

Historic Resource Survey Form

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION
Bureau for Historic Preservation

Key # 107870
ER# 2010-8010-042

Name, Location and Ownership (Items 1-6; see Instructions, page 4)

HISTORIC NAME Baltimore & Ohio Railroad Pittsburgh Division

CURRENT/Common NAME CSX Transportation, Inc. Right-of-Way

STREET ADDRESS _____

ZIP _____

LOCATION Generally following Wills Creek, Flaugherty Creek, Casselman River, Youghiogheny River, and Monongahela River from Pennsylvania-Maryland state line south of Hyndman at the southeast end to Pittsburgh at the northwest end.

MUNICIPALITY Multiple

COUNTY Somerset, Bedford, Allegheny

TAX PARCEL #/YEAR Multiple

USGS QUAD Hyndman, Fairhope, Wittenberg, Meyersdale, Confluence, McKeesport PA

OWNERSHIP ☒ Private

☐ Public/Local ☐ Public/County ☐ Public/State ☐ Public/Federal

OWNER NAME/ADDRESS CSX Transportation, Inc.

CATEGORY OF PROPERTY ☐ Building ☐ Site ☐ Structure ☐ Object ☒ District

TOTAL NUMBER OF RESOURCES _____

Function (Items 7-8; see Instructions, pages 4-6)

Historic Function

Transportation

Transportation

Transportation

Subcategory

Rail-related

Rail-related

Rail-related

Particular Type

Railroad

Tunnel

Bridge

Current Function

Transportation

Transportation

Transportation

Subcategory

Rail-related

Rail-related

Rail-related

Particular Type

Railroad

Tunnel

Bridge

Architectural/Property Information (Items 9-14; see Instructions, pages 6-7)

ARCHITECTURAL CLASSIFICATION

No style

EXTERIOR MATERIALS and STRUCTURAL SYSTEM

Foundation _____

Walls _____

Roof _____

Other _____

Structural System _____

Asphalt, steel, stone, brick, concrete, wood

WIDTH _____ (feet) or _____ (# bays)

DEPTH _____ (feet) or _____ (# rooms)

STORIES/HEIGHT _____

Key # _____
ER# _____

Property Features *(Items 15-17; see Instructions, pages 7-8)*

Setting Railroad corridor passing through rural and suburban landscapes

Ancillary Features

Sidings

Retaining walls

Culverts

Yards

Tracks

Interlocking and signal towers

Roadbeds

Acreage Unknown (round to nearest tenth)

Historical Information *(Items 18-21; see Instructions, page 8)*

Year Construction Began 1847 ☐ Circa **Year Completed** 1871 ☐ Circa

Date of Major Additions, Alterations _____ ☐ Circa _____ ☐ Circa _____ ☐ Circa

Basis for Dating ☒ Documentary ☐ Physical

Explain Secondary sources (see narrative and bibliography)

Cultural/Ethnic Affiliation(s) None

Associated Individual(s) None

Associated Event(s) _____

Architect(s) N/A

Builder(s) Baltimore & Ohio Railroad

Submission Information *(Items 22-23; see Instructions, page 8)*

Previous Survey/Determinations PHMC opinion of eligibility in 1997 for section through North Versailles Township, North Braddock, Braddock, Rankin, and Swissvale boroughs, and Pittsburgh in Allegheny County; PHMC opinion of eligibility in 2001 for section through West Homestead and Hays boroughs in Allegheny County; PHMC opinion of eligibility for section in Adams Township, Butler County.

Threats ☐ None ☐ Neglect ☐ Public Development ☒ Private Development ☐ Other

Explain National Gateway Initiative Clearance Project

This submission is related to a ☐ non-profit grant application ☐ business tax incentive

☒ NHPA/PA History Code Project Review ☐ other

Preparer Information *(Items 24-30; see Instructions, page 9)*

Name & Title Elizabeth Amisson, Senior Architectural Historian

Date Prepared November 17, 2009

Project Name National Gateway Initiative Clearance Project

Organization/Company A.D. Marble & Company

Mailing Address 375 East Elm Street, Suite 200, Conshohocken, PA 19428

Phone 484-533-2500

Email eamisson@admarble.com

National Register Evaluation (Item 31; see Instructions, page 9)
(To be completed by Survey Director, Agency Consultant, or for Project Reviews ONLY.)

- ☐ Not Eligible (due to ☐ lack of significance and/or ☐ lack of integrity)
- ☒ Eligible Area(s) of Significance Criterion A (transportation and industry)
- Criteria Considerations _____ Period of Significance 1871-1929
- ☐ Contributes to Potential or Eligible District District Name _____

Bibliography (Item 32; cite major references consulted. Attach additional page if needed. See Instructions, page 9.)

- A.G. Lichtenstein & Associates, Inc.
1998 Pennsylvania Historic Bridge Inventory and Evaluation form for SR 2037 over CSXT (B&O Railroad). On file at Pennsylvania Historical & Museum Commission, Harrisburg, Pennsylvania.
- Baltimore & Ohio Railroad
1897a *Baltimore & Ohio Railroad Portals Falls Cut Tunnel, P.&C.R.R..*
- 1897b *Baltimore & Ohio Railroad Plan & Section Falls Cut Tunnel, P.&C.R.R..*
- 1905 *B.&O.R.R. Plans, Sections, etc. Falls Cut Tunnel, Connellsville Division (Between Fairhope and Manila).* Revision date unknown.
- 1913 *B.&O.R.R. Plans, Sections, etc. Sand Patch Tunnel Built in 1911-1912, Connellsville Division Between Manila and Sand Patch.* Drawings dated November 1913.
- 1916 Multiple drawings for Bridge No. 10, Hyndman, Pennsylvania. Ties plan and trestle plan.
- 1919a *B.&O.R.R. Plans, Sections, etc. New Sand Patch Tunnel Extension Built in 1918, Connellsville Division Between Manila and Sand Patch.* Drawings dated September 1919.
- 1919b *B.&O.R.R. Plans, Sections, etc. Pinkerton Tunnel, Connellsville Division.* Drawing dated November 1919 (revision to earlier drawing dated March 1911).

See continuation sheet.

Additional Information

The following must be submitted with form. Check the appropriate box as each piece is completed and attach to form with paperclip.

- ☒ Narrative Sheets—Description/Integrity and History/Significance (See Instructions, pages 13-14)
- ☒ Current Photos (See Instructions, page 10)
- ☒ Photo List (See Instructions, page 11)
- ☒ Site Map (sketch site map on 8.5x11 page; include North arrow, approximate scale; label all resources, street names, and geographic features; show exterior photo locations; See Instructions, page 11)
- ☐ Floor Plan (sketch main building plans on 8.5x11 page; include North arrow, scale bar or length/width dimensions; label rooms; show interior photo locations; See Instructions, page 11)
- ☒ USGS Map (submit original, photocopy, or download from TopoZone.com; See Instructions, page 12)

Send Completed Form and Additional Information to:

National Register Program
Bureau for Historic Preservation/PHMC
Keystone Bldg., 2nd Floor
400 North St.
Harrisburg, PA 17120-0093

