

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

MHT No. F-8-2

SHA Bridge No. F26-05 Bridge name Crum Road Bridge

**LOCATION:**

Street/Road name and number [facility carried] formerly carried Crum Road over Israel's Creek

City/town Walkersville Vicinity X

County Frederick

This bridge projects over: Road  Railway  Water  (formerly) Land

Ownership: State  County  Municipal  Other

**HISTORIC STATUS:**

Is the 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 \_\_\_\_\_

**DESCRIPTION:**

Setting: Urban \_\_\_\_\_ Small town \_\_\_\_\_ Rural \_\_\_\_\_

**Describe Setting:**

Bridge No. F26-05 formerly carried Crum Road over Israel Creek in Frederick County. Crum Road runs north/south and Israel Creek flows east/west. The bridge has been disassembled and is currently in storage; the County anticipates re-using the structure in Ballenger Creek Park, however, no schedule for re-assembly has been set.

**Describe Superstructure and Substructure:**

Bridge No. F26-05 is a single-span, iron bowstring pony truss, constructed circa 1880 by the King Iron Bridge Company of Cleveland, Ohio. It measures 19.2 meters (63 feet) in total length and has eight (8) panels with diagonal endposts. All connections are pinned and the floor system is composed of rolled beam stringers and floorbeams. It has a clear roadway width of 4.08 meters (13.4 feet); the out-to-out width is 4.8 meters (15.75 feet). The bridge previously had concrete abutments (not original) and stone wingwalls.

The Crum Road Bridge was disassembled and a new metal girder bridge was constructed at this crossing in 1994.

**HISTORY:**WHEN was the bridge built: circa 1880This date is: Actual \_\_\_\_\_ Estimated XSource of date: Plaque \_\_\_\_\_ Design plans \_\_\_\_\_ SHA/County bridge files/inspection form X

Other (specify): \_\_\_\_\_

**SURVEYOR/HISTORIAN ANALYSIS:**

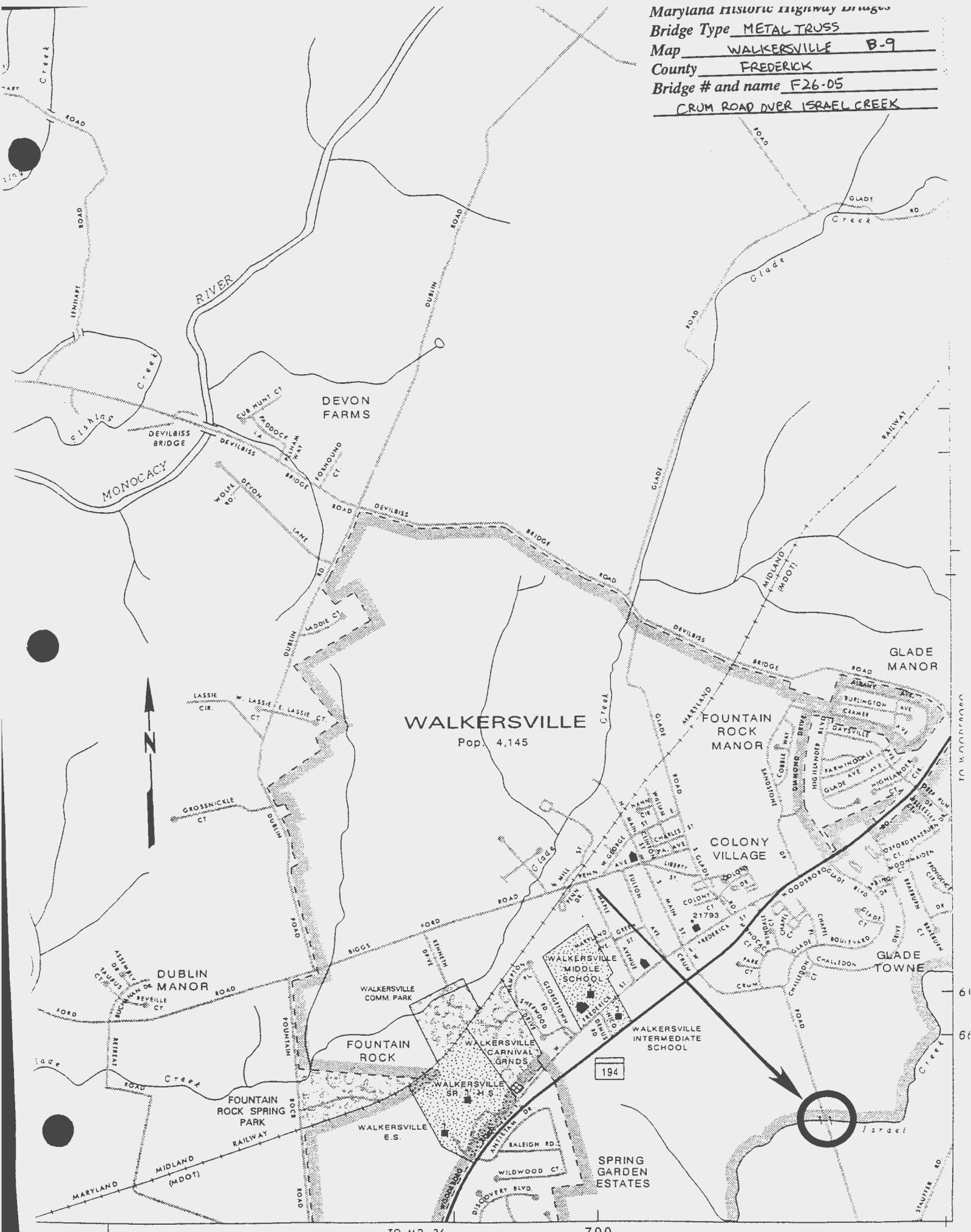
This bridge may have National Register significance for its association with:

