals in compression, except for hip verticals immediately adjacent to the inclined end posts of the bridge. The large majority of Maryland's surviving metal truss bridges are

Pratts, built as through or pony trusses either riveted or pin-connected. The bridge=s use of a pony truss--a truss which has no lateral bracing connecting the top chords of its superstructure--is unusual in the state. Pony trusses probably comprise no more than about 20 percent of Maryland's metal truss bridges.

This bridge was erected during one of the three key periods (1840-1860, 1860-1900, and 1900-1960) of bridge construction in Maryland. Built in the 1880s or 1890s, it falls within the period 1860-1900. During this era, steel began to completely replace iron, and the metal truss became popular at highways as well as railroads. Bridges erected during this period were characterized by relatively delicate members.

Does bridge retain integrity [in terms of National Register] of important elements described in Context Addendum? No Yes

Is bridge a significant example of work of manufacturer, designer and/or engineer? No Yes
This bridge may have been designed by Charles H. Latrobe.

In the mid and late nineteenth century, numerous companies were organized around the country that designed, fabricated, and erected metal truss bridges. One of the first such companies to be established in Maryland was Smith, Latrobe and Company, which was organized in 1866 by Charles Shaler Smith, Benjamin H. Latrobe, and C.H. Latrobe. Reorganized as the Baltimore Bridge Company in 1869 and active until its dissolution in 1880, it constructed many major bridges, including spans across the Mississippi, Missouri, and Kentucky rivers. From the company's dissolution into the 1890s, Charles H. Latrobe (1883-1902) continued to be active designing bridges in Maryland. He is believed to have designed at least three bridges erected in Cecil County--CE-002 (c.1885), CE-007 (c.1890), and 7057 (Porters Bridge/Richardsmere Bridge - c.1885). He also designed three landmark metal arch bridges in Baltimore--Calvert Street, St. Paul, and Cedar Avenue--between 1878 and 1890.

Should bridge be given further study before significance analysis is made? No Yes

It is believed that no further evaluation is necessary to determine the eligibility of this bridge for listing in the National Register. However, additional research, which could be conducted as part of any future National Register nomination prepared for the bridge, might provide further information about its history and environs.

BIBLIOGRAPHY:

Bridge inspection reports and files of the Cecil County engineer=s office.

County survey files of the Maryland Historical Trust.

Jackson, Donald H. *Great American Bridges and Dams*. Washington, D.C: The Preservation Press, 1968

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

Pennsylvania Historical and Museum Commission and Pennsylvania Department of Transportation. *Historic Highway Bridges in Pennsylvania*. Commonwealth of Pennsylvania, 1986.

SURVEYOR/SURVEY INFORMATION:

