Mary Street Bridge T.R. 0439 Fairview Township Luzerne County, Pennsylvania

# **PHOTOGRAPHS**

# WRITTEN HISTORICAL AND DESCRIPTIVE DATA

# STATE-LEVEL RECORDATION Bureau for Historic Preservation Pennsylvania Historical & Museum Commission Commonwealth Keystone Building 400 North Street Harrisburg, Pennsylvania 17120-0053

#### STATE-LEVEL RECORDATION

Mary Street Bridge

<u>Location:</u> Mary Street Bridge, T.R. 0439, in Fairview Township, Luzerne County,

Pennsylvania

UTM: Zone 18, Easting 0426065; Northing 4558596

Quad: Wilkes Barre West, PA, 1:24,000

<u>Builders:</u> Central Railroad of New Jersey

Manufacturer: Central Railroad of New Jersey

Date of

Construction: 1894

<u>Present Owner:</u> Fairview Township

Present Use: Vehicular and pedestrian bridge, currently closed to traffic

<u>Significance:</u> The bridge is a single span lattice thru-girder bridge constructed in 1894.

The 14.3-meter (47-foot) long bridge is supported on rubble stone abutments. According to the Pennsylvania Department of Transportation Bridge Inventory and Evaluation, the bridge is "historically and technologically significant as among the earliest surviving examples of its type/design in Pennsylvania." The bridge consists of a 14.3-meter (47-foot) long by 6.07-meter (15-foot) wide rectangle, whose vertices coincide with the bridge's thru-girders, and includes only bridge

superstructure and substructure.

<u>Project Information:</u> The Mary Street Bridge was determined eligible for listing in the National

Register of Historic Places in 2000. The bridge is currently slated for demolition and replacement due to structural and functional deficiencies. To mitigate the adverse effect, the State Historic Preservation Officer stipulated a State-Level Recordation of the bridge within its setting. This

documentation was undertaken to fulfill this stipulation.

Lynda B. Schwan

Cultural Heritage Research Services, Inc. (CHRS, Inc.)

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#### INTRODUCTION

This metal lattice thru-girder bridge carries Mary Street (T.R. 0439) over the former Lehigh and Susquehanna Railroad in the unincorporated village of Mountain Top (also referred to as Solomon Gap) in the northwestern corner of Fairview Township, Luzerne County, Pennsylvania. According to the Pennsylvania Department of Transportation, the bridge was constructed in 1894 and altered in 1950. In 2000 the bridge was determined eligible for listing in the National Register of Historic Places.

# PHYSICAL DESCRIPTION OF BRIDGE AND SETTING

The Mary Street Bridge which carries Mary Street (T.R. 0439) over the former Lehigh and Susquehanna Railroad, is located in a rural residential and commercial area of Fairview Township. The bridge is a Fairview Township owned structure. This single lane bridge carries Mary Street over a single active railroad track surrounded by woods to the west and the unincorporated village of Mountain Top to the east. The rail line is now the Reading Blue Mountain & Northern Railroad (formerly the Lehigh and Susquehanna Railroad which later become the Central Railroad of New Jersey line from Easton to Wilkes-Barre which was completed in 1866). Mary Street connects Lehigh Street to S.R. 0309.

The bridge is a single span lattice thru-girder bridge constructed in 1894. The 14.3-meter (47-foot) long bridge is supported on rubble stone abutments. The girders are composed of built-up sections for the upper and lower flanges and webs with rolled T-section and plate. The rolled floor beams, dating to ca. 1950, are set directly on the girder flanges. The bridge has rolled stringers and a double wood plank deck.

In an inspection report for the bridge, prepared by Borton-Lawson Engineering in 1994 and updated in 1998, the bridge was determined to be in poor condition. The wooden deck has inadequate waterproofing which allows for seepage through the joints allowing for deterioration of the wood. The superstructure has significant section loss in some members of the superstructure. The entire superstructure has rusting and pitting. The masonry joints of the substructure have significant mortar deterioration with signs of moisture penetration and some movement. The east abutment has noticeable signs of cracking and displacement of the stone masonry at the truss-bearing seat. The bridge was closed to traffic in February of 1997. Currently the approaches are blocked with a gravel barrier.