Bibliography Continuation Sheet

Key # _____

ER# _____

- 1919c *B.&O.R.R. Plans, Sections, etc. Shoo Fly Tunnel, Connellsville Division.* Drawing dated November 1919 (revision to earlier drawing dated 1903).
- 1919d *B.&O.R.R. Plans, Sections, etc. Brook Tunnel, Connellsville Division.* Drawing dated November 1919 (revision to earlier drawing, date unknown).
- 1922 *Baltimore & Ohio Railroad Corporate Histories, Volume 2.* Baltimore: Baltimore & Ohio Railroad Company Valuation Department. On file at Baltimore & Ohio Railroad Museum, Baltimore, Maryland.
- 1933 Multiple drawings for steel repairs to Bridge No. 10, Hyndman, Pennsylvania.
- 1937 Multiple drawings for steel repairs to Bridge No. 10, Hyndman, Pennsylvania.
- 1943 Multiple drawings for steel repairs to Bridge No. 10, Hyndman, Pennsylvania.
- 1951 Multiple drawings for steel repairs to Bridge No. 10, Hyndman, Pennsylvania.
- Brown, Scott C.
1991 Historic American Engineering Record documentation for North Hyndman Bridge, Baltimore & Ohio Railroad. HAER No. PA-358.
- Brown, Scott C. et al.
1994 *Somerset County, Pennsylvania: An Inventory of Historic Engineering and Industrial Sites.* Washington, D.C.:National Park Service.
- Chessie System
1977 Multiple drawings for steel repairs to Bridge No. 10, Hyndman, Pennsylvania.
- CSX Transportation, Inc.
2009 "Baltimore & Ohio Railroad History," Available from <http://csx.history.railfan.net/menuhistory.html>
- Dilts, James
1993 *The Great Road: The Building of the B&O, the Nation's First Railroad.* Stanford University Press, Stanford, California.
- Drury, George
2000 *The Historical Guide to North American Railroads.* Waukesha, Wisconsin: Kalmbach Publishing Co.
- Glessner et al.
1986 Pennsylvania Historic Resource Survey Form for Falls Cut Tunnel. On file at Pennsylvania Historical and Museum Commission, Harrisburg, Pennsylvania.
- Fike, Sally
1994 Pennsylvania Historic Resource Survey Form for Western Maryland Railway – Keystone Viaduct. On file at Pennsylvania Historical and Museum Commission, Harrisburg, Pennsylvania.
- Franklin, Ellis
1882 *History of Fayette County, Pennsylvania.* Philadelphia: L.H. Everts & Company.
- Harwood, Herbert H., Jr.
1994 *Impossible Challenge II.* Baltimore: Barnard, Roberts and Co., Inc.
- King Bridge Company
1916 Multiple drawings for Bridge No. 10, Connellsville Division. Prepared for Baltimore & Ohio Railroad. Contract No. 122.
- McGuinness, Marci Lynn
1998 *Along the Baltimore & Ohio Railroad, From Cumberland to Uniontown.* Chicago: Arcadia Publishing.
- P.A.C. Spero & Company
1997 Pennsylvania Historic Resource Survey Form for Baltimore & Ohio Railroad through North Versailles Township, North Braddock, Braddock, Rankin, and Swissvale boroughs, and Pittsburgh. On file at Pennsylvania Historical and Museum Commission, Harrisburg, Pennsylvania.
- Reynolds, Kirk and Dave Oroszi
2008 *Baltimore and Ohio Railroad.* Voyageur Press, Minneapolis, Minnesota.

Bibliography Continuation Sheet

Key # _____
ER# _____

Roberts, Charles S.

1993 *Sand Patch: Cumberland to Connellsville and Branches 1837-1993*. Baltimore: Barnard, Roberts and Co., Inc.

Salamon, Stephen J. et al.

1993a *Baltimore and Ohio: Reflections of the Capital Dome, New York to Cumberland*. Old Line Graphics, Silver Spring, Maryland.

1993b *Baltimore and Ohio: Sunburst Trail to Chicago, Cumberland to Chicago*.
Old Line Graphics, Silver Spring, Maryland.

Shippen, Joseph

1884 *History of Bedford, Somerset, and Fulton Counties, Pennsylvania*. Chicago: Waterman, Watkins & Co.

Somerset County Planning Commission

1984 Somerset County Phase II Historic Resources Survey. On file at Pennsylvania Historical & Museum Commission, Harrisburg, Pennsylvania.

Stover, John F.

1987 *History of the Baltimore & Ohio Railroad*. West Lafayette, Indiana: Purdue University Press.

Internet Resources

Meyersdale, PA website (accessed November 9, 2009)

<http://www.meyersdalepa.org/railroad/borailhistory.html>

SteamPhotos.com website (accessed November 9, 2009)

http://www.steamphotos.com/gallery/3405984_hFJN7#201168208_Wj4CH

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Photo List (Item 33)

See pages 10-11 of the Instructions for more information regarding photos and the photo list. In addition to this photo list, create a photo key for the site plan and floor plans by placing the photo number in the location the photographer was standing on the appropriate plan. Place a small arrow next to the photo number indicating the direction the camera was pointed. Label individual photos on the reverse side or provide a caption underneath digital photos.

Key # _____
ER# _____

Photographer name Robert Kreamer, Elizabeth Amisson

Date October 2009

Location Negatives/Electronic Images Stored A.D. Marble & Company, Conshohocken, PA

Photo #	Photo Subject/Description	Camera Facing
1	Wills Creek Bridge, west elevation.	SE
2	Wills Creek Bridge. Note the underside of the superstructure and intersection with northern abutment.	NW
3	Wills Creek Bridge. Note granite block walls beneath poured concrete.	SE
4	Wills Creek Bridge, east elevation.	E
5	Wills Creek Bridge, looking along track.	NW
6	Falls Cut Tunnel (south portal). Note the plate girder bridge over Wills Creek before the tunnel.	NE
7	Falls Cut Tunnel (south portal). Note incised stone plaques with name and construction date (1897).	N
8	Falls Cut Tunnel (south portal). Note the brick liner and splayed pilaster.	N
9	Falls Cut Tunnel (north portal).	SW
10	Falls Cut Tunnel (north portal). Note incised stones with name and construction date (1897).	SW
11	Falls Cut Tunnel (north portal), looking along the track. Note bridge over Wills Creek.	NE
12	Sand Patch Tunnel (south portal). Note spalling of concrete portal facing.	NE
13	Sand Patch Tunnel inside south portal. Note refuge niche and brick wall visible beneath concrete.	N
14	Sand Patch Tunnel (south portal), looking along the tracks.	SW
15	Sand Patch Tunnel (north portal). Note the name incised in the concrete.	SW
16	Sand Patch Tunnel (north portal), looking along the track.	NE
17	Sand Patch Tunnel (north portal). Note the brick liner.	SW
18	Church Street Bridge.	NW
19	Church Street Bridge. Note concrete pier.	SW
20	Church Street Bridge. Note concrete abutment and underside of superstructure.	N
21	Church Street Bridge, looking along Church Street. Note the brick covering the deck.	SW
22	Church Street Bridge. Note the steel-plated pedestrian walkway and iron railing.	SW
23	Pinkerton Tunnel (west portal). Note the inscribed stone with name and keystone (dated 1885). Note construction into the rock face.	E
24	Pinkerton Tunnel (west portal). Note rock facing to left.	E
25	Pinkerton Tunnel (west portal), view to the east. Note stone arch and brick liner.	E
26	Pinkerton Tunnel (east portal). Note the portal is constructed into the rock facing.	SE

Key # _____

ER# _____

Photo #	Photo Subject/Description	Camera Facing
27	Pinkerton Tunnel (east portal). Note the incised name and keystone (dated 1885).	SW
28	Pinkerton Tunnel (east portal). Note the stone archway and brick liner.	SW
29	Shoo Fly Tunnel (west portal).	E
30	Shoo Fly Tunnel (west portal). Note decorative brick work, including raised letters	E
31	Shoo Fly Tunnel (west portal). Note brick liner.	E
32	Shoo Fly Tunnel, interior near west portal. Note refuge niche.	NE
33	Shoo Fly Tunnel (east portal). Note pilasters flanking opening.	SW
34	Shoo Fly Tunnel (east portal). Note decorative brick work with raised letters and deteriorated keystone.	SW
35	Benford Tunnel (south portal). Note decorative brick work including corbelling, recessed panels, and raised letters forming name.	N
36	Benford Tunnel (south portal). Note the portal is constructed into the rock facing.	N
37	Benford Tunnel (south portal). Note the brick liner.	W
38	Benford Tunnel (south portal). Note refuge niche.	E
39	Benford Tunnel (north portal). Note that the portal is constructed into the rock face.	SE
40	Benford Tunnel (north portal). Note the decorative work and name in raised letters.	SE
41	Brook Tunnel (west portal). Note the stone and concrete block retaining wall to the left of the portal	E
42	Brook Tunnel (west portal). Note the incised name stone and keystone (dated 1884).	E
43	Brook Tunnel (west portal). Note the brick liner.	E
44	Brook Tunnel (east portal). Note the stone retaining walls to the left and right of the portal.	SW
45	Brook Tunnel (east portal). Note the name plate and keystone (dated 1885	SW
46	Brook Tunnel (east portal). Note the stone arch and brick liner.	SW

Key # _____
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Site Plan (Item 34)

See page 11 of the Instructions for more information regarding the site plan. Create a sketch of the property, showing the footprint of all buildings, structures, landscape features, streets, etc. Label all resources and streets. Include a North arrow and a scale bar (note if scale is approximate). This sheet may be used to sketch a plan or another map/plan may be substituted.

