MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes X
no__

Property Name: Principio Creek Railroad Bridge No. 56.92 Inventory Number: CE-1560

Address: Amtrak ROW Between Principio Station Road & Mountain Hill Road City: Perryville Zip Code: 21903

County: Cecil USGS Topographic Map: Havre De Grace MD 1985

Owner: National Railroad Passenger Corporation (Amtrak) Is the property being evaluated a district? ____yes

Tax Parcel Number: None available Tax Map Number: 35 Tax Account ID Number: _____

Project: Principio Creek Railroad Bridge Repair Agency: Federal Railroad Administration

Site visit by MHT Staff: X no ___yes Name: _____ Date: _____

Is the property located within a historic district? ____yes X no

If the property is within a district District Inventory Number: _____

NR-listed district ____yes Eligible district ____yes District Name: _____

Preparer's Recommendation: Contributing resource ___yes ___no Non-contributing but eligible in another context ____

If the property is not within a district (or the property is a district)

Preparer's Recommendation: Eligible X yes ____no

Criteria: ___A X B X C ___D Considerations: ____A ___B ___C ___D ___E ___F ___G ___None

Documentation on the property/district is presented in:

Description of Property and Eligibility Determination: *(Use continuation sheet if necessary and attach map and photo)*

The Principio Creek Railroad Bridge No. 56.92 is located just outside of the city of Perryville, Cecil County, in north central Maryland. Principio Creek flows south and empties into Furnace Bay just east of the Susquehanna River in the larger Chesapeake Bay watershed. The bridge is within a densely wooded stand with steep side slopes along the creek banks and is only assessable from the National Railroad Passenger Corporation (Amtrak) rail line right-of-way.

The Principio Creek Railroad Bridge No. 56.92 was constructed in 1903 by the Pennsylvania Railroad. It is a single span stone arch bridge with a stone, concrete, and earthen deck that has been covered by several feet of gravel.[1] The bridge deck measures 39 feet (ft) in length from the face of the upstream headwall to the face of the downstream headwall.[2] The steel rails and concrete ties of the decking rest directly on the gravel. There is a 38 ft high and 37 ½ ft wide tunnel opening on each side. The voussoirs (wedge shaped arch units) are mirrored on both east and west elevations. The closed spandrel arch is constructed of rusticated limestone blocks and is 44 ½ ft high

[1] Cridlebaugh Bruce S. *Bridge Basics - A Spotter's Guide to Bridge Design* (2008) Electronic Document. Accessed July 1, 2013 from http://pghbridges.com/basics.htm
[2] Engineering Structures. *Amtrak Bridge Inventory Mid-Atlantic Division.* (2013) Philadelphia Pennsylvania

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended X **Eligibility not recommended** ____

Criteria: ___A ___B X C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G ___None

Comments:

[signature] 7/10/14
Reviewer, Office of Preservation Services **Date**

[signature] 7/16/14
Reviewer, NR Program **Date**

201403348

and 74 ½ ft wide at its largest spans. Although it is impossible to tell post-construction, the original plans called for the closed spandrels to be filled with rubble and only faced with dressed stone, a common design for these bridge types. The intrados, or interior tunnel, is composed of rubbed ashlar blocks.

The Principio Creek Bridge is in good condition with only a few signs of deterioration. Missing stones were observed on the southwest wall and the northeast wing wall. A fair amount of vegetation grows from between the stones. In addition to the wear and tear, the bridge has had a number of alterations in the subsequent years since its construction. In 1990 a concrete extension was constructed at the base of the southwestern wing wall to help prevent erosion. A set of concrete cinder block steps and an iron handrail that extend from the coping of the bridge deck to down the concrete wall extension was also added on the southwest all that same year. The rusticated stone of the Principio Creek Bridge appear to be original to the 1903 construction; however, due to the extreme conditions inherent to railroad operations, it is highly unlikely that the steel rails and wooden ties themselves are original to the structure. At some point the original stone decking was capped by a concrete slab. A set of steel and concrete sheet pilings were constructed on the south wing wall.

The Principio Creek Bridge, designed by Pennsylvania Railroad Chief Engineer William H. Brown, is typical of engineering at the turn of the last century. In the last few decades of the 19th century railroad bridge failures had increased considerably due to the use of heavier train engines being developed by the railroad companies.[3] As such, engineers and rail executives grew distrustful of wood and metal bridge construction and began seeking a more dependable bridge building material. From the aspect of design and engineering the result was predictable, they began to use the semicircular stone arch, the like of which had been utilized by cultures dating to ancient times.[4] Brown helped prove the resilience of stone bridge construction when his Johnstown Bridge in Pennsylvania withstood disastrous floods two years after its construction in 1887, fully convincing advocates and skeptics alike of the strength of stone arch bridges[5]. Under Browns guidance, the Pennsylvania Railroad undertook one of the most ambitious stonemasonry bridge building programs in the United States[6]. Although few stone arches were built after the first several decades of the twentieth century, the fundamental principles of the arch would continued to be used for turnpike, canal and railroad bridges in the form of concrete, due in large part to the established resilience of stone construction.[7] According to the National Bridge Inventory of the US Department of Transportation, over 40 highway and railroad bridges constructed with a masonry-arch configuration are still in existence in Maryland as of 2012, further proving its strength.[8]

The Principio Creek Bridge (CE-1560) is recommended as eligible for listing on the NRHP due to its historic and architectural significance based on some of the four NRHP criteria and themes identified during research. Under Criterion A, the bridge is not recommended as eligible as it does not reflect the early settlement of the township or county, nor does it provide information on the impact of any local industry. Based on a review of historic topographic mapping (U.S.G.S. 1900 Harve De Grace 15 Minute Series, surveyed in 1899; available at: (http://historical.mytopo.com/getImage.asp?fname=hvdg00se.jpg&state=MD) the rail line including a bridge in the same location were already in existence. As such this bridge replaced an earlier structure at the same location and did not in and of itself alter the nature of the local transportation industry or infrastructure in place at the time of its construction or otherwise contribute to events that made a significant contribution to the history of the area.

The Principio Creek Bridge is recommended eligible under Criterion B based on its association with the Chief Engineer of the Pennsylvania Railroad, William H. Brown (1836 – 1910). Brown designed and built over 160 stone

---

[3] Karschner, Terry. *Pennsylvania Railroad Bridge at Trenton, NRPH Nomination Form 79001502.* Office of Historic Preservation, Environmental Protection, Trenton, New Jersey, 1977.
[4] Spero & Company. *Historic Highway Bridges in Maryland:1631-1960.* Maryland State Department of Transportation, Baltimore, Maryland, 1995.
[5] Karschner 1977.
[6] Atlantic Publishing & Engraving Company. *Encyclopedia of Contemporary Biography of Pennsylvania, Vol. III.* Atlantic Publishing & Engraving Company, New York, 1908.
[7] Spero & Company 1995.
[8] US Department of Transportation. *National Bridge Inventory.* (2013) Electronic Document. Accessed July 1, 2013 from http://www.fhwa.dot.gov/bridge/britab.cfm

arch bridges throughout his life making it one of the most common bridge types found on the Pennsylvania lines.[9] Through his extensive work, Brown helped demonstrate the advantages of stone construction for railroad bridges in the nineteenth century, presenting a distinctive solution to the problem of bridge failures associated with use of heavier locomotives.[10] As such, William Brown was one of the premier engineers of his time. Several representative stone arch bridges built by Brown are already listed on the NRHP, such as the Trenton, New Jersey Pennsylvania Railroad Bridge (NPS reference number: 79001502), and as such the Principio Creek Bridge represents another excellent example of Brown's workmanship.