# HISTORICAL BACKGROUND

The Mary Street Bridge carries Mary Street (T.R. 0439) over a single set of Reading Blue Mountain & Northern Railroad tracks lying in a cut in the unincorporated village of Mountain

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Top (sometimes referred to as Solomon Gap or Solomons Gap), in northwestern Fairview Township, Luzerne County. Pennsylvania Department of Transportation (PENNDOT) inspection records for the Mary Street Bridge indicate the bridge was erected in 1894 (Pennsylvania Department of Transportation 1998:1). Despite an extensive search of Fairview Township, Luzerne County, Central Railroad Company of New Jersey, and Reading Blue Mountain & Northern Railroad records, CHRS, Inc. researchers were unable to find evidence either supporting or challenging an erection date of 1894 for the Mary Street Bridge. Pennsylvania Department of Transportation District 4-0 personnel could not identify a source for this date in inspection records.

The cut spanned by the Mary Street Bridge was blasted either partially or entirely in 1839 or shortly thereafter as part of the Lehigh Coal and Navigation Company's construction of the Lehigh and Susquehanna Railroad between the head of the Company's Navigation at White Haven (approximately 16.09 kilometers [10 miles] southeast of Mountain Top) through Solomon Gap to a connection with the North Branch Canal at Wilkes-Barre. This rail line was originally "designed as a portage over which to transport boats between White Haven and Wilkes-Barre, and thus form a link in the connection between Buffalo and Philadelphia through the North Branch Canal and the canals in New York on one side, and the Lehigh and Delaware Rivers on the other" (Munsell 1880:92). This elaborate "portage" was ultimately used to transport railroad cars rather than boats.

The route of the Lehigh and Susquehanna Railroad between White Haven and Wilkes-Barre was surveyed by Edwin A. Douglas, the Lehigh Coal and Navigation Company's Chief Engineer. Incorporated into the Lehigh and Susquehanna Railroad's design was a succession of three technologically innovative inclined planes upon which "trips" of railroad cars loaded with coal or other materials could be hoisted from Ashley (approximately 3.65 kilometers [2.26 miles] north of Mountain Top) up the north sides of Wilkes-Barre and Penobscot Mountains to Solomon Gap, a vertical distance of 350.52 meters (1,150 feet). After elevating on these "Ashley Planes," the railroad cars could be released on the south side of Solomon Gap and allowed to coast down the south side of Penobscot Mountain to White Haven (Stein 1909:318; Munsell 1880:92) ("from White Haven the road was afterward built down the Lehigh to Mauch Chunk [present-day Jim Thorpe], and thence to Easton") (Munsell 1880:92). The first train to travel over the Lehigh and Susquehanna Railroad from White Haven to Wilkes-Barre via Solomon Gap (and through the cut eventually spanned by the Mary Street Bridge) arrived in Wilkes-Barre on May 23, 1843 (Bradsby 1893:263).

In the mid-1860s, the Lehigh Coal and Navigation Company began acquiring additional property in the vicinity of Solomon Gap for construction of a "Back Track" on its Lehigh and Susquehanna Railroad. This long, looping Back Track was designed to allow passenger trains, empty rail cars, and all other north-bound traffic to be transported between Ashley and Solomon Gap by either steam locomotive or gravity, thus freeing up the Ashley Planes for increased shipments of south-bound coal (Stein 1909:318). It was hoped that this improvement would give

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the Lehigh and Susquehanna Railroad a competitive advantage over the Lehigh Valley Railroad, which had just been extended from White Haven to Wilkes-Barre via Solomon Gap (Bradsby 1893:263). Construction of the Lehigh Coal and Navigation Company's Back Track required the laying of a second set of tracks through the cut eventually spanned by the Mary Street Bridge. It has not been determined if the cut was widened and/or deepened when this second set of tracks was laid. When the Back Track was completed in 1867, it extended from a point several hundred meters south of present-day Mary Street northward, before descending northeastward along the northern face of Penobscot Mountain, then southwestward down to Ashley and the foot of the Ashley Planes (Bradsby 1893:263).