Note: See attached photograph location maps.

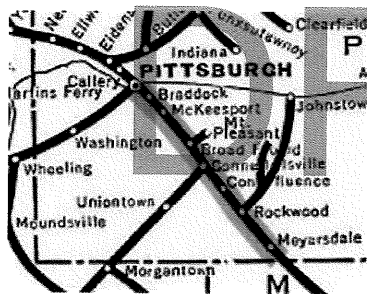
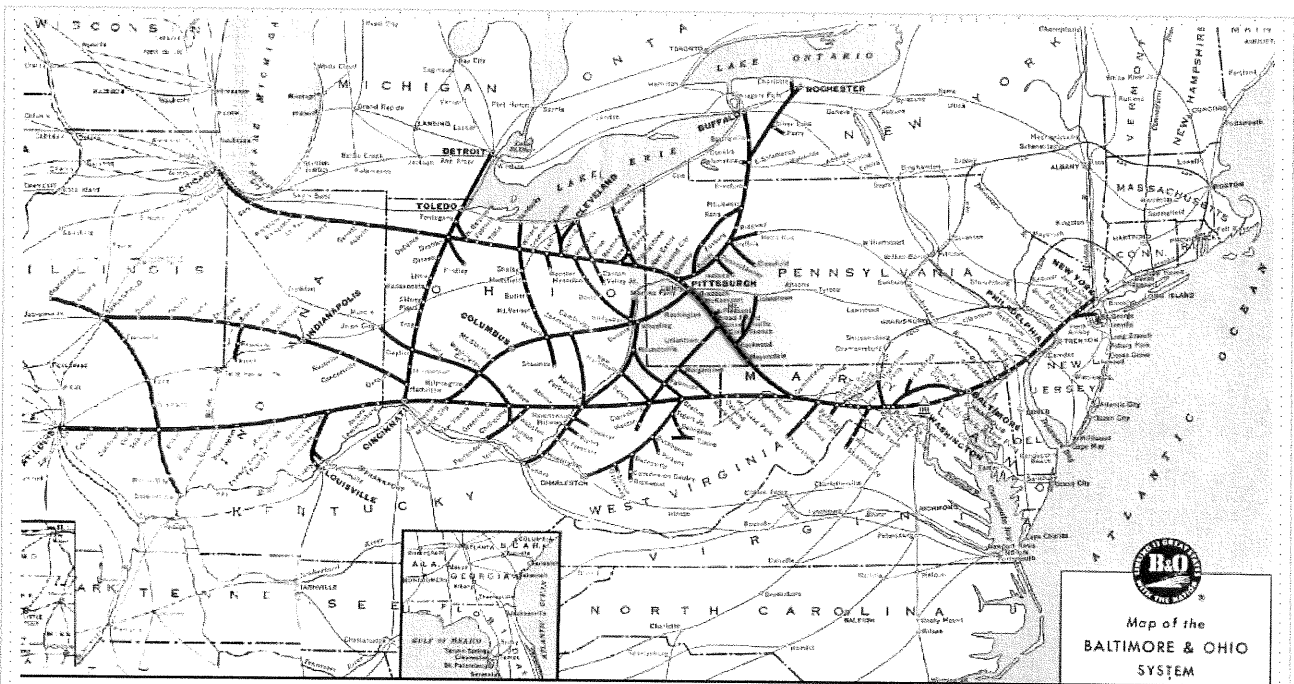
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System Map

Baltimore & Ohio Railroad Pittsburgh Division

Key # _____

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**Pittsburgh Division -
Recommended Eligible**

Source: http://en.wikipedia.org/wiki/Baltimore_and_Ohio_Railroad

Physical Description and Integrity (Item 38)

Provide a current description of the overall setting, landscape, and resources of the property. See page 13 of the Instructions for detailed directions. Continue on additional sheets as needed. Suggested outline for organizing this section:

- Introduction [summarize the property, stating type(s) of resource(s) and function(s)]
- Setting [describe geographic location, streetscapes, natural/man-made landscape features, signage, etc.]
- Exterior materials, style, and features [describe the exterior of main buildings/resources]
- Interior materials, style, and features [describe the interior of main buildings/resources]
- Outbuildings/Landscape [describe briefly additional outbuildings/landscape features found on property, substitute Building Complex Form if preferred; See Instructions, page 18]
- Boundaries [explain how/why boundaries chosen, such as historic legal parcel, visual natural features such as tree lines, alley separating modern construction, etc.]
- Integrity [summarize changes to the property and assess how the changes impact its ability to convey significance]

Key # _____

ER# _____

Physical Description

Improvements associated with the National Gateway Initiative Clearance Project are located within the alignment of the former Baltimore & Ohio Railroad Pittsburgh Division (currently owned and operated by CSX Transportation, Inc.), which extended from Cumberland, Maryland northwest to Pittsburgh, Pennsylvania. This form documents the portion of the Pittsburgh Division in Pennsylvania. The former Pittsburgh Division crosses the Maryland-Pennsylvania state line south of Hyndman, Pennsylvania and generally follows Wills Creek, Flaugherty Creek, and the Casselman, Youghiogheny, and Monongahela rivers from the state line at the southeast end to Pittsburgh at the northwest end. The line crosses numerous municipalities in Bedford, Somerset, Fayette, Westmoreland, and Allegheny counties. It passes through and was shaped by the rugged terrain of the Allegheny mountains, which required the construction of tunnels and helper grades. The setting is predominantly rural, with the primary exception of the Pittsburgh region.

The Pittsburgh Division originated with the Pittsburgh & Connellsville Railroad, constructed between Pittsburgh and Cumberland from 1847 to 1871 under the control of the Baltimore & Ohio Railroad. The line joined the Baltimore & Ohio Railroad's original main line at Cumberland, connecting the ports in Baltimore, the steel industry in Pittsburgh, and the Cumberland and Connellsville coal and coke regions. The railroad was leased to the Baltimore & Ohio Railroad in 1876, officially merged into the Baltimore & Ohio Railroad in 1912, and became known as the Pittsburgh Division. Most of the line was originally constructed as a single-track line, but it was double-tracked around the turn of the twentieth century. The Pittsburgh Division was a freight and passenger line. It carried a number of commodities; however, the majority of its tonnage consisted of coal from the 1850s through at least the first two decades of the twentieth century (Roberts 1993:25). Primary characteristic elements of the railroad include freight and passenger depots, yards, interlocking and signal towers, equipment maintenance and storage facilities, and railroad bridges and tunnels.

The entire line was not examined as part of the National Gateway Initiative Clearance Project due to the site-specific nature of proposed improvements; however, the following extant characteristic elements were identified in the project area during this investigation: Wills Creek Bridge, Hyndman Borough; Falls Cut Tunnel, Fairhope Township; Sand Patch Tunnel, Larimer Township; Pinkerton and Shoofly Tunnels, Upper Turkeyfoot Township; and Benford and Brook Tunnels, Lower Turkeyfoot Township. Descriptions of these resources are included in the *Contributing and Non-Contributing Features* section of this form.

The National Register boundaries of the Baltimore & Ohio Railroad Pittsburgh Division follow the historic alignment, currently the operating right-of-way of CSX Transportation, Inc. The alignment extends from the Pennsylvania-Maryland state line south of Hyndman Borough, through Bedford, Somerset, Fayette, Westmoreland, and Allegheny counties to Pittsburgh. The boundary follows the historic route and includes buildings and structures within the operating right-of-way that were critical components in the historic operation of the Baltimore & Ohio Railroad Pittsburgh Division.

Integrity

Alterations have been made to specific features of the Baltimore & Ohio Railroad Pittsburgh Division, as described in the *Contributing and Non-Contributing Features* discussion; however, the railroad continues to serve its original function and retains a number of characteristic elements. The line's overall integrity of materials, design, location, setting, and association remain intact. Improvement campaigns of the late nineteenth and early twentieth century, including the construction of the Fort Hill Low Grade Line and a double-tracking campaign that involved reconstruction of several tunnels and bridges, contributed to the efficiency and continued operation of the line. The general features of the Pittsburgh Division changed little in the later twentieth century. Portions of the line were single-tracked in the mid-1960s; however, this change does not detract significantly from the integrity of design or materials. The line is still in use as a freight corridor, contributing to the integrity of feeling and association.

