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

MHT No. WA-I-462

SHA Bridge No. 21042 **Bridge name** MD 494 over Conococheague Creek

LOCATION:
Street/Road name and number [facility carried] MD 494

City/town Fairview **Vicinity** X

County Washington

This bridge projects over: Road ____ **Railway** ____ **Water** X ____ **Land** ____

Ownership: State X ____ **County** ____ **Municipal** ____ **Other** ____

HISTORIC STATUS:
Is bridge located within a designated historic district? Yes ____ **No** X
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 X

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 ____

Concrete ____:
Concrete Arch ____ **Concrete Slab** ____ **Concrete Beam** ____ **Rigid Frame** ____

Other ____ **Type Name** ____

WA-I-462

replaced, in the 1920s and 1930s, by a new if less numerous generation of metal truss fabricators. Among the new bridge companies active in Maryland was the McClintic-Marshall Company of Pittsburgh, Pennsylvania, which erected long Pratt and Pennsylvania (Petit) bridges throughout the state from the 1910s through the 1930s. These include bridges G-32 (1924) in Garrett County and this structure.

Should bridge be given further study before significance analysis is made? No X **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 Maryland State Highway Administration.

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.

State inventory form WA-I-462

SURVEYOR/SURVEY INFORMATION:

Date bridge recorded 2/22/95

Name of surveyor Charles Ziegler/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 HISTORICAL TRUST

ELIGIBILITY RECOMMENDED X ELIGIBILITY NOT RECOMMENDED ____

CRITERIA: ___A ___B X C ___D

CONSIDERATIONS: ___A ___B ___E ___F ___G ___None

COMMENTS: _____

REVIEWER, OPS: Anne Bruder DATE: 4/3/91

REVIEWER, NR PROGRAM: B Cunt DATE: 4/3/91

WA-I-462

DESCRIPTION:

Describe Setting:

Bridge 21042 carries MD 494 over Conococheague Creek in an east/west direction. The creek flows north/south and eventually flows into the Potomac River. The bridge is located in Fairview, Maryland. The area is rural and is not developed.

Describe Superstructure and Substructure:

Bridge 21042 is a skewed, two-span, Pratt through-truss. Each span has 8 panels that are 16'-72" wide, giving each a total span length of 133'-0". The top chords are back to back channel with top cover plates. The bottom chords are back to back channels. The vertical members and the diagonals are I-shaped. The truss height is 24'-6". The floor system consists of I-shaped longitudinal stringer as well as transverse floor beams. The connections are riveted. The deck is reinforced 9-2" deep concrete slab. The width between curbs is 27'-0". The abutment and piers are reinforced concrete.

Discuss Major Alterations:

No notable alterations have been made to this bridge. Its deck has been replaced, apparently in 1962.

HISTORY:

WHEN was bridge built (actual date or date range) 1932
This date is: Actual X **Estimated** _____
Source of date: Plaque X **Design plans** X **County bridge files/inspection form** _____
Other (specify) SHA Files and State inventory form

WHY was bridge built? To provide a reliable crossing of MD 424over Conococheague Creek, to meet local and regional transportation needs.

WHO was the designer _____

WHO was the builder McClintic-Marshall Corporation - builder and/or designer

WHY was bridge altered? [check N/A X **if not applicable]**

Was bridge built as part of organized bridge-building campaign? Yes X **No** _____
This bridge was built under the aegis of the State Roads Commission as part of the Good Roads Movement.

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 small but significant number of metal truss bridges erected in Maryland from the 1920s through the 1940s. Its heavy, solid construction reflects continuing advances in metal truss technology and fabrication early in the century, and the almost unyielding reliability of substantial trusses for major crossings. Such bridges were built throughout the state during the period, particularly in the early 1930s, as part of the Good Roads Movement promoted by the State Roads Commission. Many of them retain plaques indicating that they were built under the aegis of the Commission, even though they were designed by private bridge building firms.

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 and reliability, metal truss bridges with heavy members such as this one were often utilized in Maryland from the 1920s through the 1940s at long crossings. Multi-lane facilities carrying major thoroughfares, they had not only a significant impact on local growth, but facilitated regional residential, commercial, agricultural, and industrial development.

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

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.