On March 31, 1871 the Lehigh Coal and Navigation Company leased its Lehigh and Susquehanna Railroad to the Central Railroad Company of New Jersey, which began operating the former Lehigh and Susquehanna Railroad as "the Lehigh and Susquehanna Division" of "the New Jersey Central Railroad" (Stein 1909:318). On a map of Wright Township published in 1873 (sixteen years before the northeastern portion of Wright Township was established as Fairview Township), the generally parallel routes of the "NJC" (New Jersey Central's) Lehigh and Susquehanna Division and the newer Lehigh Valley Railroad were depicted passing through "Mountain Top P.O." (Beers 1873). The Back Track operating as part of the "New Jersey Central Railroad" at that time was depicted diverging northeastward from the main line near Wright Township's northern border.

An unlabeled road on the alignment of present-day Mary Street was depicted on the 1873 map intersecting the "NJC" (New Jersey Central's) Lehigh and Susquehanna Division in the vicinity of the present-day Mary Street Bridge (Beers 1873). CHRS, Inc. researchers attempted to consult Wright Township Commissioners' meeting minutes for 1873 and earlier in order to learn when the unnamed precursor of present-day Mary Street (T.R. 0439) had been laid out, and if a bridge was constructed at that time to carry the new road across the railroad cut in Solomon Gap. Wright Township officials indicated that no Township Commissioners' meeting minutes or comparable records of municipal activity exist for Wright Township for that period. A review of Luzerne County road dockets compiled in the 1870s yielded no evidence of County involvement in the laying out of a road on the alignment of present-day Mary Street. The 1873 map does not appear to indicate if the new road spanned the railroad cut or was interrupted by it. If the road spanned the railroad cut (the most likely possibility), it must have done so via some sort of bridge. If the present Mary Street Bridge was indeed erected in 1894 (as the uncorroborated PENNDOT records indicate), then some other structure may have carried Mary Street across the railroad cut in 1873.

The northeastern portion of Wright Township—including Mountain Top—was incorporated as "Fairview Township" in 1889 (Godcharles 1933:281). The picturesque qualities of this newly-formed municipality, and its character as a railroading nexus, were described four years later by a traveler on one of the two railroads serving Mountain Top. The traveler wrote:

Going south from Wilkes-Barre, on reaching the top of the mountain after the long going over the ox-bow that winds up the mountain side [the Back Track], then you can look to the right out of the car window and your eyes will tell you how this [township] came to be called Fairview. For miles and miles flat mountain top is spread before you and in the blue distance the hazy hills again rise above the wide depression. The two main lines of railroad parallel each other all the way from Mauch Chunk, going north to Mountain Top—Fairview—the head of the "planes," where the coal is hauled up the mountain by stationary power, and then the long trains descend toward the south. These coal roads up the mountain sides, ending at the top of the mountain at Fairview, and the converging of the two lines of the railroads in their long respective ox-bows, make of this quite a noted point. By either road in going south as your train winds along the mountain side, the greater part of the time you may look out upon as beautiful scenery as the eye can rest upon. The deep gorge on either hand often gives the car, in looking out of the train, the semblance of rushing along in midair, and in the distance is the valley, Wilkes-Barre, Ashley, Plymouth, Kingston, Dorrance, Bennett, Luzerne, Wyoming, Forty Fort and the great coal breakers and their ever ascending columns of steam and the villages, hamlets, farms and residences and shade trees, wide roads and winding avenues and walks that are as beautiful as a dream.

Fairview is certainly properly named. It is the centering point of as lovely scenery as can be found in the world. The township name of Fairview is but an extension to the new township of the name of Fairview station on the Lehigh Valley railroad. . . .