Contributing and Non-Contributing Features

The National Gateway Initiative Clearance Project involves proposed improvements to eight structures historically associated with the Baltimore & Ohio Railroad Pittsburgh Division. These eight structures were evaluated for their significance in association with the Pittsburgh Division.

Wills Creek Bridge, Hyndman Borough, Bedford County, Milepost BF 191.92

Wills Creek Bridge, also known as North Hyndman Bridge or Bridge No. 10, is a railroad bridge constructed in 1916 to carry the Baltimore & Ohio Railroad over Wills Creek in Hyndman Borough, Bedford County.

Wills Creek Bridge is a single-span, steel, Pratt through truss structure with an open timber deck. It is supported on poured concrete and granite bearing blocks. The wingwalls are incised poured concrete. The bridge carries two tracks currently owned and operated by CSX Transportation, Inc.

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The current bridge, built in 1916, was not the first at this crossing of Wills Creek. Constant improvements in motive power in the late nineteenth and early twentieth century required constant upgrades to facilities to handle the weight of larger locomotives. At least three prior bridges, constructed ca. 1870-1910, were located at this crossing prior to the erection of the current bridge (Roberts 1993:52). The current bridge was built by the King Bridge Company of Cleveland, Ohio. The King Bridge Company was founded in 1871 and was one of the few large bridge fabricators to survive the merger movement of 1900-01, when American Bridge Company absorbed many companies (King Bridge Company 1916; Brown 1991). A number of minor steel repairs were made to the bridge throughout the twentieth century (Baltimore & Ohio Railroad 1933, 1937, 1943, 1951; Chessie System 1977).

Wills Creek Bridge is a significant built element associated with the essential function of the Baltimore & Ohio Railroad Pittsburgh Division. It was constructed during the railroad's period of significance and retains integrity of design, materials, workmanship, and association from the period of significance; therefore, it is recommended eligible as a contributing feature to the railroad.

Falls Cut Tunnel, Fairhope Township, Somerset County, Milepost BF 198.40

Falls Cut Tunnel, constructed by the Baltimore & Ohio Railroad in 1897, currently carries two tracks operated by CSX Transportation, Inc. The tunnel bypasses a sharp bend in Wills Creek, approximately one mile west of the community of Fairhope in Fairhope Township, Somerset County, Pennsylvania.

The tunnel measures 517 feet long and 30 feet wide. It follows a 1.09 to 1.30% track grade from west to east (Baltimore & Ohio Railroad 1905). The arch consists of five layers of brick, and the arch liner and portals consist of brick laid in a common bond pattern. The portal arches are framed by brick pilasters extending the height of the structure. The words FALLS CUT and the year 1897 are inscribed in flat stone plaques above the arches in both portals. The railroad tracks cross Wills Creek at both ends of the tunnel on single-span plate girder bridges.

The Baltimore & Ohio Railroad constructed the original Falls Cut Tunnel approximately 200 feet west of the current alignment as part of the Pittsburgh and Connellsville Railroad, completed in 1871. The original alignment is visible in aerial photographs. The railroad built the current tunnel in 1897 to reduce the curve of the original alignment. The realignment project was known as the Falls Cut Improvement, and involved the construction of .56 mile of new track and abandonment of .57 mile of old track. W.T. Manning was the railroad's chief engineer at the time of its construction. Extensive clay mines and brickworks at Keystone, Fairhope, and Williams in Somerset County and at Hyndman in Bedford County generated much traffic on the line in the late nineteenth century, and the tunnel may have been built with bricks from the nearby Savage Fire Brick Company at Keystone or Williams (Brown et al. 1994:196; Glessner et al. 1986; Baltimore & Ohio Railroad 1897a, 1897b, 1905, 1922).

Falls Cut Tunnel is a significant built element associated with the essential function of the Baltimore & Ohio Railroad Pittsburgh Division. It was constructed during the railroad's period of significance and retains integrity of design, materials, workmanship, and association from the period of significance; therefore, it is recommended eligible as a contributing feature to the railroad. The tunnel represents a late-nineteenth-century improvement intended to increase efficiency along the Pittsburgh Division.

Sand Patch Tunnel, Larimer Township, Somerset County, Milepost BF 210.60

Sand Patch Tunnel, constructed by the Baltimore & Ohio Railroad in 1911-1912 and extended in 1918, carries two tracks operated by CSX Transportation, Inc. through the Negro Mountain in Sand Patch, Somerset County. The tunnel is located in a rural setting approximately .5 mile northeast of S.R. 2006 near the community of Sand Patch in Larimer Township, Somerset County. S.R. 160 (Cumberland Highway) crosses over the tunnel near its center.

The tunnel measures 4,475 feet long and 31 feet wide. It follows a 0.5% track grade from east to west (Baltimore & Ohio Railroad 1913). The tunnel was constructed in two sections: the 4,175-foot eastern section built in 1911-1912 and the 300-foot western extension built in 1918. The entire tunnel features a concrete arch, a brick liner laid in a common bond pattern, and parged brick portals. Refuge niches, intended to provide railroad workers shelter from approaching trains, are staggered along the interior side walls. The words SAND PATCH are etched in concrete at the top of the arch in the east portal. Historic drawings indicate the east portal once bore the date 1912 and the west portal once bore the date 1918, along with the tunnel name; however, these etchings are no longer evident (Baltimore & Ohio Railroad 1913, 1919a). Spalling is evident in both the east and west portals. The portals of Sand Patch Tunnel are very similar in design to those of Graham, Stuart, Carothers, and Randolph tunnels, constructed in 1913-14 as part of the Magnolia Cutoff improvement along the East End of the Cumberland Division.

The original 4,777-foot, single-track tunnel through Negro Mountain at Sand Patch was built as part of the Pittsburgh and Connellsville Railroad between 1854 and 1871. In 1911, the Baltimore & Ohio Railroad began construction of a new double-track tunnel adjacent to the original to accommodate increasing traffic and to compete with the Western Maryland Railway, which proposed a tunnel nearby. The new double-track tunnel, which measured 4,175 feet long and 31 feet wide, was constructed by the Kerbaugh Construction Company between 1911 and 1912. Excavation began from both portals and two brick air shafts. A small reservoir was constructed to provide water needed for the drilling hydraulics and steam power. The new tunnel opened to traffic in February 1913 (Brown et al. 1994:203-206; Meyersdale, PA website, accessed November 9, 2009).

The new tunnel was excavated too close to the original, causing a hillside to give way and collapse a 250-foot section of newly constructed tunnel near the west portal in 1912. This necessitated reconstruction 200 feet west of the proposed alignment, an undertaking that involved approximately 1,000 men laboring for fifty days (Brown et al. 1994:203-206). Baltimore & Ohio Railroad drawings dated September 1919 indicate the west end of the tunnel was extended by 300 feet in 1918 (Baltimore & Ohio Railroad 1919a). The tunnel was opened for service in February 1913 (Roberts 1993:72).

The original 1854-1871 Sand Patch tunnel (not documented in this form) was intended for use by slower eastbound trains following the completion of the new tunnel. The new tunnel was intended for westbound traffic only; however, the new tunnel proved able to handle all traffic. Operations were suspended through the old tunnel on January 27, 1917, the tracks were removed in 1921, and the tunnel was abandoned in 1942. Most of the original tunnel has collapsed, and the portals have deteriorated (Brown et al. 1994:203-206; Roberts 1993:72).

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Sand Patch Tunnel is a significant built element associated with the essential function of the Baltimore & Ohio Railroad Pittsburgh Division. It was constructed during the railroad's period of significance and retains integrity of design, materials, workmanship, and association from the period of significance; therefore, it is recommended eligible as a contributing feature to the railroad. The tunnel was built as part of an early twentieth-century double-tracking campaign. Baltimore & Ohio Railroad president Daniel Willard stated in the 1913 annual report that the completion of the newly opened Sand Patch Tunnel, "gives a double track line between Philadelphia, Pa. and Chicago, Ill., with the exception of about 31 miles on the Chicago Division" (Stover 1987:220). The spalling and loss of the incised dates in the east and west portals do not significantly detract from the tunnel's integrity; it continues to convey its historic function and associations.

Church Street Bridge, Garrett Borough, Somerset County, Milepost BF 220.00

Church Street Bridge, constructed by the Baltimore & Ohio Railroad in 1919, is a highway bridge carrying Church Street (SR 2037) over the former Baltimore & Ohio Railroad Pittsburgh Division in Garrett Borough, Somerset County.