Due to its stone architecture and the retention of most of its historic material integrity, the Principio Creek Bridge is recommended eligible under Criterion C. The Principio Creek Bridge, built in a simple arch form, represents a fine example of a type of bridge construction applied to a short span typical of the late 19th and early 20th centuries. The Principio Creek Bridge is similar in style and construction with a number of other stone arch railroad bridges in Maryland that are already listed on the NRPH such as the Bloomington Viaduct, the Thomas Viaduct, and the Carrollton Viaduct, as well as stone road bridges like Casselman's Bridge, Wilson's Bridge, and LeGore Bridge.

While bridges may qualify if they have the potential to contribute important information to our understanding of history, properties evaluated under Criterion D are typically considered archaeological sites. The Principio Creek Bridge does not show potential to yield additional information pertaining to any previously-mentioned criteria or themes that could potentially warrant additional research. Due to these factors, Principio Creek Bridge is recommended as not eligible under Criterion D.

Prepared by: Matthew E. Prybylski, MHP
AMEC Environment & Infrastructure
Project Architectural Historian
690 Commonwealth Center
11003 Bluegrass Parkway
Louisville, KY 40299

Date Prepared: 22 November 2013

[9] New York Times. *William Henry Brown Obituary*, New York City, June 26, 1910.
[10] Atlantic Publishing & Engraving Company 1908.

CE-1560

Atlantic Publishing & Engraving Company. *Encyclopedia of Contemporary Biography of Pennsylvania, Vol. III.* Atlantic Publishing & Engraving Company, New York, 1908.

Bruder, Anne E. *Tomorrow's Roads Today: Expressway Construction in Maryland, 1948-1965 Historic Context And Survey Of SHA Bridges Statewide With Determination Of Eligibility Forms.* Maryland State Highway Administration, Baltimore, Maryland, 2011.

Cridlebaugh Bruce S. *Bridge Basics - A Spotter's Guide to Bridge Design* (2008) Electronic Document. Accessed July 1, 2013 from http://pghbridges.com/basics.htm

Engineering Structures. *Amtrak Bridge Inventory Book: Mid-Atlantic Division.* National Railroad Passenger Corporation (Amtrak), Philadelphia Pennsylvania, 2013.

Karschner, Terry. *Pennsylvania Railroad Bridge at Trenton, NRPH Nomination Form 79001502.* Office of Historic Preservation, Environmental Protection, Trenton, New Jersey, 1977.

Maryland State Highway Administration. *SHA's Historic Bridge Inventory 1809-1947.* Maryland State Highway Administration, Baltimore, Maryland, 1995.

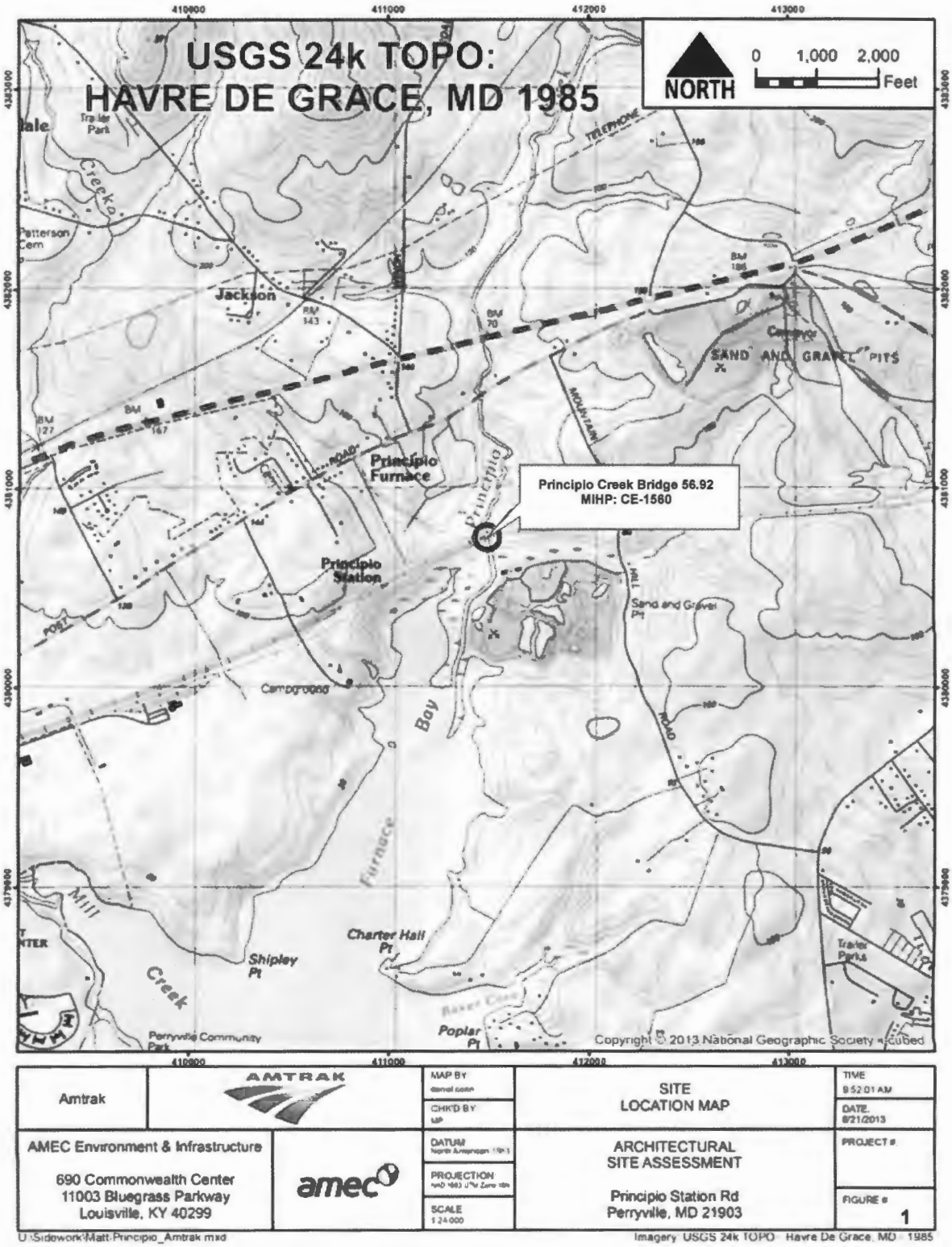
New York Times. *William Henry Brown Obituary*, New York City, June 26, 1910.

Spero & Company. *Historic Highway Bridges in Maryland:1631-1960.* Maryland State Department of Transportation, Baltimore, Maryland, 1995.