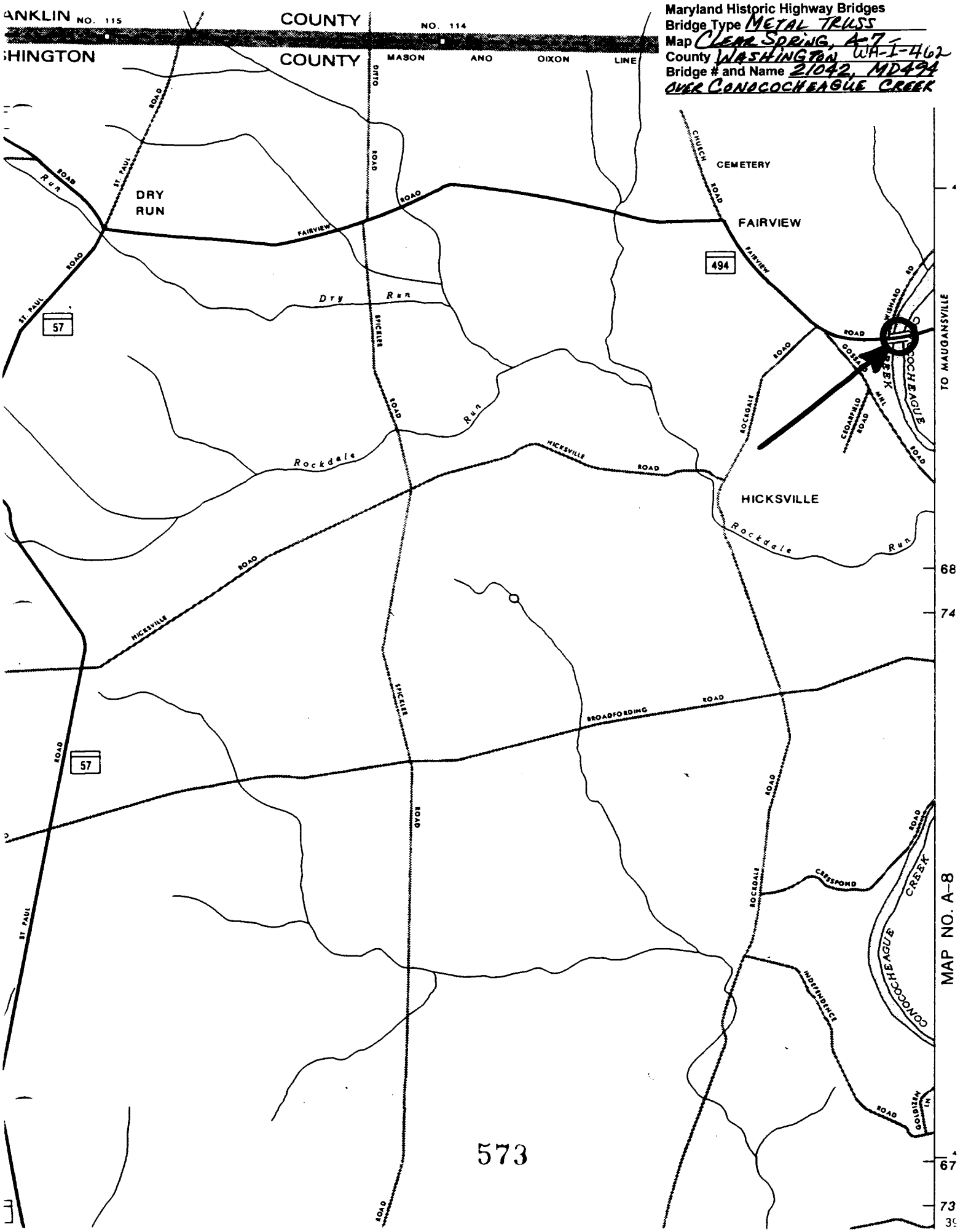
This bridge was erected during one of the three key periods (1840-1860, 1860-1900, and 1900-1960) of bridge construction in Maryland. Built in 1932, it falls within the period 1900-1960. During this era, metal truss highway bridges became increasingly standardized. Also during this period, smaller and moderate length trusses were gradually replaced by reinforced concrete structures, and the modern metal girder bridge, which could easily be widened, replaced the metal truss bridge at all but the largest approaches and crossings. Built after 1930, it is characterized by heavy solid members, rather than the relatively delicate members that characterized its late-nineteenth and early-twentieth century predecessors.