A - Events X B- Person \_\_\_\_\_C- Engineering/architectural character X

The bridge was listed on the National Register of Historic Places on December 28, 1978.

**SURVEYOR:**Date bridge recorded March 1998Name of surveyor Dave Dick/Caroline HallOrganization/Address Wallace Montgomery and Associates, 110 West Road, Towson, MD 21204/  
P.A.C. Spero & Co., 40 W. Chesapeake Ave, Suite 412, Baltimore, MD 21204Phone number (410) 296-1635FAX number (410) 296-1670

Maryland Historic Highway Bridges  
 Bridge Type METAL TRUSS  
 Map WALKERSVILLE B-9  
 County FREDERICK  
 Bridge # and name F26-05  
CRUM ROAD OVER ISRAEL CREEK



195

TO MD. 26 1210 700

7700 00'



1. F-8-2

2. Fall-05, Crum Road over Israel Creek

3. Frederick County, MD

4. Ryan McKay

5. July 1997

6. MD SHPO

7. South approach

8. 1 of 2



1. F-8-2

2. F26-05, Crum Road over Israel Creek

3. Frederick County, MD

4. Ryan McKay

5. July 1997

6. MD SHPO

7. East elevation

8. 2 of 2

F-8-2

Crum Road Bridge  
Walkersville  
Public

C. 1880

The Crum Road Bridge spans Israel Creek southeast of Walkersville, on Crum Road.

The bridge is an iron bowstring pony truss bridge in a single span of 62 feet in length and 15.8 in width. It was built circa 1875, probably by the King Iron Bridge Company of Cleveland, Ohio. The structure is set on two replacement reinforced cement abutments. The bridge has been recently refurbished with a new plank flooring and coat of paint. The bridge is almost identical to the Dutour Bridge, which was recently moved from its location across the Monocacy River to Catoclin Mountain National Park to be used as a foot bridge.

The Crum Road Bridge is one of only two iron bow string bridges still being used for traffic in Frederick County. The Crum Road Bridge differs from Bennies Hill Bridge in size and construction of its members. Both are tied arches with diagonals serving as bracing and verticals supporting the deck. The Crum Road Bridge is smaller in size than Bennies Hill Bridge.



UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

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RECEIVED

DATE ENTERED

**NATIONAL REGISTER OF HISTORIC PLACES  
INVENTORY -- NOMINATION FORM**

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*  
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

**1 NAME**

HISTORIC

Crum Road Bridge

AND/OR COMMON

**2 LOCATION**

STREET & NUMBER

Crum Road over Israel's Creek

NOT FOR PUBLICATION

CITY, TOWN

Walkersville

CONGRESSIONAL DISTRICT

VICINITY OF

Sixth

STATE

Maryland

CODE

24

COUNTY

Frederick

CODE

021

**3 CLASSIFICATION**

**CATEGORY**

DISTRICT

BUILDING(S)

STRUCTURE

SITE

OBJECT

**OWNERSHIP**

PUBLIC

PRIVATE

BOTH

**PUBLIC ACQUISITION**

IN PROCESS

BEING CONSIDERED

**STATUS**

OCCUPIED

UNOCCUPIED

WORK IN PROGRESS

**ACCESSIBLE**

YES: RESTRICTED

YES: UNRESTRICTED

NO

**PRESENT USE**

AGRICULTURE

COMMERCIAL

EDUCATIONAL

ENTERTAINMENT

GOVERNMENT

INDUSTRIAL

MILITARY

MUSEUM

PARK

PRIVATE RESIDENCE

RELIGIOUS

SCIENTIFIC

TRANSPORTATION

OTHER

**4 OWNER OF PROPERTY**

NAME The Board of County Commissioners of Frederick County, Maryland  
c/o William Fout, Roads Department Engineer