US Department of Transportation. *National Bridge Inventory.* Electronic Document. Accessed July 1, 2013 from http://www.fhwa.dot.gov/bridge/britab.cfm

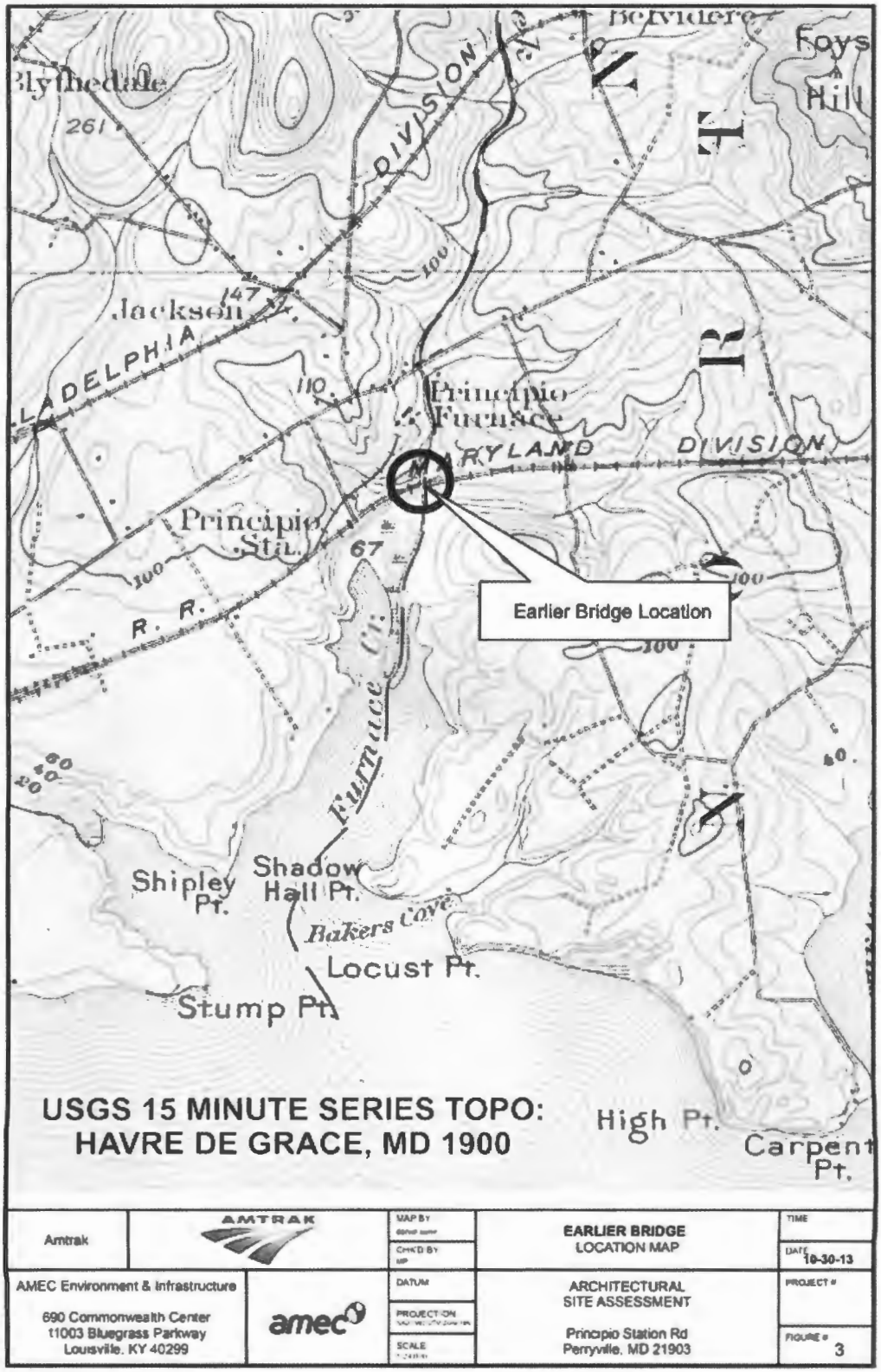
CE-1560

MARYLAND HISTORICAL TRUST
NR-ELIBILITY REVIEW FORM



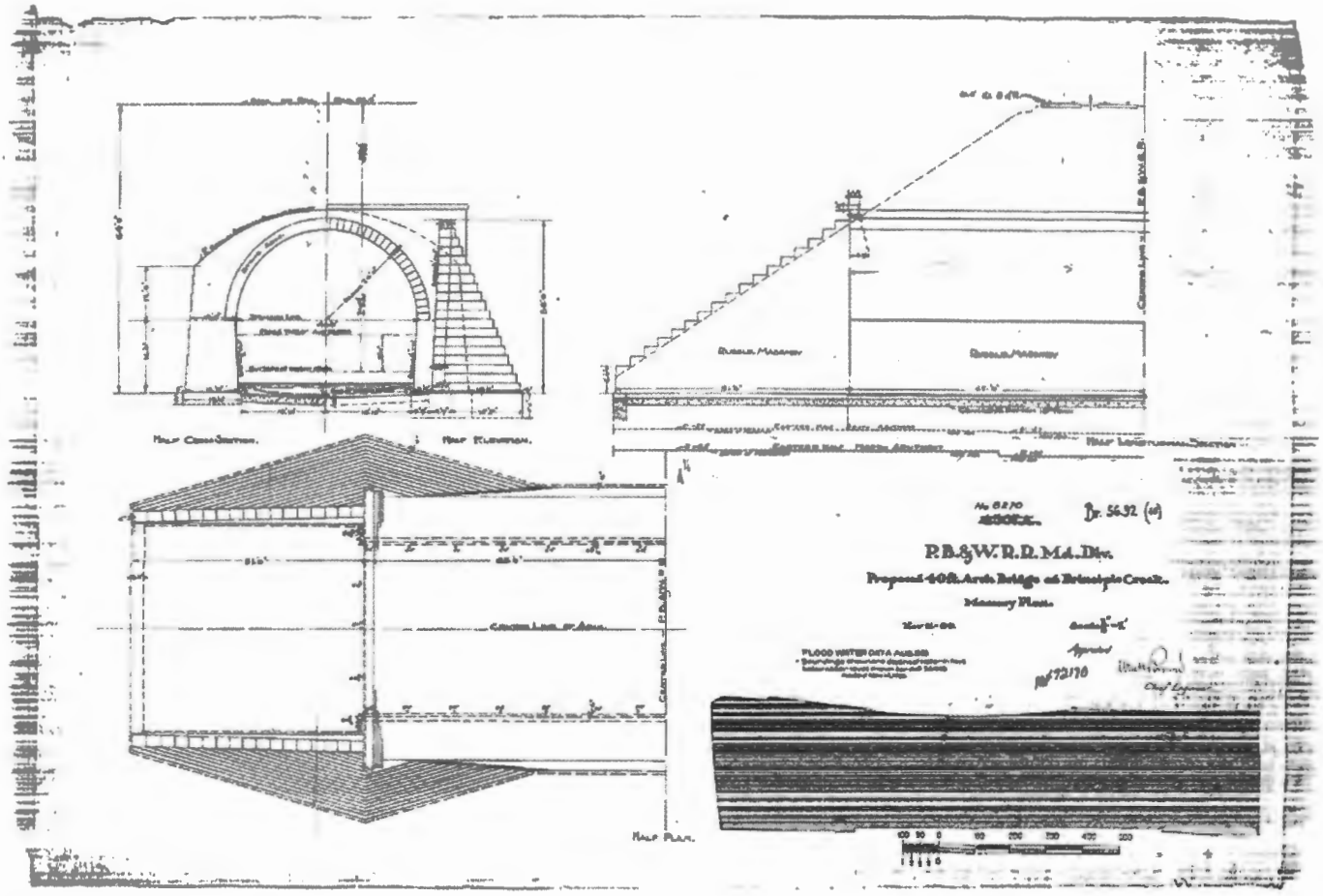
MAP 1: Project Location on USGS 24k Topographic Map (Havre De Grace, MD 1985).