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

Is bridge a significant example of work of manufacturer, designer and/or engineer? No__ Yes X

In the early twentieth century, metal truss bridges were largely supplanted in the state by concrete and, later, metal girder structures. The old metal fabricators disappeared during this period. They were

Maryland Historic Highway Bridges
Bridge Type METAL TRUSS
Map CLEAR SPRING, 47
County WASHINGTON WA-I-462
Bridge # and Name 21042, MD494
OVER CONOCOCHEAGUE CREEK



WISHARD ROAD
25

WA-I-462

BR # ~~02-104~~210

OVER TOMCOCHEAGUE CREEK

WASHINGTON CO., ME.

CHARLES ZIEGLER

2/22/95

S. H. A.

EAST APPROACH

1 OF 5

WA-I-462

BR# 102104210

OVER CONOCOCHEAGUE CREEK

WASHINGTON CO. MD.

CHARLES ZIEGLER

2/22/95

S.H.A.

SOUTH ELEVATION (DOWNSTREAM)

2 OF 5

Built By
Corporation
1932
BUILT – 1932
STATE ROADS COMMISSION

WA-I-462

BR # ~~AD~~ 2104210

OVER CONOCOCHEAGUE CREEK

WASHINGTON CO., MD.

CHARLES ZIEGLER

2/22/95

S. J. A

PLAQUE (E. APPROACH)

3 OF 5

WA-I-462

BR # 102204210

OVER CONOCOCHEAGUE CREEK

WASHINGTON COUND.

CHARLES RIEGLER

2/22/95

S. H. A.

NORTH ELEVATION (UPSTREAM)

4 OF 5

CONEGOGUEAGUE
CREEK

WA-I-462

ER # ~~102104210~~ 1045

OVER CONOCOCHEAGUE CREEK

WASHINGTON CO. MD

CHARLES KIEGLER

2/22/95

S.H.A.

1ST APPROACH

5 OF 5

WA-I-462 1932
Fairview Bridge
(Maryland 494 Over Conococheague Creek)
Fairview vicinity
public (unrestricted)

The Fairview bridge carries Maryland Route 494 over the Conococheague Creek and consists of two skew Pratt steel through trusses, each 135 feet in length, set end to end. The portal bracing is constructed of heavy triangular trusses. Each truss has six panels with diagonal members slanting downward toward the center.

Erected in 1932, this structure was built by the McLintic Marshall Corporation according to the specifications of the Maryland State Roads Commission, under the chairmanship of G. Clinton Uhl. It represents the only historic truss bridge -- part of Maryland's state road system in Washington County, and one of 26 truss bridges throughout the state road network -- identified by the Maryland Historical Trust for the Maryland Department of Transportation in a jointly conducted survey which took place during 1980-81.

W 21042

MARYLAND HISTORICAL TRUST

WA-I-462
MAGI # 22 [redacted] 3817
4000

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME

HISTORIC

AND/OR COMMON
Fairview Bridge, Maryland 494 over Conococheague Creek

2 LOCATION

STREET & NUMBER
¼ mile East of Fairview

CITY, TOWN
Fairview

X VICINITY OF

CONGRESSIONAL DISTRICT
6th

STATE
Maryland

COUNTY
Washington

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	X PUBLIC	X OCCUPIED	__AGRICULTURE	__MUSEUM
__BUILDING(S)	__PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
X STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	__YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	X YES: UNRESTRICTED	__INDUSTRIAL	X TRANSPORTATION
		__NO	__MILITARY	__OTHER

4 OWNER OF PROPERTY

NAME
State Highway Administration DOT

Telephone #:

STREET & NUMBER
301 West Preston Street

CITY, TOWN
Baltimore

__ VICINITY OF

STATE, zip code
Maryland, 21201

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC
Washington County Courthouse

Liber #:
Folio #:

STREET & NUMBER

CITY, TOWN
Hagerstown

STATE
Maryland

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

DATE

__FEDERAL __STATE __COUNTY __LOCAL

DEPOSITORY FOR SURVEY RECORDS

CITY, TOWN

STATE

7 DESCRIPTION

WA-I-462

CONDITION		CHECK ONE	CHECK ONE
__EXCELLENT	__DETERIORATED	X UNALTERED	X ORIGINAL SITE
X GOOD	__RUINS	__ALTERED	__MOVED DATE_____
__FAIR	__UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

This bridge carries Maryland Route 494 over Conococheague Creek in a general E-W direction. It consists of two skew pratt steel through trusses, each 133' long, set end to end. The portal braces are triangular trusses of heavier members than the wind braces. All connections are riveted. Each truss has six panels, with diagonal members slanting downward toward the center, so that there is no central "X" panel. The roadway is 27' wide.

CONTINUE ON SEPARATE SHEET IF NECESSARY

8 SIGNIFICANCE

WA-I-462

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
__PREHISTORIC	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	__RELIGION
__1400-1499	__ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE
__1500-1599	__AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE
__1600-1699	__ARCHITECTURE	__EDUCATION	__MILITARY	__SOCIAL/HUMANITARIAN
__1700-1799	__ART	X ENGINEERING	__MUSIC	__THEATER
__1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	X TRANSPORTATION
X 1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)
		__INVENTION		

SPECIFIC DATES 1932

BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

McClintic Marshall Corp., built according to the specifications of the State Roads Commission, H.D. Williar Chief Engineer, W.C. Hopkins Bridge Engineer.

The bridge plaque identifies the State Roads Commission as consisting of E. Brooke Lee and Robert Lacy, with Clinton Uhl as chairman. (see. Uhl essay, M/DOT survey general bridge significance, attached).

CONTINUE ON SEPARATE SHEET IF NECESSARY

WA-I-462

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Condit, Carl, American Building Art, 20th Century; New York Oxford University Press, 1961,

Files of the Bureau of Bridge Design, State Highway Administration, 301 West Preston Street, Baltimore, Maryland.

CONTINUE ON SEPARATE SHEET IF NECESSARY

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY _____

Quadrangle Name: Mason Dixon, MD.
Quadrangle Scale: 1:24 000
UTM References: 18.257100.4399020

VERBAL BOUNDARY DESCRIPTION

N/A

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	COUNTY
N/A	
STATE	COUNTY

11 FORM PREPARED BY

NAME / TITLE
John Hnedak/M/DOT Survey Manager

ORGANIZATION
Maryland Historical Trust

DATE
1980

STREET & NUMBER
21 State Circle

TELEPHONE
(301) 269-2438

CITY OR TOWN
Annapolis

STATE
Maryland 21401

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature, to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 Supplement.

The Survey and Inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

RETURN TO: Maryland Historical Trust
The Shaw House, 21 State Circle
Annapolis, Maryland 21401
(301) 267-1438

WA-I-462

GENERAL BRIDGE SIGNIFICANCE

The significance of bridges in Maryland is a difficult and subtle thing to gauge. The Modified significance criteria of the National Register, which are the standard for these judgements in Maryland, as in most states, must be broadly applied to allow for most of these structures, In particular the 50 year rule which specifies a minimum age for structures can be waived, and is more commonly done so for engineering structures than for others. Questions of uniqueness and typicality, exemplary types, etc., must set aside for now, because they presuppose a wider knowledge of the entire resources than is presently available. Indeed, this survey is an initial step toward understanding the extent to which Maryland's bridges are part of her cultural resources. Aesthetic considerations may have to be sidestepped entirely, for such structures as these are generally considered mundane and ordinary at best, and sometimes a negative landscape feature, by the layman. It does take a specialized aesthetic sense to appreciate such structures on visual grounds, but a case for visual significance can be made. The remaining criteria are those of historical associations. The relative youth of most of these structures precludes a strong likelihood of participation to events and lives of import. The best generalization can be made for most bridges is that they are built on site of early crossings, developing from fords and ferries through covered bridges and wooden trusses to their present state. This significance inheres in the site, however, and in most cases would not be diminished by the adsense of the present structure.