Fairview is quite a railroad point. Bear Creek Junction is the point where branches off from the Lehigh Valley road their line to Meadow run, about 16 miles [25.74 kilometers]\*. In addition to the already-mentioned incline coal road from Wyoming valley to the Mountain Top, the converging at this point of the two main lines of railroad, the New Jersey Central railroad, commencing at that point, have built a coal road to Pittston, the cut-off. By this line they carry their coal and freight up the mountain. Thus the trains, and they are many, from either direction here stop their extra engines that are used in the steep hauls up the mountain, every loaded train requiring two of these monster engines, and many three of them. This makes the stations of Mountain Top, Fairview and Penobscot all practically one, strung along different tracks, quite a railroad rendezvous, and engine houses and small shops are numerous, and railroad employees have homes in the vicinity. Fairview is on the Lehigh Valley railroad, and Penobscot on the New Jersey Central—practically all one (Bradsby 1893:557-58).

An unlabeled road on the alignment of present-day Mary Street was depicted on a USGS map of Fairview Township published in 1894, the same year the present Mary Street Bridge is

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reported to have been erected (USGS 1894; Pennsylvania Department of Transportation 1998:1). None of the data presented on the 1894 map either support or challenge the accuracy of the reported erection date. CHRS, Inc. researchers pursued other avenues of investigation. Newspapers published in Wilkes-Barre during 1894 were scanned for evidence of the Mary Street Bridge's erection. No such evidence was discovered. The photograph and manuscript collections of the Luzerne County and Wyoming County Historical Societies were searched for evidence pertaining to the Mary Street Bridge. Again, no evidence was discovered. In light of the possibility that the bridge was erected by the Central Railroad Company of New Jersey rather than one or more municipal agents, CHRS, Inc. researchers consulted Central Railroad Company of New Jersey records archived in the New Jersey State Archives. This collection, it was learned, only contains records pertaining to Company property and activities within the State of New Jersey. Records pertaining to property and activities in Pennsylvania are archived in the National Archives. An archivist at the National Archives conducted a search of the Archives on behalf of CHRS, Inc., looking in particular for valuation records that typically provide extensive construction data relating to railroad overpasses and underpasses. The archivist's emailed response to CHRS, Inc. read as follows: "The records of the Interstate Commerce Commission (Record Group 134), Bureau of Valuation, are in the custody of this unit. I have searched the Engineering Field Notes for the Central RR of New Jersey and have been unable to locate bridge notes for Valuation Section 9 PA, that goes through Solomon's Gap and Fairview, PA. I have, however, located building notes for this section of track that includes drawings and photos of railroad-owned structures along the right-of-way." The Mary Street Bridge was not included in the "railroad-owned structures along the right-of-way" (Pfeiffer 2004:n.p.).

None of the twentieth-century railroad maps, property maps, deed records, and aerial photographs collected and examined by CHRS, Inc. researchers in the course of this investigation shed light on the origins of the Mary Street Bridge. Sometime after 1948, when the Ashley Planes were closed, the set of tracks serving the Planes were removed, leaving the single set of tracks still active beneath the Mary Street Bridge under new ownership (Bohlin 1979:n.p). The Central Railroad Company of New Jersey suffered repeated financial setbacks during the depression years of the 1930s. It went into receivership in 1939 and did not emerge from this shackled state until 1949, a year after the Ashley Planes were shut down (Saylor 1964:39; Bohlin 1979:n.p.). In the intervening years the Company tried to reduce the amount of taxes it owed the State of New Jersey by setting up a wholly owned subsidiary called "the Central Railroad Company of Pennsylvania" to operate its property in Pennsylvania, including the Lehigh and Susquehanna Division. The Interstate Commerce Commission approved the creation of this subsidiary effective August 5, 1946, but the State of New Jersey filed suit to have the action reversed. It was eventually ruled in court that the State of New Jersey could tax the combined earnings of the Central Railroad Company of New Jersey and the Central Railroad Company of Pennsylvania. "This ruling rendered as pointless the separate operation of the properties in the two states," a railroad historian has written. "As of January 1, 1953, the Central Railroad [Company] of New Jersey resumed operation of the entire property, and the Central Railroad Company of Pennsylvania ceased being an operating company, although it has continued in

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existence as a wholly owned, non-operating subsidiary of the Central Railroad Company of New Jersey . . . . [As of 1964] the Reading own[ed] 48.97 percent of the capital stock of the Central Railroad Company of New Jersey" (Saylor 1964:38).