CE-1560



MAP 3: Earlier Bridge Location on USGS Topographic Map (Havre De Grace, MD 1900).

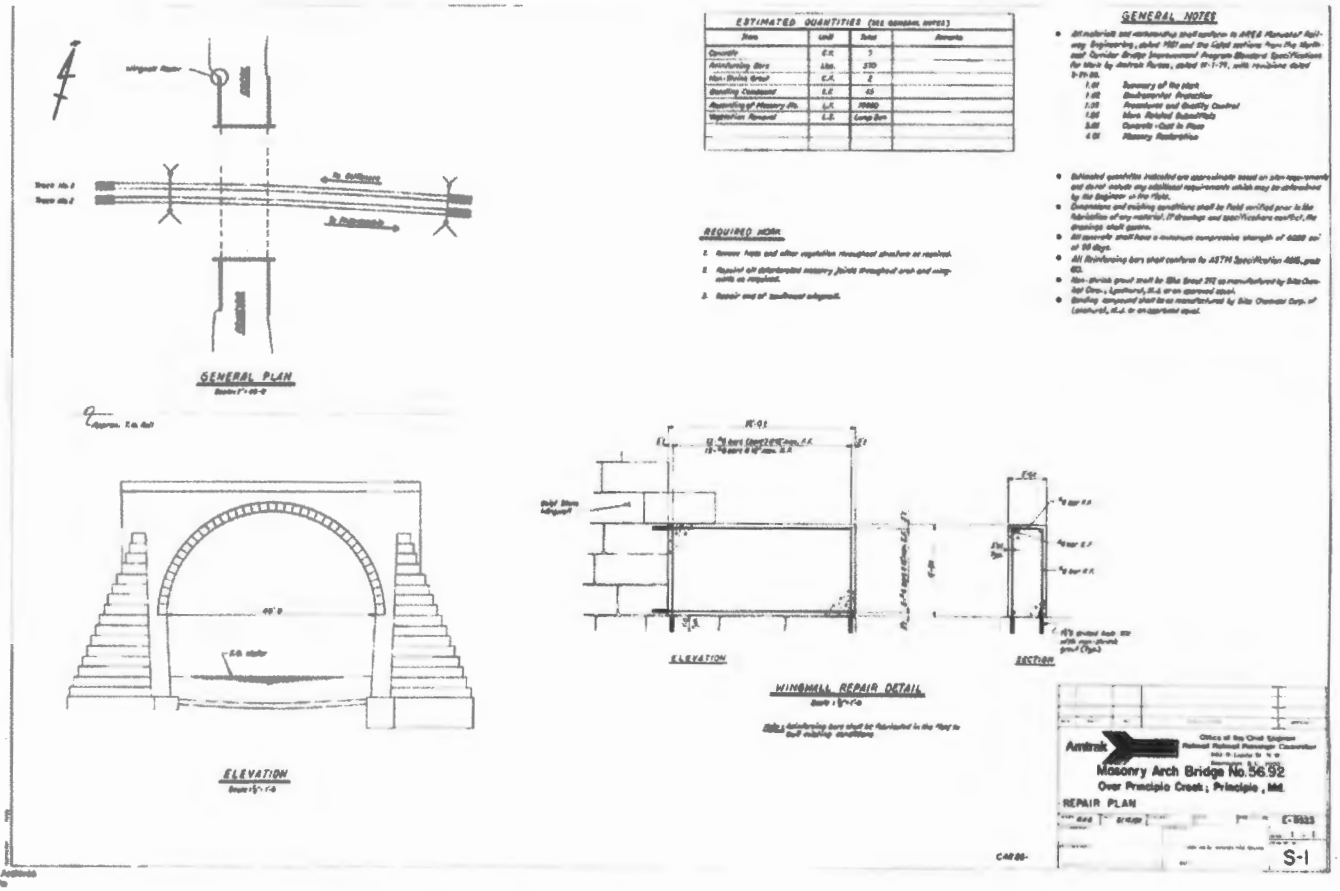
CE-1560



Drawing 1. Original 1902 bridge design by William H. Brown.

CE-1560

MARYLAND HISTORICAL TRUST
NR-ELIBILITY REVIEW FORM



Drawing 2. Wing Wall Repair and Alteration Design Plan from 1990.

amec

PHOTO LOG

Project: Principio Creek State: Maryland County: Cecil

State Site No: CE-1560 Site Name: AMTRAK Principio Creek Railroad Bridge No. 56.92

Printer Inks/Paper: Epson UltraChrome K3 Pigmented Inks on Fuji Crystal Archival Type II Paper

CD-R: Brand - Delkin Devices; Make - Archival Gold Disc; Dye - 24 Karat Gold Phthalocyanine Phase-Changing Dye