These criteria may also be addressed positively. The primary significance of these bridges, those which were built between the two World Wars, consists in their association with rapidly changing modes and trends in transportation in America during the period. The earliest of them saw the appearance of the automobile and its rise as the preëminent means of getting Americans from place to place. Roads were being improved for increased speeds and capacity, and bridges, as potential weak links on the system, became particularly important. The technology for producing them was not new, and would not change significantly during the period. Accordingly, great numbers of easily, quickly and relatively cheaply built concrete slab, beam and arch bridges were built to span the samll crossings, or were multiplied to cover longer crossings where height was no problem.

Truss bridges with major structural members of compound beams, of either the Warren or Pratt types, while more expensive and considered more intrusive on the landscape, were built to span the larger gaps.

With an aesthetic which allowed concrete slab bridges to have classical balustrades, or the application of a jazz-age concrete relief; with the considerable variety possible in the construction of medium sized metal trusses; and with the lack of nationwide standards for highway bridge design, the resulting body of structures displays considerable variety. The sameness of appearance of currently produced highway bridges leads one to believe this variety will not reappear. For that reason alone it is wise to keep watch over our existing bridges. Regardless of ones taste and aesthetic preference, one must be admitted that these older bridges add their variety and visual interest to the environment as a whole, and that it is often the case that their replacement by a standard highway bridge results in a visual hole in the landscape.

In situations requiring decisions of potential effect on these structures, they should receive some consideration. As the recording and subsequent understanding of Maryland's Cultural resources grows, they will be recognized as a significant part of that heritage.

It should be noted that two non-negligible classes of structure have been omitted from this set. The first is the huge number of concrete slab or beam bridges of an average of twenty feet or less in length. These are so nearly ubiquitous and of such minor visual impact (they are often easy to drive across without noticing) that they were not inventoried. They are considered in the general recommendations section of the final report of this survey, however.

The second category is that of the "great" bridges, the huge steel crossings of the major waterways. While they are awesome and aesthetically appealing, they are not included in this inventory because they do not share the problems of their more modest counterparts. They do not lack for recognition, they have not been technologically outmoded, and are in no danger of disappearing through replacement. In a sense, they are not as rare; hundreds of

these great bridges are known nationally, and there is little doubt as to the position of any one bridge within national spectrum. There seems little point in including them with the larger inventory of bridges. From an arbitrary point of view, their dates are outside the 1935 limit which we set for the consideration of bridges. We have departed from that limit on occasion, but will not in this case. These bridges, too, will be considered in the final report.

Moveable bridges deserve a special note regarding their significance. They are rare, and all but the most recent of them have been listed by this survey by virtue of that fact alone. They are, by their nature as intermittent impediments to the smooth flow of traffic, threatened. We rarely tolerate disruptions to what we perceive as our progress. This has been demonstrated recently by the replacement of the drawbridge at Denton, on one of the major routes to the Atlantic Coast from the rest of Maryland.

However much we are inconvenienced by them, we must admit that moveable bridges contribute a share of interest to the landscape. As with significance judgements in general, we here enter a realm which is governed by taste and opinion. Some of us might not enjoy being forced to site back for a while to look at the surroundings which we would otherwise totally ignore, especially if the engine is in danger of boiling over. But there are those who are fascinated by the slow rise of a great chunk of roadway, moved by quit, often invisible machinery; who are amused by the tip of the mast which skims the top of the temporary wall; or who reflect on the nobility inherent in a river and the fact that we have not subdued every waterway with our autos, while knowing that we can if we want to.

Locust Level Sch
Nova
PENNSYLVANIA
MARYLAND
MASON AND DIXON LINE
CONOCOCHEAGUE
Fairview
Rockdale
Fairview Mill
Run
Dry
Rockdale
WA-V-462
MASON DIXON
QUADRANGLE

WA-I-462
Fairview Bridge
M/DOT
Hnedak/Meyer
Spring 1980

Built by
McClintic-Marshall
Corporation
1932
CONOCOCHEAGUE CREEK BRIDGE
BUILT – 1932
STATE ROADS COMMISSION
G. CLINTON UHL – CHAIRMAN
E. BROOKS LEE ROBERT LACY
H. D. WILLIAMS, JR. – CHIEF ENGINEER
W. C. HOPKINS – BRIDGE ENGINEER

WA-I-462
Fairview Bridge
M/DOT
Hnedak/Meyer
Spring 1980