On March 22, 1967, according to another railroad historian, the Central Railroad Company of New Jersey "filed for bankruptcy for the final time. . . . It then pulled out of Pennsylvania completely in 1972. The CNJ never did recover from this and went rather meekly into the Conrail system in 1976" (Paone 1999:n.p.). After two decades under Conrail management, the former Lehigh and Susquehanna Division of the New Jersey Central Railroad was acquired by the Reading Blue Mountain & Northern Railroad Company in 1996. Today, the tracks beneath the Mary Street Bridge are used by trains of the Reading Blue Mountain & Northern Railroad Company to serve customers located between Lehighton and Scranton, to provide "bridge traffic to two shortlines in the Wilkes-Barre Scranton area," and to "provide a shortcut for the Canadian Pacific Railroad, using trackage rights for access to Philadelphia and New York City" (Reading Blue Mountain & Northern Railroad Company 2004:n.p.).

Pennsylvania Department of Transportation inspection records indicate the Mary Street Bridge was "altered" around 1950, with the alterations including the introduction of rolled floorbeams (Pennsylvania Department of Transportation 1998:1). The bridge was posted with a 9.08-metric ton (10-ton) weight limit until June 22, 1989, when the weight limit was reduced to 6 metric tons (7 tons) by order of the Public Utility Commission. The bridge was closed to traffic in February 1997. Advanced signing is now provided, and the approaches are blocked with a gravel barrier (Borton-Lawson Engineering, Inc. 1998:2).

# SOURCES OF INFORMATION

#### **Primary Sources**

<u>Maps</u>

Beers, Daniel G.

1873 Atlas of Luzerne County. Philadelphia, PA: A. Pomeroy and Co.

United States Geological Survey

Wilkes-Barre, PA Quadrangle, 15 minute series. Surveyed 1890-91. Washington, D.C.: United States Geological Survey.

- 1983 *Wilkes-Barre East, PA Quadrangle,* 7.5 minute series. From aerial photographs taken 1942, field checked 1947, revised from aerial photographs taken 1981, photorevised 1983. Reston, Virginia.
- 1990 *Wilkes-Barre West, PA Quadrangle,* 7.5 minute series. From aerial photographs taken 1942, field checked 1947, revised from aerial photographs taken 1987, photorevised 1990. Reston, Virginia.

# **Secondary Sources**

#### Articles

#### Stein, C.H.

"Handling Freight Traffic on Inclined Planes: The Ashley Planes of the CRRNJ." In *Engineering News*, Vol. 61, No. 12 (March 25, 1909). New York: Engineering News, Inc.

# Books

# Bradsby, Henry C., ed.

1893 History of Luzerne County, Pennsylvania. Chicago, IL: S.B. Nelson.

#### Godcharles, Frederic A.

1933 *Pennsylvania: Political, Governmental, Military, and Civil.* New York, NY: The American Historical Society, Inc.

#### Munsell, W.W.

1880 History of Luzerne, Lackawanna and Wyoming Counties, Pa. New York, NY: W.W. Munsell & Co.

#### Saylor, Roger B.

1964 *The Railroads of Pennsylvania*. State College, Pennsylvania: Bureau of Business Research, Pennsylvania State University.

# **Unpublished Reports and Documents**

#### Alfson, Mary and Courtney L. Clark

Mary Street Bridge Replacement Project, Fairview Township, Luzerne County, Pennsylvania, Determination of Effect Report. Report prepared by CHRS, Inc., North Wales, PA. Report prepared for the U.S. Department of Transportation, Federal Highway Administration and the Pennsylvania Department of Transportation.

# Bohlin, Annie (compiler)

Nomination of the Ashley Planes to the Pennsylvania Inventory of Historic Places. In the collection of the Wyoming Valley Historical Society, Wilkes-Barre, PA.

# Borton-Lawson Engineering, Inc.

"Inspection Report for Mary Street Bridge, Fairview Township, Luzerne County, Pennsylvania. Prepared for Fairview Township Board of Supervisors." Originally submitted June 1994, revised March 1998. On file at Barton-Lawson Engineering, Inc., Wilkes-Barre, PA.