Exp. #	Direction	Description	Date
CE-1560_2013-07-24_01	SW	SW Wing wall	7-24-13
CE-1560_2013-07-24_02	W	SW Wing Wall Close Up	7-24-13
CE-1560_2013-07-24_03	W	SW Wing Wall Close Up of Missing Stone	7-24-13
CE-1560_2013-07-24_04	S	Stone Steps and Iron Rail on SE Wing Wall	7-24-13
CE-1560_2013-07-24_05	NW	Tunnel South elevation and SW Wing Wall	7-24-13
CE-1560_2013-07-24_06	NW	Tunnel South elevation and SW Wing wall	7-24-13
CE-1560_2013-07-24_07	NW	SW Wing Wall Close Up	7-24-13
CE-1560_2013-07-24_08	NW	SW Wing Wall	7-24-13
CE-1560_2013-07-24_09	N/A	REMOVED –Picture Could Not Be Developed	7-24-13
CE-1560_2013-07-24_10	W	Stone Base of SW Wing Wall (CLOSE UP)	7-24-13
CE-1560_2013-07-24_11	W	SW Wing Wall	7-24-13
CE-1560_2013-07-24_12	N	Stone steps and iron rail on SE Wing Wall	7-24-13
CE-1560_2013-07-24_13	N/A	REMOVED –Picture Could Not Be Developed	7-24-13
CE-1560_2013-07-24_14	N	Arch of Tunnel on the South Elevation	7-24-13
CE-1560_2013-07-24_15	N	Keystone of Tunnel Arch on the South Elevation	7-24-13
CE-1560_2013-07-24_16	N	Keystone of Tunnel Arch on the South Elevation	7-24-13
CE-1560_2013-07-24_17	NW	Tunnel South elevation and SW Wing Wall	7-24-13
CE-1560_2013-07-24_18	NW	Tunnel South elevation and SW Wing Wall	7-24-13
CE-1560_2013-07-24_19	W	SW Wing Wall	7-24-13
CE-1560_2013-07-24_20	NW	Base of Tunnel and SW Wing Wall	7-24-13
CE-1560_2013-07-24_21	NW	Base of Tunnel and SW Wing Wall	7-24-13
CE-1560_2013-07-24_22	N	Stone Steps on SE Wing Wall (CLOSE UP)	7-24-13
CE-1560_2013-07-24_23	NW	Tunnel South Elevation	7-24-13
CE-1560_2013-07-24_24	NW	Interior of Tunnel's East Elevation (CLOSE UP)	7-24-13
CE-1560_2013-07-24_25	NW	Interior of Tunnel's East Elevation	7-24-13
CE-1560_2013-07-24_26	N	Stone Closed Spandrel on east side of South Elevation	7-24-13
CE-1560_2013-07-24_27	N	Stone Closed Spandrel on east side of South Elevation	7-24-13
CE-1560_2013-07-24_28	N	Stone Coping on east side of South Elevation	7-24-13
CE-1560_2013-07-24_29	SE	SE Wing Wall from above	7-24-13
CE-1560_2013-07-24_30	SE	SE Wing Wall with concrete wall extension	7-24-13
CE-1560_2013-07-24_31	SE	SE Wing Wall with concrete wall extension	7-24-13
CE-1560_2013-07-24_32	N	Stone Coping on the West side of the South Elevation	7-24-13
CE-1560_2013-07-24_33	N	Stone Coping on the West side of the South Elevation	7-24-13
CE-1560_2013-07-24_34	SE	Southeast Wing wall	7-24-13
CE-1560_2013-07-24_35	NE	Tunnel South elevation and SE Wing Wall	7-24-13
CE-1560_2013-07-24_36	E	Base of Southeast Wing wall	7-24-13

amec

PHOTO LOG

Project: Principio Creek State: Maryland County: Cecil

State Site No: CE-1560 Site Name: AMTRAK Principio Creek Railroad Bridge No. 56.92

Printer Inks/Paper: Epson UltraChrome K3 Pigmented Inks on Fuji Crystal Archival Type II Paper

CD-R: Brand - Delkin Devices; Make - Archival Gold Disc; Dye - 24 Karat Gold Phthalocyanine Phase-Changing Dye

Exp. #	Direction	Description	Date
CE-1560_2013-07-24_37	NE	Tunnel South elevation and SE Wing Wall	7-24-13
CE-1560_2013-07-24_38	NE	Tunnel South elevation and SE Wing wall (CLOSE UP)	7-24-13
CE-1560_2013-07-24_39	NE	Tunnel South elevation and SE Wing wall from Woods	7-24-13
CE-1560_2013-07-24_40	W	Surrounding Woods	7-24-13
CE-1560_2013-07-24_41	S	Stone steps and iron rail on SE Wing Wall	7-24-13
CE-1560_2013-07-24_42	SW	Surrounding Woods	7-24-13
CE-1560_2013-07-24_43	SW	Surrounding Woods	7-24-13
CE-1560_2013-07-24_44	S	Stone steps and iron rail on SE Wing Wall (CLOSE UP)	7-24-13
CE-1560_2013-07-24_45	NW	Tunnel South elevation and SW Wing wall from Woods	7-24-13
CE-1560_2013-07-24_46	NW	Tunnel South elevation and SW Wing wall from Woods	7-24-13
CE-1560_2013-07-24_47	NW	Tunnel South elevation and SW Wing wall from Woods	7-24-13
CE-1560_2013-07-24_48	W	Southwest Wing Wall	7-24-13
CE-1560_2013-07-24_49	E	Old Road to SE Wing Wall	7-24-13
CE-1560_2013-07-24_50	S	Principio Creek facing Downstream	7-24-13
CE-1560_2013-07-24_51	N/A	REMOVED –Picture Could Not Be Developed	7-24-13
CE-1560_2013-07-24_52	SE	Southeast Wing wall	7-24-13
CE-1560_2013-07-24_53	W	Gravel Deck Fill	7-24-13
CE-1560_2013-07-24_54	W	Gravel Deck Fill	7-24-13
CE-1560_2013-07-24_55	W	Bridge Deck with Rails	7-24-13
CE-1560_2013-07-24_56	E	Bridge Deck with Rails	7-24-13
CE-1560_2013-07-24_57	W	Bridge Deck with Rails	7-24-13
CE-1560_2013-07-24_58	S	Wooden Steps to South Elevation	7-24-13
CE-1560_2013-07-24_59	SW	SW Wing Wall from top of stone stairs	7-24-13
CE-1560_2013-07-24_60	W	Stone Arch, Coping, and SW Wing Wall	7-24-13
CE-1560_2013-07-24_61	W	Stone Arch, Coping, and SW Wing Wall	7-24-13
CE-1560_2013-07-24_62	W	Base of Tunnel East Elevation	7-24-13
CE-1560_2013-07-24_63	W	Base of Tunnel East Elevation	7-24-13
CE-1560_2013-07-24_64	S	SE Wing Wall Concrete Extension	7-24-13
CE-1560_2013-07-24_65	NW	Bridge South Elevation Overview	7-24-13
CE-1560_2013-07-24_66	N	Principio Creek Facing Upstream	7-24-13
CE-1560_2013-07-24_67	SE	NE Wing Wall	7-24-13
CE-1560_2013-07-24_68	SE	NE Wing Wall and portion of North Elevation	7-24-13
CE-1560_2013-07-24_69	SE	NE Wing Wall and portion of North Elevation	7-24-13
CE-1560_2013-07-24_70	SE	NE Wing Wall and North Elevation	7-24-13

amec

PHOTO LOG

Project: Principio Creek State: Maryland County: Cecil

State Site No: CE-1560 Site Name: AMTRAK Principio Creek Railroad Bridge No. 56.92

Printer Inks/Paper: Epson UltraChrome K3 Pigmented Inks on Fuji Crystal Archival Type II Paper

CD-R: Brand - Delkin Devices; Make - Archival Gold Disc; Dye - 24 Karat Gold Phthalocyanine Phase-Changing Dye

Exp. #	Direction	Description	Date
CE-1560_2013-07-24_71	SE	Tunnel North Elevation Arch (CLOSE UP)	7-24-13
CE-1560_2013-07-24_72	S	Closed Stone Spandrel on North Elevation Eastside	7-24-13
CE-1560_2013-07-24_73	S	Connection of Tunnel and NE Wing Wall	7-24-13
CE-1560_2013-07-24_74	W	Missing Stones on NE Wing Wall (CLOSE UP)	7-24-13
CE-1560_2013-07-24_75	W	Missing Stones on NE Wing Wall (CLOSE UP)	7-24-13
CE-1560_2013-07-24_76	W	Missing Stones on NE Wing Wall (CLOSE UP)	7-24-13
CE-1560_2013-07-24_77	SE	Tunnel North Elevation and NE Wing wall from Woods	7-24-13
CE-1560_2013-07-24_78	SE	Tunnel North Elevation Arch from Woods	7-24-13
CE-1560_2013-07-24_79	SE	Bridge North Elevation and NE Wing wall from Woods	7-24-13
CE-1560_2013-07-24_80	SE	Bridge North Elevation and NE Wing wall from Woods	7-24-13
CE-1560_2013-07-24_81	SE	Bridge North Elevation and NE Wing wall from Woods	7-24-13