In 2006, Church Street Bridge was determined not eligible for listing in the National Register of Historic Places, individually or as part of a historic district, due to a lack of significance (A.G. Lichtenstein & Associates, Inc. 1998). The bridge is a two-span, steel, through girder structure measuring 164 feet long and 17 feet wide. It is supported on concrete abutments and a concrete pier. The structure has knee braces, built-up floor beams encased in concrete (for protection from locomotive exhaust), and a concrete deck with a brick wearing surface. A cantilevered sidewalk with a metal railing extends from the east side of the bridge. The bridge carries one lane of traffic over two active railroad tracks currently owned and operated by CSX Transportation, Inc. (A.G. Lichtenstein & Associates, Inc. 1998).

The current Church Street Bridge is not the earliest structure associated with the Baltimore & Ohio Railroad to be erected at this crossing. The line crossing beneath the bridge was constructed as part of the Pittsburgh & Connellsville Railroad, opened in 1871 (A.G. Lichtenstein & Associates, Inc. 1998; Somerset County Planning Commission 1984:92).

Church Street Bridge represents a common bridge type developed by the railroads in the late 1840s. Built-up girders could span greater distances than rolled beams and could be fabricated off-site, easily transported, and hoisted into position. The simple structures proved efficient and effective for spans up to 100 feet. Thousands of bridges of this type were built for railroads in the later nineteenth and early twentieth centuries. The technology was applied to Pennsylvania highway bridges in the late nineteenth century, and through girders became the most common type of highway girder bridge (Somerset County Planning Commission 1984:92).

Church Street Bridge does not have a significant association with the Baltimore & Ohio Railroad's Pittsburgh Division. Although the bridge was constructed within the railroad's period of significance, it is not a major built element with architectural or engineering significance and associations with the essential functions of the railroad; therefore, it is not recommended eligible as a contributing feature to railroad.

Pinkerton Tunnel, Upper Turkeyfoot Township, Somerset County, Milepost BF 235.40

Pinkerton Tunnel, constructed by the Baltimore & Ohio Railroad in 1885, currently carries one track operated by CSX Transportation, Inc. through Pinkerton Point on the Casselman River. The tunnel is located in a rural setting in the community of Pinkerton, approximately two miles south of Markleton in Upper Turkeyfoot Township, Somerset County, Pennsylvania. The tunnel runs parallel to the now abandoned 1911 Western Maryland Railway tunnel of the same name (Brown et al. 1994:199).

The tunnel measures 1,081 feet long and 28 feet wide. It follows a 0.19 to 0.45% track grade from west to east and a 6 degree curve (Baltimore & Ohio Railroad 1919b). The arch and portals are stone and the arch liner is brick laid in a common bond pattern. Keystones in the east and west portal arches are inscribed with the date 1885, and the word PINKERTON is inscribed in a stone at the top of each portal.

The original single-track tunnel at the same location was constructed in 1871 as part of the Baltimore & Ohio Railroad's line between Pittsburgh and Connellsville, completed in 1871. The original tunnel was destroyed by fire in November 1879, after which a two-mile shoo-fly line was built around the tunnel. The shoo-fly line was used until July 1885, when the current tunnel was completed and operations returned to the original alignment (Baltimore & Ohio Railroad 1919b, 1922). One set of tracks through the tunnel was taken up at some point after 1954 (Brown et al. 1994:199).

Pinkerton Tunnel is a significant built element associated with the essential function of the Baltimore & Ohio Railroad Pittsburgh Division. It was constructed during the railroad's period of significance and retains integrity of design, materials, workmanship, and association from the period of significance; therefore, it is recommended eligible as a contributing feature to the railroad.

Shoofly Tunnel, Upper Turkeyfoot Township, Somerset County, BF 236.80

Shoofly Tunnel, constructed by the Baltimore & Ohio Railroad in the 1870s or 1880s and altered in 1897 and in 1902-1903, currently carries a single track operated by CSX Transportation, Inc. The tunnel is located north of a sharp bend of the Casselman River, approximately one mile east of the community of Fort Hill in Upper Turkeyfoot Township, Somerset County, Pennsylvania.

The tunnel measures 307 feet long and 30 feet wide. It follows a 0.32% track grade from west to east and an 8 degree curve (Baltimore & Ohio Railroad 1919c). The arch consists of five layers of brick, and the arch liner and portals consist of brick laid in a common bond pattern. Refuge niches, intended to provide railroad workers shelter from approaching trains, are staggered along the interior side walls. The portal arches are framed by brick pilasters extending the height of the structure. Brick corbelling adorns the tops of the portals under concrete caps. The word SHOOFLY, fashioned out of bricks, is centered above the portal arches and flanked by panels of decorative brickwork. A deteriorated brick

keystone in the east portal arch bares the date 1902, reflecting the year the tunnel was extended to the east. The portals are very similar in design to those of the Catoctin and Point of Rocks Tunnels, built in 1902-1903 during improvements to the Old Main Line.

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The tunnel was originally constructed in the 1870s to bypass a sharp curve in the Casselman River. In 1897 it was arched and widened to accommodate two tracks, a brick liner was added, and the tunnel was extended 70 feet to the west. The tunnel was extended 100 feet to the east in 1902-1903. Both extensions were required to resolve narrow cuts at the original portals (Baltimore & Ohio Railroad 1919c; Roberts 1993:119). One set of tracks through the tunnel has been taken up, and traffic along the double-tracked line is currently funneled through the structure by switches located near the portals (Brown et al. 1994:207).

Shoofly Tunnel is a significant built element associated with the essential function of the Baltimore & Ohio Railroad Pittsburgh Division. It was constructed during the railroad's period of significance and retains integrity of design, materials, workmanship, and association from the period of significance; therefore, it is recommended eligible as a contributing feature to the railroad.

Benford Tunnel, Lower Turkeyfoot Township, Somerset County, BFJ 5.00

to be open cut

Benford Tunnel, constructed by the Baltimore & Ohio Railroad in 1903, currently carries a single track operated by CSX Transportation, Inc. The tunnel is located in a rural setting two miles northeast of Harnedsville in Lower Turkeyfoot Township, Somerset County, Pennsylvania.

The tunnel is 406 feet long and 18 feet wide. It follows a 0.63% track grade from west to east and an 8 degree curve (Baltimore & Ohio Railroad 1911). The arch consists of three layers of brick and the arch liner and portals consist of brick laid in a common bond brick pattern. Refuge niches, intended to provide railroad workers shelter from approaching trains, are staggered along the interior side walls. Rectangular, recessed panels flank the portal arches. Brick corbelling adorns the tops of the portals under stone caps. The word BENFORD, fashioned out of bricks and framed in recessed rectangular panels, is centered above the portal arches. Anchor bolts are visible in the south portal arch.

The tunnel was originally constructed in 1903 as part of the Fort Hill Low Grade. The single-track Fort Hill Low Grade broke off from the original, double-tracked Pittsburgh Division in Confluence. The single-track line ran south of the original line and passed through Benford tunnel, rejoining the original line just east of Brook Tunnel (Brown et al. 1994:193-194). The 6.9-mile Fort Hill Low Grade was completed in 1902 to increase efficiency between Confluence and Fort Hill by offering a lower-grade alternative route, with a ruling grade of 0.75%, to heavy freight trains. The grade along the original route between Confluence and Fort Hill was approximately 1.25% (Roberts 1993:115).

Benford Tunnel is a significant built element associated with the essential function of the Baltimore & Ohio Railroad Pittsburgh Division. It was constructed during the railroad's period of significance and retains integrity of design, materials, workmanship, and association from the period of significance; therefore, it is recommended eligible as a contributing feature to the railroad. The tunnel was constructed as part of the Fort Hill Low Grade, which improved freight movement between Confluence and Fort Hill.

Brook Tunnel, Lower Turkeyfoot Township, Somerset County, BF 239.70

Brook Tunnel, constructed by the Baltimore & Ohio Railroad from 1883-1885, currently carries a single track operated by CSX Transportation, Inc. The tunnel is located in a rural setting one mile west of the community of Fort Hill in Lower Turkeyfoot Township, Somerset County, Pennsylvania.

The tunnel is 1,856 feet long and 26 feet wide. It follows a 0.5 to 0.7% track grade from west to east (Baltimore & Ohio Railroad 1919d). The arch and portals are stone and the arch liner is brick laid in a common bond pattern. Stone pilasters flank the portal arches. The portals have stone caps. The word BROOK is inscribed in flat stone plaques above the arches, and keystones in the arches bear the inscribed year 1884.