Date bridge recorded 2/13/95

Name of surveyor Matt Hurley/Marvin Brown

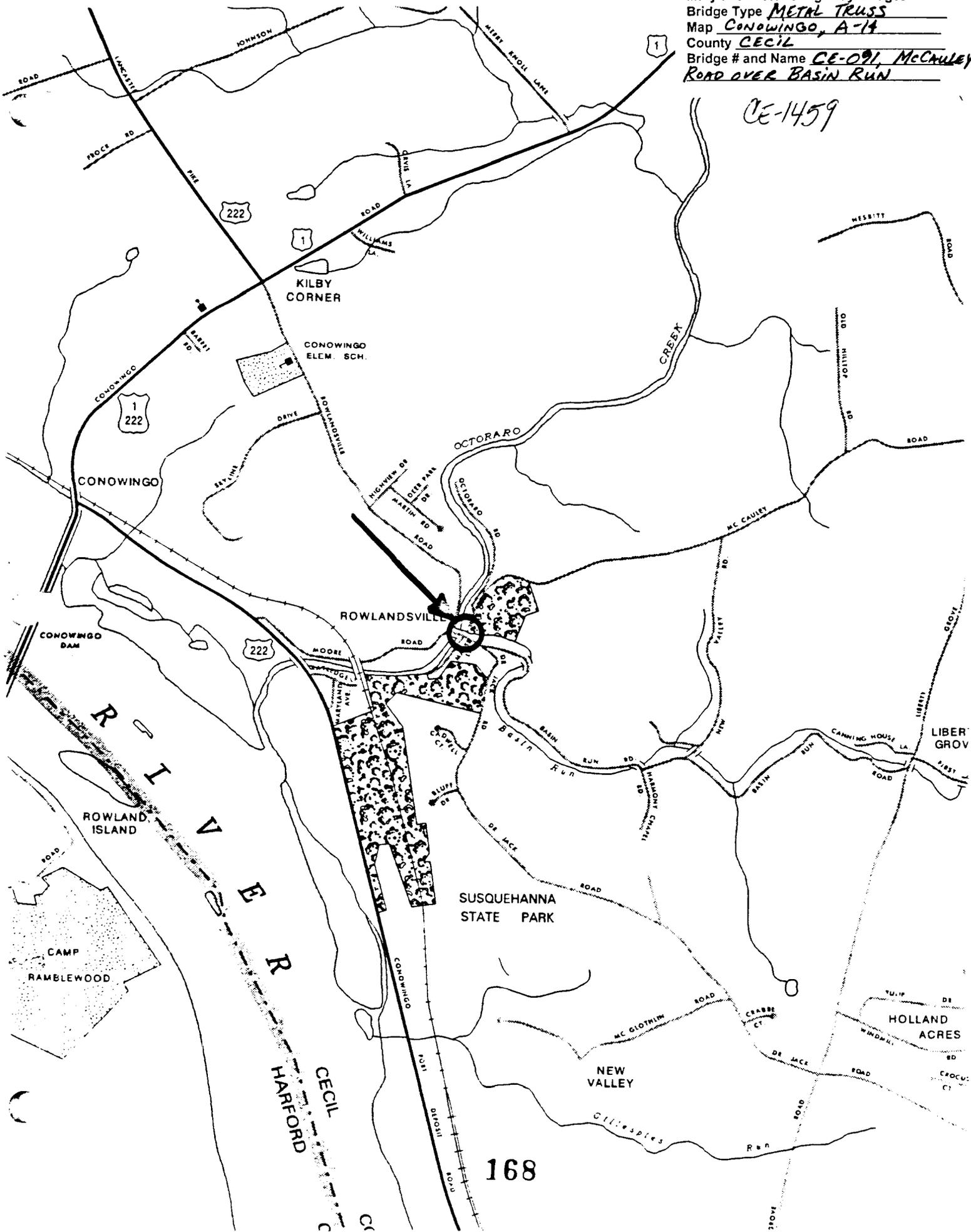
Organization/Address GREINER, INC., 2219 York Road, Suite 200, Timonium, Maryland 21093-3111

Phone number 410-561-0100

FAX number 410-561-1150

Maryland Historic Highway Bridges
Bridge Type METAL TRUSS
Map CONOWINGO, A-14
County CECIL
Bridge # and Name CE-091, McCauley
ROAD OVER BASIN RUN

CE-1459





RESTRICTED BRIDGE
SINGLE UNIT
24000 LBS &
COMBINATION
24000 LBS &

CE 1459

CECIL COUNTY, MD

MATT HURLEY

FEB 13 1995

~~MARYLANDS SHPO 5 WA~~

BRIDGE NO CE 091

LOOKING WEST

1 OF 7



CE-1459

LECIL COUNTY, MD

MATT HURLEY

FEB 13 1995

MARYLAND SHPO SHA

BRIDGE NO CE 091

OLD MILL, EAST OF BRIDGE

2 OF 7



RESTRICTED BRIDGE
SINGLE UNIT
24000 LBT GVW
COMBINATION UNIT
24000 LBT GVW

ONE LANE
BRIDGE



CE-1459

CECIL COUNTY, MD

MATT HURLEY

FEB 13 1995

~~MARYLAND SHPO - SHA~~

BRIDGE NO CE 091

LOOKING EAST

3 OF 7



CE-1459

LECIL COUNTY, MD

MATT HURLEY

FEB 13 1995

MARYLAND ~~SHAPO~~ SHH

BRIDGE NO CE 091

LOOKING UPSTREAM

H OF 7



CE-1459

CECIL COUNTY, MD

MATT HURLEY

FEB 13 1995

~~MARYLAND SHPO~~ SHA

BRIDGE NO CE 091

DOWNSTREAM FLOORBEAM/VERTICAL CONN

5 OF 7



CE-1459
LECLIC COUNTY MD

MATT HURLEY

FEB 13 1995

~~MARYLAND SHPO~~ STA 7

BRIDGE NO CE 091

LOOKING DOWNSTREAM

6 OF 7



CE-1459

CECIL COUNTY MD

MATT HURLEY

FEB 13 1995

~~MARYLAND SHPO~~ SHA

BRIDGE NO CE 091

ABANDONED R.R. BRIDGE, WEST OF BRIDGE

7 OF 7