MIHP: CE-1560_2013-07-24_01 CE-1560

PROPERTY: AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7-24-13

MD SHPO

SOUTHWEST WING WALL

1 OF 78

CE-1560_2013-07-24_01.JPG
285 N N N N -- 8701 JNI 2058.8/100.0

CE-1560-2013-07-24-02

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7-24-13

MD SHPO

SOUTHWEST WING WALL CLOSEUP

2 OF 78

CE-1560_2013_07_24_03

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7-23-13

MD SHPO

SOUTHWEST WING WALL CLOSE UP of MISSING STONE

3 OF 78

CE-1560_2013_07_24_04

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7-23-13

MD SHPO

STONE STEPS AND IRON RAIL ON SOUTHEAST WING WALL

4 OF 78

CE-1560-2013-07-24-05 CE-1560

AMTRAK PRINGIPIO BRIDGE No. 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7-24-13

MD SHPO

TUNNEL SOUTH ELEVATION AND SOUTHWEST WING WALL

5 OF 78

CE-1560

CE-1560-2013_07_24_06
AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATTHEW PRYBYLSKI
7-24-13
MDSHPO

TUNNEL SOUTH ELEVATION AND SOUTH WEST WING WALL

6 OF 78

CE-1560-2013.07-24_07

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7-24-2013

MD SHPO

SOUTHWEST WING WALL CLOSE UP

7 OF 78

CE-1560_2013-07-24_07.jpg
285 N N N N--- 8701 JNI Z058.8/ 100.0

CE-1560_2013_07_24_08

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATTHEW PRYBYLSKI
7-24-2013
MD SHPO

SOUTHWEST WING WALL

8 OF 78

CE.1560_2013_07_24_10

CE-1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7-24-2013

MD SHPO

STONE BASE OF SOUTHWEST WING WALL (CLOSE UP)

9 OF 78

CE-1560_2013_07_24_11

CE-1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7-24-2013

MDSHPO

SOUTHWEST WING WALL

10 OF 78

CE-1560-2013-07-24-12

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7-24-2013

MD SHPO

STONE STEPS AND IRON RAIL ON SOUTHEAST WING WALL

11 OF 78

CE-1560-2013.07.24.14

CE-1560

AMTRAK PRINCIPIO BRIDGE NO 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7.24.2013

MD SHPO

ARCH of TUNNEL ON SOUTH ELEVATION

12 OF 78

CE-1560_2013-07-24_14.JPG
285 N N N N- -- 0701 JNI 2029.0/ 100.0

CE-1560_2013_07_24_15

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7-24-2013

MD SHPO

KEYSTONE OF TUNNEL ARCH ON THE SOUTH ELEVATION

13 OF 78

CE-1560_2013-07-24_15.JPG
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE-1560_2013_07_24_16

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATTHEW PRYBYLSKI
7-24-2013
MD SHPO

KEYSTONE OF TUNNEL ARCH ON THE SOUTH ELEVATION

14 OF 78

CE-1560_2013_07_24_17

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATTHEW PRYBYLSKI
7-24-2013
MD SHPO
TUNNEL SOUTH ELEVATION AND SOUTHWEST WING WALL
15 OF 78

CE-1560_2013-07-24_17.JPG
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE-1560_2013_07_24_18

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATTHEW PRYBYLSKI
7-24-2013
MD SHPO
TUNNEL SOUTH ELEVATION AND SOUTHWEST WING WALL
16 OF 78

CE_1560_2013_07_24_19

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

SOUTHWEST WING WALL

17 OF 78

CE-1560_2013-07-24_19.JPG
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE_1560_2013_07_24_20

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MDSHPO

BASE OF TUNNEL AND SOUTHWEST WING WALL

18 of 78

CE-1560_2013-07-24_20.JPG
285 N N N N--- 8701 JNI 2058.8/100.0

CE_1560_2013_07_24_21

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

BASE of TUNNEL AND SOUTHWEST WING WALL

19 OF 78

CE-1560_2013-07-24_21.JPG
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE_1560_2013_07_24_22

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

STONE STEPS of SOUTHEAST WING WALL (CLOSE UP)

20 OF 78

CE-1560_2013-07-24_22.JPG
285 N N N N--- 8701 JUL 2058.8/ 100.0

CE_1560_2013_07_24_23

CE - 1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92

CECIL, MD

MATT PRYBYLSKI

MD SHPO

TUNNEL SOUTH ELEVATION

21 OF 78

CE-1560_2013-07-24_23.jpg
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE_1560_2013_07_24_24

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO
INTERIOR of THE TUNNEL'S EAST ELEVATION (CLOSE UP)

22 OF 78

CE-1560-2013-07-24-25

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATTHEW PRYBYLSKI
7-24-2014
MD SHPO

INTERIOR OF THE TUNNEL'S EAST ELEVATION

23 OF 78

CE_1560_2013_07_24_26

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATTHEW PRYBYLSKI

7-24-13

MD SHPO

STONE CLOSED SPANDEL ON EAST SIDE of SOUTH ELEVATION

24 OF 78

CE-1560_2013-07-24_26.jpg
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE-1560-2013_07_24_27

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

STONE CLOSED SPANDEL ON EAST SIDE of SOUTH ELEVATION

25 OF 78

CE-1560_2013-07-24_27.JPG
285 N N N N--- 8701 JUL 2058:8/100.0

CE-1560_2013_07_24_28

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

STONE COPING ON THE EAST SIDE of SOUTH ELEVATION

26 OF 78

CE-1560_2013-07-24_28.jpg
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE-1560-2013_07_24_29

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

SOUTHEAST WING WALL FROM ABOVE

27 OF 78

CE-1560_2013-07-24_29.JPG
285 N N N N--- 8701 JNI 2058.8/100.0

CE-1560_2013_07_24_30

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO
SOUTHEAST WING WALL WITH CONCRETE WALL EXTENSION

28 OF 78

CE-1560_2013-07-24_30.JPG
285 N N N N--- 8701 JNI 2058.8/100.0

CE-1560_2013_07_24_31

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

SOUTHEAST WING WALL WITH CONCRETE WALL EXTENSION

29 OF 78

CE_1560_2013_07_32

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

STONE COPING ON THE WEST SIDE OF SOUTH ELEVATION

30 OF 78

CE-1560_2013_07-24_33 CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

STONE COPING ON THE WEST SIDE of SOUTH ELEVATION

31 OF 78

CE_1560_2013_07_24_34

CE-1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

SOUTHEAST WING WALL

32 OF 78

CE-1560_2013-07-24_34.jpg
285 N N N N --- 8701 JNI 2050.8/100.0

CE_1560_2013_07_24_35

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

TUNNEL SOUTH ELEVATION AND SOUTH EAST WING WALL

33 OF 78

CE-1560_2013-07-24_35.JPG
285 N N N N--- 8701 JNI 2058.8W 100.0

CE-1560_2013_07_24-36

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

BASE of SOUTH EAST WING WALL

34 of 78

CE-1560_2013-07-24_36.jpg
285 N N N N--- 0201 INI 2058.8/ 100.0

CE-1560-2013-07-24-37

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

TUNNEL SOUTH ELEVATION AND SOUTHEAST WING WALL

35 of 78

CE-1560_2013-07-24_37.jpg
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE_1560_2013_07_24_38