# Clark, Courtney L., Nadine Miller Peterson and Philip Ruth

Mary Street Bridge Replacement Project, Fairview Township, Luzerne County, Pennsylvania, Historic Resources Survey/Determination of Eligibility Report.

Report prepared by CHRS, Inc., North Wales, PA. Report prepared for the U.S. Department of Transportation, Federal Highway Administration and the Pennsylvania Department of Transportation.

# Pennsylvania Department of Transportation

"Pennsylvania Historic Bridge Inventory & Evaluation" form for the "TR 439 (St Marys Road) Over CONRAIL/D&H (Lehigh Line)" Bridge. Included in the PENNDOT Historic Bridge Access Database, downloaded on February 20, 2002 via <ftp://ftp.dot.state.pa.us/public/bureaus/BEQ/DEC01MASTRBRDG.mdb>.

#### Pfeiffer, David

2004 Email to CHRS, Inc. Researcher Dan Zagorski, December 30, 2004. David Pfeiffer, Archivist, Civilian Records, Textual Archives Services Division, National Archives at College Park, College Park, MD.

#### Websites:

#### Paone, Phil

"New Jersey Railroad Information: The Central Railroad of New Jersey." Webpage http://members.tripod.com/njrails/20th\_Century/CNJ/CNJ.htm, accessed on May 10, 2002.

#### Reading Blue Mountain & Northern Railroad Company

"About the Reading & Northern." Webpage http://www.readingnorthern.com/about.shtml, on the Reading Blue Mountain & Northern Railroad Company website, http://www.readingnorthern.com/. Accessed on January 11, 2005.

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# **B.** Repositories Consulted for Historic Views

Bishop Memorial Library

Luzerne County Historical Society

Wyoming County Historical Society

# **PROJECT INFORMATION**

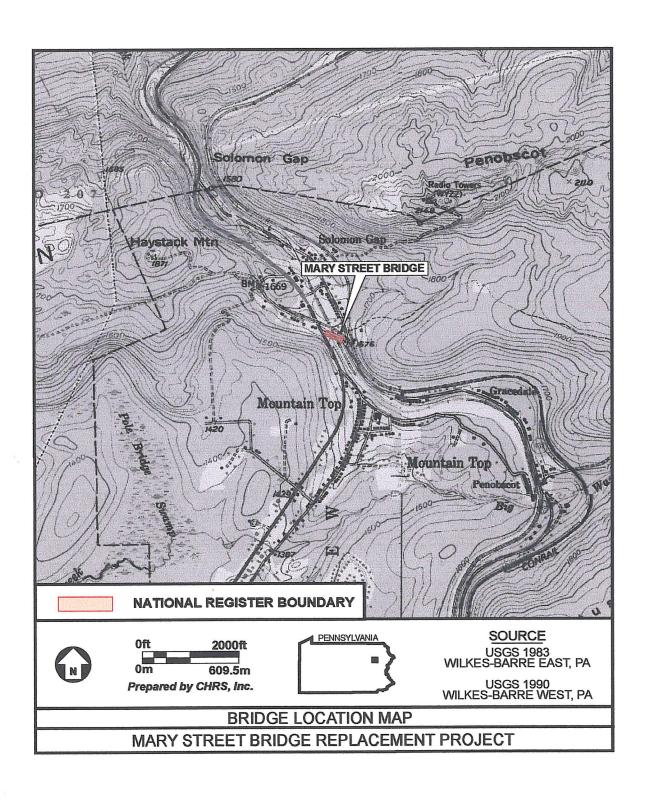
This documentation was prepared in order to mitigate an adverse effect to the Mary Street Bridge that will result from planned replacement of the Mary Street Bridge, T.R. 0439, in Fairview Township, Luzerne County, Pennsylvania. The project involves the replacement of the bridge that carries Mary Street over the former Lehigh and Susquehanna Railroad. The purpose of the project is to improve safety and bring the bridge into conformance with current design standards. Previous reports that addressed the Mary Street Bridge includes a *Historic Resources Survey/Determination of Eligibility Report* (Clark, Miller Peterson, Ruth 2003) and a *Determination of Effect Report* (Alfson and Clark 2004). This work was performed for the U.S. Department of Transportation, Federal Highway Administration and the Pennsylvania Department of Transportation.