STREET & NUMBER

Winchester Hall

CITY, TOWN

Frederick

STATE

Maryland

21701

VICINITY OF

**5 LOCATION OF LEGAL DESCRIPTION**

COURTHOUSE

REGISTRY OF DEEDS, ETC

Frederick County Roads Department (Bridge #2605)

STREET & NUMBER

Montevue Lane

CITY, TOWN

Frederick

STATE

Maryland

21701

**6 REPRESENTATION IN EXISTING SURVEYS**

TITLE

Historic American Engineering Record

DATE

Summer, 1977

FEDERAL  STATE  COUNTY  LOCAL

DEPOSITORY FOR  
SURVEY RECORDS

National Park Service

CITY, TOWN

Washington

STATE

D. C.

20240

# 7 DESCRIPTION

<b>CONDITION</b>		<b>CHECK ONE</b>	<b>CHECK ONE</b>
<input checked="" type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input checked="" type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED    DATE _____
<input type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Crum Road Bridge spans Israel Creek southeast of Walkersville, Frederick County, Maryland on Crum Road.

The bridge is an iron bowstring pony truss bridge in a single span of 62 feet in length and 15.8 feet in width. It was built circa 1875, probably by the King Iron Bridge Company of Cleveland, Ohio. The structure is set on two replacement reinforced cement abutments. The bridge has been recently refurbished with a new plank flooring and coat of paint. The bridge is almost identical to the Detour Bridge, which was recently moved from its location across the Monocacy River to Catoclin Mountain National Park to be used as a foot bridge.

The Crum Road Bridge is one of only two iron bow string bridges still being used for traffic in Frederick County. The Crum Road Bridge differs from Bennies Hill Bridge in size and construction of its members. Both are tied arches with diagonals serving as bracing and verticals supporting the deck. The Crum Road Bridge is smaller in size than Bennies Hill Bridge.

**8 SIGNIFICANCE**

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION	
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE	
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE	
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN	
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input checked="" type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER	
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input checked="" type="checkbox"/> TRANSPORTATION	
<input type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input checked="" type="checkbox"/> OTHER (SPECIFY)	
		<input type="checkbox"/> INVENTION		industrial archeology	

SPECIFIC DATES      circa 1880      BUILDER/ARCHITECT      King Iron Bridge Company(?)

STATEMENT OF SIGNIFICANCE

The original patent for the bow string arch truss bridge was first registered in 1840 and was a popular structure until the late 19th century.

However, the Crum Road Bridge may be an example of Zenas King's patented Tubular Arch Bridge, a very popular design of the King Iron Bridge and Manufacturing Company, who probably constructed this bridge in the 1870's. Even in the heyday of iron truss bridges, bow string arch bridges were a rarity as evidenced by this quote from James Waddell's The Designing of Ordinary Iron Highway Bridges in reference to Pratt & Whipple Trusses: "at least ninety percent of all American iron highway bridges are built on these systems."<sup>1</sup>

There are some forty iron truss bridges still in existence in Frederick County, Maryland. But with increasing development in the area many of these will have to be destroyed because of additional tonnage requirements demanded of highway structures. Since iron truss bridges portray an important step in bridge engineering design it is imperative that some examples such as the Crum Road Bridge remain in the American landscape.

<sup>1</sup> James A. L. Waddell, The Designing of Ordinary Iron Highway Bridges (New York: John Wiley & Sons, Inc., 1891-5th ed.), p. IV.

# 9 MAJOR BIBLIOGRAPHICAL REFERENCES

F-8-2

SEE CONTINUATION SHEET #1.

## 10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 112' x 50'

UTM REFERENCES

A	ZONE	EASTING	NORTHING
C	ZONE	EASTING	NORTHING

B	ZONE	EASTING	NORTHING
D	ZONE	EASTING	NORTHING

VERBAL BOUNDARY DESCRIPTION

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

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

## 11 FORM PREPARED BY

1 km

NAME: TITLE

Cherilyn Widell

ORGANIZATION

Frederick County Historic Preservation

DATE

January 19, 1978

STREET & NUMBER

Winchester Hall; 12 East Church Street

TELEPHONE

(301) 663-8300

CITY OR TOWN

Frederick

STATE

Maryland 21701

## 12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS

NATIONAL

STATE

LOCAL

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

TITLE

STATE HISTORIC PRESERVATION OFFICER

DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION  
ATTEST

DATE

KEEPER OF THE NATIONAL REGISTER

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

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**NATIONAL REGISTER OF HISTORIC PLACES  
INVENTORY -- NOMINATION FORM**