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

TUNNEL SOUTH ELEVATION AND SOUTH EAST WING WALL (CLOSEUP)

36 OF 78

CE-1560_2013-07-24_38.JPG
285 N N N N--- 8701 JNI 2050.8/100.0

CE_1560_2013_07_24_39

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

TUNNEL SOUTH ELEVATION AND SOUTHEAST WING WALL FROM WOODS

37 OF 78

CE-1560_2013-07-24_39.JPG
285 N N N N--- 8701 JNI 2070.0/ 100.0

CE_1560_2013_07_24_40

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

SURROUNDING WOODS

38 OF 78

CE-1560-2013-07-24-41

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

STONE STEPS AND IRON RAIL of SOUTHEAST WING WALL

39 of 78

CE-1560_2013-07-24_41.JPG
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE_1560_2013_07_24_42

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

SURROUNDING WOODS

40 OF 78

CE-1560_2013-07-24_42.JPG
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE-1560-2013-07-24-43

CE-1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

SURROUNDING WOODS

41 OF 78

CE-1560_2013-07-24_43.JPG
285 N N N N -- 8701 JNI 2058.8/ 100.0

CE-1560-2013.07-24-44

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

STONE STEPS AND IRON RAIL ON SOUTHEAST WING WALL (CLOSEUP)

42 OF 78

CE-1560_2013-07-24_44.JPG
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE_1560_2013_07_24_45

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

TUNNEL SOUTH ELEVATION AND SOUTHWEST WING WALL FROM WOODS

43 OF 78

CE-1560_2013-07-24_45.JPG
285 N N N N--- 8701 JUL 2058.8/100.0

CE_1560_2013_07_24_46

CE-1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

TUNNEL SOUTH ELEVATION AND SOUTHWEST WING WALL FROM WOODS

44 OF 78

285 N N N N--- 8701 JNI 2058.8/100.0
CE-1560_2013-07-24_46.JPG

CE-1560_2013_07_24_47

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

TUNNEL SOUTH ELEVATION AND SOUTHWEST WING WALL

45 of 78

CE-1560_2013-07-24_47.jpg
285 N N N N---- 8201 JHI 2062.9/ 100.0

CE_1560_2013_07_24_48

CE-1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

SOUTHWEST WING WALL

46 of 78

CE-1560_2013-07-24_48.jpg
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE_1560_2013_07_24_49

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 5692

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

OLD ROAD TO SOUTHEAST WING WALL

47 OF 78

CE-1560_2013-07-24_49.JPG
285 N N N N--- 8701 JNI 2058.8/ 100.0

CE_1560_2013_07_24_50

CE-1560

AMTRAK PRINCIPIO BRIDGE NO 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

PRINCIPIO CREEK FACING DOWNSTREAM

48 of 78

CE-1560_2013-07-24_50.jpg
285 N N N N- 8701 JNI 2058.8/ 100.0

CE_1560_2013_07_24_52

CE-1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

SOUTHEAST WING WALL

49 of 78

CE-1560_2013-07-24_52.JPG
285 N N N N-- 8701 JNI 2058.8/100.0

CE_1560_2013_07_24_53

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

GRAVEL DECK FILL

50 OF 78

CE-1560_2013-07-24_53.JPG
285 N N N N--- 8701 JNI 2050.8/ 100.0

CE_1560_2013_07_24_54

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

GRAVEL DECK FILL

51 OF 78

CE-1560_2013-07-24_54.JPG
285 N N N N--- 8701 JNI 2058.8/100.0

CE-1560_2013-07-24_55

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

BRIDGE DECK WITH RAILS

52 OF 78

CE_1560_2013_07_24_56

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

BRIDGE DECK WITH RAILS

53 OF 78

CE-1560_2013-07-24_56.jpg
285 N N N N--- 8701 JNI 2083.0/100.0

CE_156_2013_07_24_57

CE-1560

AMTRAK PRINCIPIO BRIDGE NO 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

BRIDGE DECK WITH RAILS

54 OF 78

CE-1560_2013-07-24_57.JPG
285 N N N N--- 8701 JNI 2083.0/ 100.0

CE_1560_2013_07_24_58

CE-1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92
CECIL, MD
MATT PRYBYLSKI
7·24-2013
MD SHPO

WOODEN STEPS TO SOUTH ELEVATION

55 OF 78

CE-1560_2013-07-24_58.jpg
285 N N N N--- 8701 JNI 2083.0/100.0

CE-1560-2013-07-24-59 CE-1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

SOUTHWEST WING WALL FROM TOP of STONE STEPS

56 OF 78

CE_1560_2013_07_24_60

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRY BYLSKI

7-24-2013

MD SHPO

STONE ARCH, COPING, AND SOUTHWEST WING WALL

57 OF 78

CE-1560_2013-07-24_60.JPG
285 N N N N--- 8701 1N1 2083.0/ 100.0

CE_1560_2013_07_24_61

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

STONE ARCH, COPING, AND SOUTHWEST WING WALL

58 OF 78

CE_1560_2013_07_24_62

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

BASE of TUNNEL EAST ELEVATION

59 OF 78

CE-1560_2013-07-24_62.jpg
285 N N N N--- 8701 JNI 2083.0/ 100.0

CE_1560_2013_07_24_63

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

BASE of TUNNEL EAST ELEVATION

60 of 78

CE_1560_2013.07_24_64

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

SOUTHEAST WING WALL CONTRETE EXTENSION

64 OF 78

CE-1560-2013.07-24.65

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

BRIDGE SOUTH ELEVATION OVERVIEW

62 OF 78

CE-1560_2013-07-24_65.JPG
285 N N N N--- 8701 JNI 2083.0/ 100.0

CE_1560_2013_07_24_66

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

PRINCIPIO CREEK FACING UPSTREAM (NORTH)