The original single-track, 1,800-foot timber crib tunnel at the same location was constructed in 1869-1871 as part of the Baltimore & Ohio Railroad's line between Pittsburgh and Connellsville, completed in 1871. Prior to construction of the original tunnel, the railroad rented horses from local farmers to pull trains over the hill. The original tunnel was destroyed by fire caused by a spark from a passing locomotive in the early 1880s. The Baltimore & Ohio Railroad constructed the current tunnel in its place between 1883 and 1885. The current tunnel was designed to carry two tracks. The tunnel was repaired in 1908; however, the nature of the repairs is unknown. The structure is likely named for Chauncy Brooks, president of the Baltimore & Ohio Railroad from 1855 to 1858 (Brown et al. 1994:193-194; Baltimore & Ohio Railroad 1919d).

Brook Tunnel is a significant built element associated with the essential function of the Baltimore & Ohio Railroad Pittsburgh Division. It was constructed during the railroad's period of significance and retains integrity of design, materials, workmanship, and association from the period of significance; therefore, it is recommended eligible as a contributing feature to the railroad.

History and Significance (Item 39)

Provide an overview of the history of the property and its various resources. Do not substitute deeds, chapters from local history books, or newspaper articles. See page 14 of the Instructions for detailed directions. Continue on additional sheets as needed.

Suggested outline for organizing this section:

- History [Summarize the evolution of the property from origin to present]
- Significance [Explain why the property is important]
- Context and Comparisons [Describe briefly similar properties in the area, and explain how this property compares]

Historical Narrative

Baltimore & Ohio Railroad: Original Main Line, Baltimore to Wheeling

The Baltimore & Ohio Railroad Company was incorporated on April 24, 1827, after charter approval on February 28 of the same year, by a group of prominent Baltimore businessmen seeking to remain competitive with New York City and Philadelphia as trade and exploration extended westward from those port cities via canal and turnpike routes. Railroad transport was limited at that time; however, the risky venture was supported because Maryland's rugged geography made a canal impractical and turnpike travel was comparably expensive and labor-intensive. Surveyors planned a railroad route from Baltimore to the Ohio River, where passengers and cargo could transfer to steamboats. The first section of the line was laid out entirely in Maryland, beginning in Baltimore and following the Patapsco River, crossing Parris Ridge, continuing through the Monocacy River Valley to the Potomac River near Harper's Ferry, and following the Potomac River to Cumberland. Grading and viaduct construction began in 1828 (completed during the winter), and the first track was laid the following year. The first 13 miles of track were completed from the station at Pratt Street in Baltimore to Ellicott Mills in May 1830, and the Baltimore & Ohio Railroad soon after became the first American railroad to offer scheduled passenger service. The line was completed to Parris Ridge by mid-1831, to the Potomac River at Point of Rocks in April 1832, and to Harpers Ferry in December 1834 (Reynolds and Oroszi 2008:14-21).

The Baltimore & Ohio Railroad experienced several setbacks in the late 1830s, including a dispute with the Chesapeake and Ohio (C&O) Canal over use of the north bank of the Potomac River. The case was settled in favor of the C&O Canal, requiring the Baltimore & Ohio Railroad to construct an alternate route to Cumberland west of Harpers Ferry. The Baltimore & Ohio Railroad constructed a bridge over the Potomac River at Harpers Ferry in January 1837, and began construction of the alternate route to Cumberland along the south bank of the river in 1839. The line finally reached Cumberland in November 1842 (Reynolds and Oroszi 2008:21-26; Salamon et al. 1993a:87). Expansion westward from Cumberland to the Ohio River at Wheeling, Virginia (now West Virginia), began in 1850 and ended in December 1852 (Reynolds and Oroszi 2008:26; Harwood 1994:68). By the outbreak of the Civil War, the Baltimore & Ohio Railroad included 531 miles of rail line, all located south of Pennsylvania.

The Baltimore & Ohio Railroad expanded steadily. As people migrated further west, the cities of Cincinnati, St. Louis, and Chicago became the new targets for the Baltimore & Ohio Railroad, with the railroad finally reaching Chicago in November 1874. By the end of the nineteenth century, the railroad had achieved almost 5,800 miles of track and connected Chicago and St. Louis to Baltimore, Washington, Philadelphia, and New York City (CSX Transportation, Inc. 2009).

Westward Expansion to Pittsburgh and Beyond

By the mid-nineteenth century, railroading had proven to be an efficient means of transporting large numbers of passengers and mass quantities of freight over long distances and through rough terrain. Rivalry between railroad companies increased as expansion continued westward and companies sought new markets in the Midwest. The Pennsylvania Railroad became the Baltimore & Ohio Railroad's chief competitor during this period. The competition was typified by the companies' simultaneous attempts to reach Pittsburgh, Pennsylvania, starting in the 1840s (Reynolds and Oroszi 2008:32, 35).

The Baltimore & Ohio Railroad first considered a route to Pittsburgh as it decided between three possible routes for its main line west from Cumberland, Maryland to the Ohio River: to Wheeling, West Virginia; to Parkersburg, West Virginia; or to Pittsburgh. The latter proved to be the shortest and therefore most desirable route (Reynolds and Oroszi 2008:35). During this time, however, the recently chartered Pennsylvania Railroad had begun construction of a line across Pennsylvania with backing from the City of Philadelphia, and the Pennsylvania government feared that the Baltimore & Ohio Railroad's entry into western Pennsylvania would "drain traffic from the Pennsylvania Railroad and the city of Philadelphia" (Salamon et al. 1993b:6). The seventieth session of the Pennsylvania legislature passed two railroad bills in the spring of 1846. One granted a charter to the Pennsylvania Railroad, allowing the company to use the state's rail lines east of Harrisburg while building a new road west to Pittsburgh. The second, signed on April 21, 1846, granted the Baltimore & Ohio Railroad permission to build a line from Cumberland to Pittsburgh; however, the latter charter would not become active until July 30, 1847, essentially giving the Pennsylvania Railroad a 15-month head start to "obtain \$3 million in stock subscriptions, with \$1 million paid in to the company treasury and have fifteen miles of road at the Pittsburgh end of the line under contract, then the entire B&O act would be null and void" (Stover 1987: 68). The Pennsylvania Railroad met all of the conditions, so on August 2, 1847, Governor Shunk made an announcement that the B&O was no longer granted permission to build its railroad from Cumberland to Pittsburgh (Stover 1987:68). The B&O instead extended its main line from Cumberland to Wheeling in the early 1850s.

The Baltimore & Ohio Railroad again attempted to reach Pittsburgh by underwriting the construction of the Pittsburgh and Connellsville Railroad in exchange for increasing control, intending to connect the line to the Baltimore & Ohio Railroad at Cumberland, Maryland. The Pittsburgh and Connellsville line was chartered in 1837 and completed between those two cities between 1847 and 1861. The Pennsylvania Railroad attempted to take over the Pittsburgh and Connellsville line in 1864; however, in 1868, the Pennsylvania Supreme Court ruled in favor of the Baltimore & Ohio Railroad, returning the Pittsburgh and Connellsville line to Baltimore & Ohio control. Following this decision, the

Baltimore & Ohio Railroad renamed the line the Pittsburgh, Washington, and Baltimore and continued construction of the line through 95 miles of extremely rugged mountain terrain from Connellsville, Pennsylvania, to Cumberland, Maryland. The line's completion in May 1871 provided the Baltimore & Ohio Railroad access to Pittsburgh's growing iron and steel industry as well as a new market along its main line for coal originating in the West Virginia mines (Reynolds and Oroszi 2008:28, 35-36; Stover 1987:112-113, 144-145; Salamon et al. 1993b:6; Shippen 1884:179).

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The Baltimore & Ohio Railroad completed two additional lines to Pittsburgh by 1884. The railroad made its second connection to Pittsburgh when it gained control of the Hempfield Railroad between Wheeling, West Virginia and Washington, Pennsylvania, in 1871. That line was subsequently expanded from Washington to Pittsburgh along the Pittsburgh Southern Railroad (renamed the Baltimore and Ohio Short Line in 1885, then merged into the Wheeling, Pittsburgh and Baltimore Line in 1887). The Pittsburgh Southern Railroad connected to the Pittsburgh and Connellsville Line via a bridge across the Monongahela River near Pittsburgh.