Crum Road Bridge  
Frederick County  
Maryland

CONTINUATION SHEET

ITEM NUMBER

9

PAGE

1

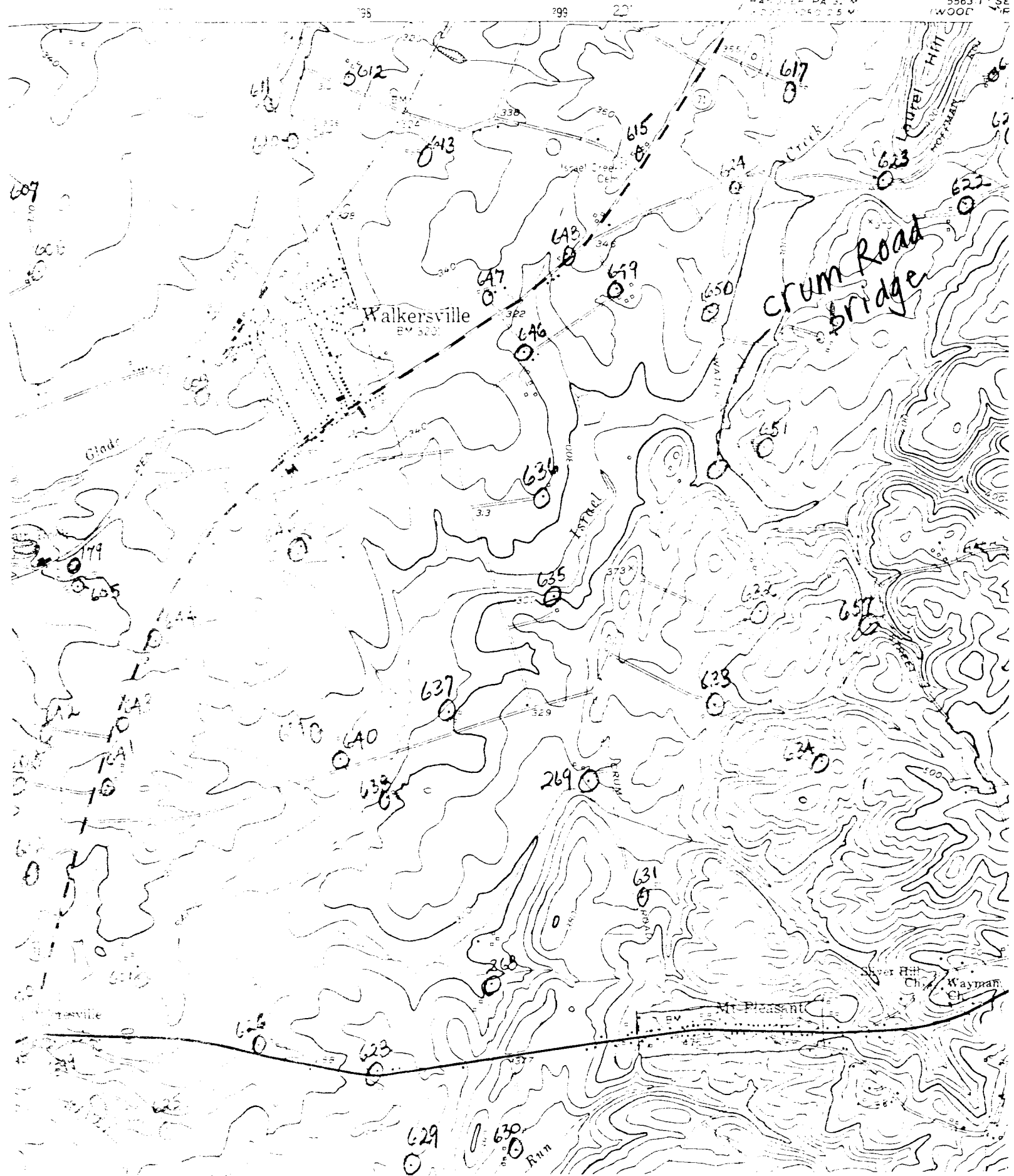
MAJOR BIBLIOGRAPHICAL REFERENCES

Deibler, Dan. Metal Truss Bridges in Virginia, 1865-1932. Vol. I.  
Virginia Highway and Transportation Research Council, 1975.

Jackson, Donald. "Railroads, truss bridges and the rise of the civil engineer."  
Civil Engineering (October, 1977), 97-101.

Meeting minutes of the Frederick County Commissioners, 1882-1889.

The Frederick Examiner, Wednesday, September 13, 1854.





Crum Rd Bridge

Crum Rd over Israel's Creek

Nath Approach

CRW 8/78

F-8-2