63 OF 78

CE-1560_2013-07-24_66.jpg
285 N N N N--- 8701 JNI 2083.0/ 100.0

CE_1560_2013_07_24_67

CE-1560

AMTRACK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

NORTHEAST WING WALL

64 of 78

CE-1560_2013-07-24_67.JPG
285 N N N N--- 8701 JNL 2083.0/ 100.0

CE_1560_2013_07_24_68

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92

CECIL, MD

MATT PRZYBYLSKI

7-24-2013

MD SHPO

NORTHEAST WING WALL AND PORTIONS of NORTH ELEVATION

65 OF 78

CE_1560_2013_07_24_69

CE-1560

AMTRAK PRINCIPIO BRIDGE NO 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

NORTH EAST WING WALL AND PORTIONS of NORTH ELEVATION

66 OF 78

CE_1560_2013_07_24_70

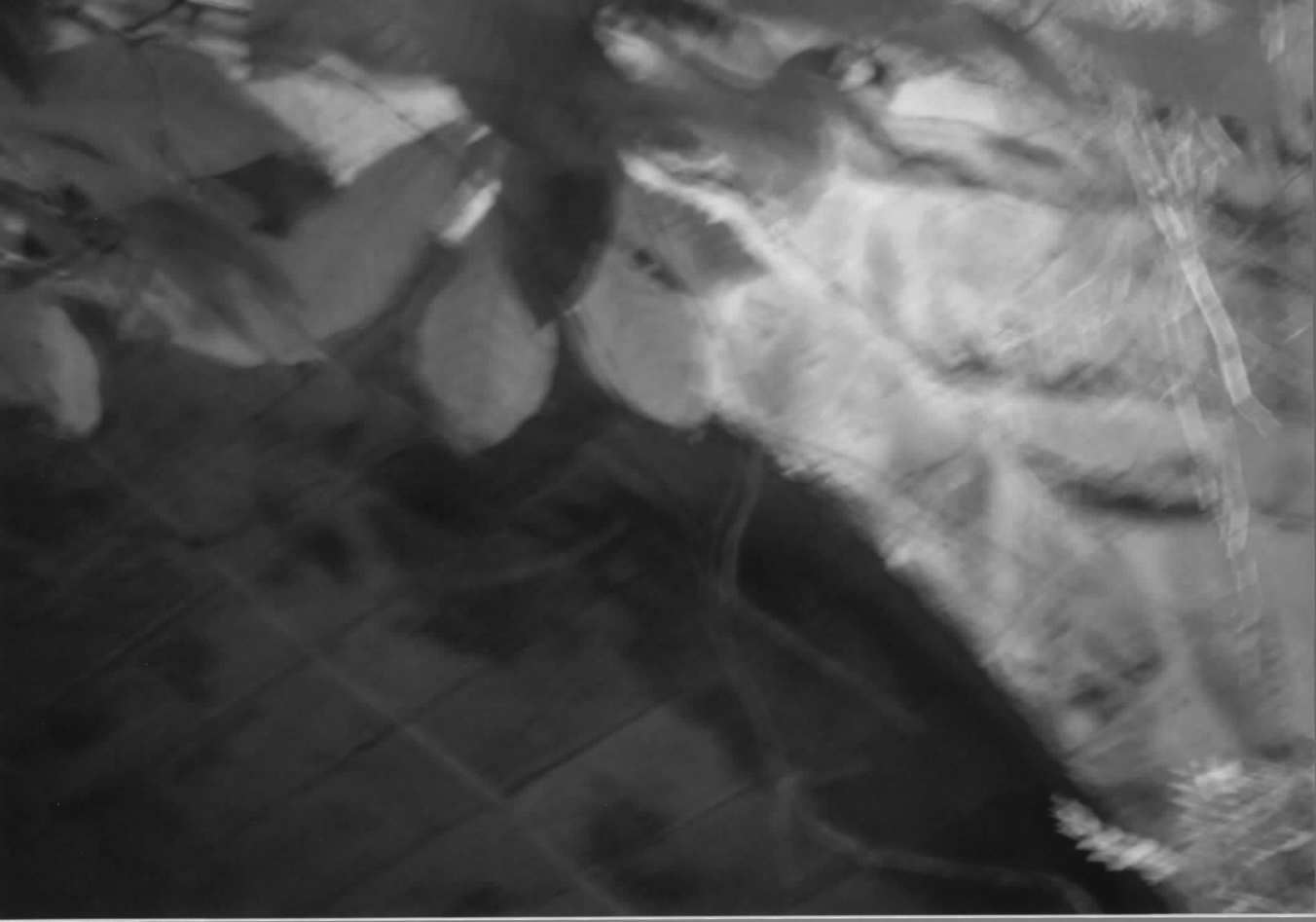
CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

NORTHEAST WING WALL AND NORTH ELEVATION

67 OF 78

CE-1560_2013-07-24_70.jpg
285 N N N N--- 8701 JNI 2083.0/ 100.0



CE_1560_2013_07_24_71

CE-1560

AMTRAK PRINCIPIO BRIDGE NO 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

TUNNEL NORTH ELEVATION ARCH (CLOSEUP)

68 OF 78

CE_1560_2013-07-24_71.jpg
285 N N N N--- 8701 JUL 2083.0/ 100.0

CE-1560-2013-07-24-72

CE-1560

AMTRAK PRINCIPIO BRIDGE NO 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

CLOSE STONE SPANDREL ON NORTH ELEVATION EAST SIDE

69 OF 78

CE_1560_2013_07_24_73

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

CONNECTION OF TUNNEL AND NORTHEAST WING WALL

70 OF 78

CE-1560_2013-07-24_73.jpg
285 N N N N--- 8701 JNI 2083.0/100.0

CE-1560-2013-07-24-74 CE-1560

AMTRAK PRINCIPIO BRIDGE NO 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

MISSING STONE ON NORTHEAST WING WALL (CLOSE UP)

71 OF 78

CE-1560_2013-07-24_74.JPG
285 N N N N--- 8701 JNI 2083.0/ 100.0

CE_1560_2013_07_24_75

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92

CECIL, MD

MATT PRYBULSKI

7-24-2013

MD SHPO

MISSING STONE ON NORTHEAST WING WALL (CLOSE UP)

72 OF 78

CE-1560-2013-07-24-76

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

MISSING STONE ON NORTHEAST WING WALL (CLOSE UP)

73 OF 78

CE-1560-2013.07-24-77 CE-1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

MD SHPO

TUNNEL NORTH ELEVATION AND NORTHEAST WING WALL FROM WOODS

74 OF 78

CE_1560_2013_07_24_78

CE-1560

AMTRAK PRINCIPIO BRIDGE NO. 56.92

CECIL, MD

MATT PRZYBYLSKI

7-24-2013

MD SHPO

TUNNEL NORTH ELEVATION ARCH FROM WOODS

75 OF 78

CE_1560_2013_07_24_79

CE-1560

AMTRAK PRINCIPIO BRIDGE No. 56.92
CECIL, MD
MATT PRYBYLSKI
7-24-2013
MD SHPO

BRIDGE NORTH ELEVATION AND NORTHEAST WING WALL
FROM WOODS

76 of 78

CE-1560-2013-07-24-80

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92

CECIL, MD

MATT PRYBYLSKI

7-24-2013

BRIDGE NORTH ELEVATION AND NORTHEAST WING WALL FROM WOODS

77 OF 78

CE-1560_2013-07-24_80.JPG
285 N N N N--- 8701 JNI 2083.0/ 100.0

CE_1560_2013_07_24_81

CE-1560

AMTRAK PRINCIPIO BRIDGE No 56.92

CECIL, MD

MATT PRYBYLSKI

7·24-2013

MD SHPO

BRIDGE NORTH ELEVATION AND NORTHEAST WING WALL FROM WOODS

78 OF 78