The Baltimore & Ohio Railroad made its third connection to Pittsburgh in 1884, when it gained controlling interest in the Pittsburgh and Western Railroad, which ran north from Allegheny, Pennsylvania to Youngstown, Ohio, where it split and continued to Akron, Ohio and Fairport, Ohio (at Lake Erie). This latter acquisition provided the Baltimore & Ohio Railroad with a northern route from Pittsburgh, facilitating an eventual connection to Chicago. In 1890-1891, the Baltimore & Ohio Railroad completed a new 73-mile line between Akron and Chicago Junction, Ohio, and connected to an existing line built in the 1870s between Chicago Junction (later re-named Willard), Ohio and Chicago. This connection created the final westward link in a new main line route from Cumberland, Maryland to Chicago through Pittsburgh (Reynolds and Oroszi 2008:36-37; Stover 1987:171-172; Salamon et al. 1993b:6). In August 1891, freight traffic began moving over the new line between Akron and Chicago Junction, and in May 1893, the Baltimore & Ohio Railroad began its East Coast-Chicago passenger service operation (Reynolds and Oroszi 2008:37).

The Pittsburgh & Connellsville Railroad (Pittsburgh Division)

Construction of the Pittsburgh & Connellsville Railroad, a subsidiary of the Baltimore & Ohio Railroad that later became known as the Pittsburgh Division, commenced in December 1847 near McKeesport, Pennsylvania. Work was suspended shortly thereafter until 1853 and resumed in 1854. A 25-mile section was completed between Connellsville in Fayette County and West Newton in Westmoreland County (near the Allegheny County line) in 1855. The line was extended 8 miles from West Newton to Guffey, Allegheny County, and then 15 additional miles to Port Perry, Allegheny County in 1856. The final 10 miles to Pittsburgh were completed between July 1859 and October 1861. Bids were advertised for extension of the line between Connellsville and Cumberland, connecting to the Baltimore & Ohio's main line, in early 1864; however, construction did not begin until late 1868 due to legal obstacles. Work began at Mount Savage Junction near Cumberland and progressed westward to Gibson Junction near Connellsville. The line was formally opened in June 1871. The Pittsburgh & Connellsville Railroad was leased to the Baltimore & Ohio Railroad for a term of fifty years starting January 1, 1876. The Pittsburgh & Connellsville Railroad officially merged into the Baltimore & Ohio Railroad on September 25, 1912 (Baltimore & Ohio Railroad 1922:433-435, 442).

The Pittsburgh & Connellsville Railroad was the first major railroad route through Bedford, Somerset, and Fayette Counties, Pennsylvania. The Baltimore & Ohio Railroad viewed most of the route as a thoroughfare rather than a destination; however, numerous branch lines were constructed by the railroad and other entities to connect major population centers and local industries to the line.

These branch lines connecting to the Pittsburgh & Connellsville Railroad formed an extensive network in Somerset County by the end of the nineteenth century, aiding in the development of the county's coal mining industry. In 1874, three years after the completion of the Pittsburgh & Connellsville Railroad, eleven small Somerset County coal companies produced 6,500 tons. By 1883, production increased to nearly 280,000 tons per year, reflecting the enormous impact of the railroad (Shippen 1884:178-181; Brown et al. 1994:13-17).

The railroad similarly impacted the coal industry in Fayette County. Connellsville, in Fayette County, was the center of coal mining and coke production at the northeastern end of the Pittsburgh seam, an area of coal deposits stretching over six thousand square miles south of Pittsburgh and into West Virginia and Ohio (Roberts 1993:26-27). Thirty coal works were established along the Pittsburgh & Connellsville Railroad and branches by 1882 (Franklin 1882:246-247). The number of coke ovens in the Connellsville region jumped from 176 in 1871, the year the Pittsburgh & Connellsville Railroad was completed, to 7,211 in 1880. In 1871, the Connellsville region produced 92% of the coke in the country, and as late as 1918 Fayette and Westmoreland counties still produced nearly half of the nation's coke. The Pittsburgh & Connellsville Railroad played a significant role in transporting that product to Pittsburgh, where it was used to manufacture steel, and in transporting steam coal to eastern and western markets (Roberts 1993:27-28).

The Pittsburgh Division also transported iron and steel products east from Pittsburgh, but the Pennsylvania Railroad received the majority of that traffic due to its connections to Philadelphia and New York (Roberts 1993:27-28).

As the Baltimore & Ohio Railroad system expanded, it was split into divisions and subdivisions. The portion of the main line originally known as the Pittsburgh & Connellsville Railroad, between Cumberland, Maryland and Pittsburgh, became known as the Pittsburgh Division. The Cumberland Division encompassed the western portion of the original main line, extending from Weverton, Maryland west to Grafton, West Virginia. The dividing point between the Pittsburgh Division and the Cumberland Division was approximately 0.6 miles to the west of Cumberland Station. The eastern portion of the original main line from Baltimore to Weverton, Maryland became known as the Old Main Line (Salamon et al. 1993a:87, 116, 120; Reynolds and Oroszi 2008:42).

Main Line Subdivision

The Pittsburgh Division was further split into the Main Line Subdivision and the Western Subdivision. The Pittsburgh Division's Main Line Subdivision stretched from Cumberland, Maryland to Connellsville, Pennsylvania, a distance of approximately 95 miles. The Main Line Subdivision passed through Cumberland Narrows, between the Haystack and Wills mountains, along tracks following Wills Creek. The line continued to follow Wills Creek across the Maryland-Pennsylvania border near Ellerslie, Maryland, 6.3 miles north of Cumberland Station, through Hyndman, Pennsylvania and into the Allegheny Mountains. At Hyndman, the line began its 20-mile ascent to the 2,257-foot summit of

the Alleghenies at Sand Patch along the Sand Patch grade. Hyndman, more than 1,300 feet below the summit, was the base of helper operations on Sand Patch grade, with a tower controlling crossovers needed for helper engine sets to tie to the rear or head ends of westbound trains. Helpers assisted trains in managing grades in excess of 1.4% for six miles between Hyndman and Fairhope, up to 1.3% for four miles from Fairhope to Glencoe, and up to 1.94% for ten miles from Glencoe to Sand Patch (Salamon et al. 1993b:6-12). The Main Line Subdivision descended more than 1,300 feet over 59 miles from Sand Patch west to Connellsville. A short stretch of eastbound grade between Salisbury Junction and Sand Patch required helpers, but generally the stretch west of Sand Patch was more manageable due to its longer distance and more gradual slope (Salamon et al. 1993b:18).

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The Main Line Subdivision continued northwest of Sand Patch along the north bank of Flaugherly Creek through Keystone and Glade City to Meyersdale, and along the north bank of the Casselman River west of Meyersdale. The Baltimore & Ohio Railroad built a short connecting track to the Western Maryland Railroad at Keystone for detour moves, as well as two sidings between Sand Patch and Meyersdale. The Western Maryland tracks passed over the Main Line Subdivision on a large through truss bridge just west of Keystone; this structure, built in 1911, is known as Keystone Viaduct or Blue Lick Truss. A tower at Garrett controlled connections to two branches, as well as crossovers and a .8-mile eastbound siding on the main line (Salamon et al. 1993b:18). The Main Line Subdivision passed through a remote gorge between Garrett and Rockwood, and then connected with the Somerset and Cambria Subdivision in Rockwood. The Main Line Subdivision continued 12 miles to Brook, passing through two double-track tunnels built to avoid sharp bends in the Casselman River, the 1,081-foot long Pinkerton, and the 307-foot long Shoofly Tunnel, both of which were single-tracked in the mid-1960s to provide greater clearance for larger freight cars (Salamon et al. 1993b:19).

Starting in 1902, the two main tracks of the Main Line Subdivision split between Brook and Confluence, with eastbound trains using the 6.9-mile Fort Hill Low Grade Line (with maximum grades of .81%) through the Casselman Valley and the 406-foot Benford Tunnel, and westbound trains using the 4.5-mile northern pass (with maximum grades of 1.23%) through the town of Ursina and the 1,836-foot long Brook Tunnel. The tracks converged at Confluence, and then continued westward along the north bank of the Youghiogheny River through the Laurel Mountains to Connellsville. A short connection was made to the Western Maryland on the south bank at Ohiopyle, 10 miles west of Confluence. The line followed the Youghiogheny for a distance of 27 miles between Confluence and Connellsville (Salamon et al. 1993b:19).