Prepared by: Lynda B. Schwan

Title: Project Manager

Affiliation: Cultural Heritage Research Services, Inc.

Date: September 30, 2004



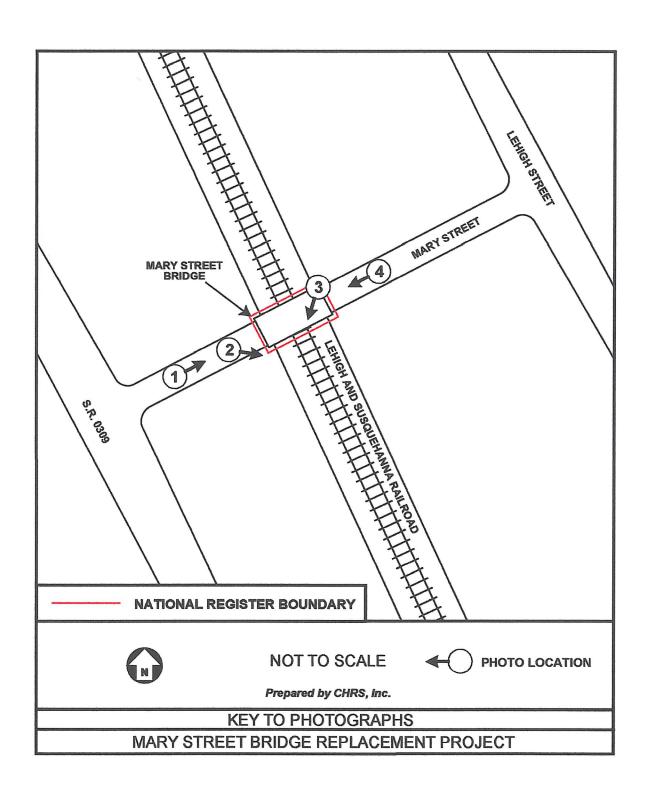
# STATE-LEVEL RECORDATION

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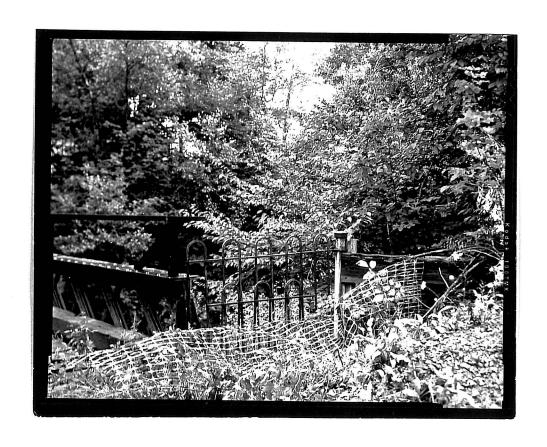
Mary Street Bridge T.R. 0439 Fairview Township Luzerne County, Pennsylvania

Photographs by Mary Alfson and Lynda Schwan of CHRS, Inc., August 2004.

- 1 VIEW LOOKING NORTHEAST TOWARD THE SOUTHWEST PORTAL. MARY STREET CURVES SLIGHTLY AS THE ROAD INCLINES.
- 2 VIEW LOOKING EAST TOWARD IRON FENCE ATTACHED TO THE BRIDGE AT THE SOUTHEAST CORNER.
- 3 VIEW LOOKING SOUTH TOWARD THE EAST LATTICE WALL OF THE BRIDGE. NOTE THE WOOD DECK OF THE BRIDGE IN THE PHOTOGRAPH.
- 4 VIEW LOOKING SOUTHWEST TOWARD THE NORTHEAST PORTAL. MARY STREET CREATES A "Y" AS IT INTERSECTS WITH S.R. 0309.











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