Western Subdivision

The Western Subdivision extended from the depot at Connellsville to Pittsburgh for 58 miles along the Youghiogheny and Monongahela rivers. Most of the subdivision ran along the former Pittsburgh and Connellsville Railroad, built in the 1850s. A connection known as West Yough Transfer was made with the Pittsburgh & Lake Erie Railroad via a bridge across the Youghiogheny River between Connellsville and Broadford to enable transfer runs to operate between Connellsville Yard and the Pittsburgh & Lake Erie Railroad's yard at Dickerson Run. The subdivision followed an easy grade along the east bank of the Youghiogheny River from Broadford to Versailles, a distance of 38 miles. Sidings near Layton and Vista allowed passenger and manifest freight trains to pass slower drag freights (Salamon et al. 1993b:36-37).

Late-Nineteenth and Early-Twentieth Century Improvements to the Pittsburgh Division

The Baltimore & Ohio Railroad underwent a number of system-wide improvements in the late nineteenth and early twentieth centuries. President John K. Cowan and vice president Oscar Murray reorganized the company, strengthened its physical plant, and built many miles of new tracks in the last decade of the nineteenth century (Reynolds and Oroszi 2008:49). Leonor F. Loree became president on June 1, 1910 and immediately began an improvement program focused on enhancing traffic movement along the main line by reducing grades and curves and double-tracking miles of the system. Loree resigned in 1904, but improvements continued under his successor, Oscar G. Murray (Drury 2000: 44; Reynolds and Oroszi 2008:53-54). Daniel Willard became B&O's fourteenth president in 1910 and led the company for the following 30 years. Willard concentrated in his first few years on strengthening the existing system, resolving bottlenecks that slowed traffic over the lines, instead of making new additions. Willard was responsible for the double tracking of miles of main line between Philadelphia and Chicago. This undertaking involved the addition and replacement of several tunnels and bridges (Reynolds and Oroszi 2008:57-58).

A number of improvements were made to the Pittsburgh Division between the 1880s and the nineteen teens. The most significant improvements to the Pittsburgh Division were made in the late 1890s and early twentieth century as a result of an increase in traffic. The Fort Hill Low Grade, completed in 1902, was intended to provide heavy freight trains a low-grade (0.75%) alternative to the steep original route between Confluence and Fort Hill (Baltimore & Ohio Railroad 1922:436; Roberts 1993:115). The 517-foot long Falls Cut Tunnel, completed on a new alignment in 1897, increased efficiency at Fairhope (Salamon et al. 1993b:6-12; Baltimore & Ohio Railroad 1922). Sand Patch Tunnel was reconstructed on a new alignment between 1911 and 1912, increasing traffic capacity with the addition of second track and reducing the grade to approximately .05% inside the tunnel (Salamon et al. 1993b:6-12; Brown et al. 1994:203-206; Meyersdale, PA website, accessed November 9, 2009).

1920s to 2009

Traffic along the B&O Railroad reached its peak in 1929, and dropped off significantly during the Great Depression. Between 1929 and the low point in 1932, total freight tonnage was cut in half and coal traffic dropped 41%. Increased truck use and depletion of coal and lumber resources contributed to this decline. Local passenger traffic also dwindled throughout the 1920s, reflecting a national trend of increased automobile use. Increased coal use, along with movement of merchandise, military supplies, and troops through Atlantic port cities breathed life back into the B&O during World War II (Harwood 1994:265, 275). The return to peacetime traffic levels in the late 1940s, concurrent with increased automobile use and highway construction, meant another serious decline in traffic system-wide. Changes in transport, storage, and handling of freight commodities in the next four decades resulted in diminished traditional rail movements and obsolete facilities. The B&O Railroad hit its all-time financial low point in 1961, and the Chesapeake and Ohio Railway took control of the railroad shortly thereafter, in 1963. The B&O Railroad was operated under the Chesapeake and Ohio Railway's new corporate structure, the Chessie System, from 1972 until 1987, when both companies formally merged into CSX Transportation, Inc. in 1987, marking the official end of B&O Railroad's corporate existence (Harwood 1994:298-299, 307; Reynolds and Oroszi 2008:73-84). CSX Transportation, Inc., continues to own and operate the railroad in 2009.

Significance and Evaluation

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The Baltimore & Ohio Railroad Pittsburgh Division is eligible for listing in the National Register under Criterion A for its association with late nineteenth and early twentieth century transportation and industrial development in Pennsylvania. The Pittsburgh Division was the first major route through Bedford, Somerset, and Fayette counties. Its completion in 1871 prompted the construction of a vast network of branch lines in the counties through which it passed, stimulating economic and industrial development. The Pittsburgh Division significantly impacted the coal mining and coke production industries in the Connellsville region by providing an outlet for coke to Pittsburgh and for steam coal to eastern and western destinations. The railroad contributed to the Connellsville region's status as the nation's coke production center in the late nineteenth century.

The Pittsburgh Division is not eligible for listing in the National Register under Criterion B because it is not associated with persons of historical importance.

The Pittsburgh Division is not eligible for listing in the National Register under Criterion C; however, individual features that contribute to the line may be eligible under Criterion C for their engineering or architectural significance.

Archeological investigations have not been carried; therefore, the eligibility of the railroad under Criterion D has not been evaluated.

The period of significance extends from 1871, when construction of the Pittsburgh Division was completed, to 1929, after which the railroad steadily declined due to increased automobile and truck competition and depletion of lumber and coal resources. Although alterations have been made to specific features of the railroad, its overall integrity of materials, design, location, setting, and association remain intact and it continues to serve its original function as an active railroad under the operation of CSX Transportation, Inc. Contributing features to the railroad include the overall alignment and extant freight and passenger depots, yards, interlocking and signal towers, equipment maintenance and storage facilities, railroad bridges, and tunnels constructed by the Baltimore & Ohio Railroad within the period of significance. Features on portions of the line completed between 1847 and 1870, prior to the official opening of the entire line, may also contribute. Contributing features include major built elements with associations with the essential functions of the railroad. Although they enhance the setting of the resource, roadbed, tracks, culverts, switches, and other small-scale elements generally do not contribute.

The entire line was not examined as part of the National Gateway Initiative Clearance Project due to the site-specific nature of proposed improvements; however, the following extant contributing elements were identified in the project area during this investigation: Wills Creek Bridge, Hyndman; Falls Cut Tunnel, Fairhope Township; Sand Patch Tunnel, Larimer Township; Pinkerton and Shoofly Tunnels, Upper Turkeyfoot Township; and Benford and Brook Tunnels, Lower Turkeyfoot Township. See the *Contributing and Non-Contributing Features* section of this form for more information on individual features.

Previous Evaluations

Three sections of the Baltimore & Ohio Railroad in Pennsylvania were previously determined eligible under Criteria A and C for their contribution to industrial, community, and transportation development and for the architectural and engineering significance of associated buildings and structures. PHMC-BHP issued an opinion of eligibility in 1997 for a section through North Versailles Township, North Braddock, Braddock, Rankin, and Swissvale boroughs, and Pittsburgh in Allegheny County. PHMC-BHP issued an opinion of eligibility in 2001 for a section through West Homestead and Hays boroughs in Allegheny County. In 2004, PHMC-BHP issued an opinion of eligibility for a section in Adams Township, Butler County. A number of individual buildings, structures, and complexes associated with the Baltimore & Ohio Railroad have also been previously evaluated and determined eligible, including the following:

- Glenwood Coal Docks, Pittsburgh, Allegheny County (determined eligible in 2007 under Criteria A and C),
- Baltimore & Ohio Railroad Bridge No. 161, Buffalo Township, Washington County (determined eligible in 1994 under Criteria A and C),
- Baltimore & Ohio Passenger Station, Washington, Washington County (determined eligible in 1999 under Criteria A and C),
- Baltimore & Ohio Railyard and Terminals, Pittsburgh, Allegheny County (determined eligible in 1991 under Criterion A),
- Baltimore & Ohio Railroad Benson Station, Benson Borough, Somerset County (determined eligible in 1993 under Criteria A and C).

The previously evaluated resources do not include documentation of the structures associated with the National Gateway Initiative Clearance Project. The structures included within the project area and their significance in relation to the Baltimore & Ohio Railroad's Pittsburgh Division are discussed in the *Contributing and Non-Contributing Features* section of this form.