

## Chapter 20. Architectural and Historical Survey

### Introduction

In January of 2008, GAI conducted a reconnaissance level architectural and historical survey in conjunction with GAI's Phase Ia cultural resources reconnaissance of BBNPP Areas 6, 7, and 8, and the Confers Lane Parcel. This reconnaissance survey identified 52 architectural and historical resources (including ten resources that collectively comprised part of the potential Wapwallopen Historic District) within the project APE.

Survey results and recommendations were presented in the Phase Ia technical report (Munford and Tuk 2008). GAI recommended supplemental study of four resources, including Stone Walls (GAI-02), Union Reformed and Lutheran Church (155049), Heller Farm (155057), and the Wapwallopen Historic District (155070), as well as further study to define the recommended NRHP boundaries conclusively for 10 resources recommended eligible for NRHP listing. The 10 resources included Union Reformed and Lutheran Church (155049), Woodcrest (155052), Stone Arch Bridge (155054), North Market Street Bridge (155055), North Branch Pennsylvania Canal (141673), The Bloomsburg Division of the Delaware, Lackawanna, and Western Railway (155053), Susquehanna and Tioga Turnpike (155056), Red Brick Studios (155064), Pennsylvania Railroad-Sunbury Line/ Delaware & Hudson Railroad (155065), and the Wapwallopen Historic District (155070).

The PHMC-BHP commented on GAI's Phase Ia recommendations in a June 5, 2008 letter requesting completion of Pennsylvania Historic Resources Survey (PHRS) forms for 22 of the identified resources, including ten resources comprising part of the Wapwallopen Historic District (see Appendix A). The PHMC-BHP determined no further survey work was required for the remaining 21 resources. The 22 resources for which the PHMC-BHP requested PHRS forms, and the 21 resources which the PHMC-BHP required no further work are summarized in Table 20-1, and their locations are provided in Figure 20-1.

**Table 20-1. Initial Phase Ia Identified Architectural and Historical Resources**

ID No.	Name	Address	Style and Type	Date	Preliminary Eligibility Recommendation
Identified Resources Requiring Additional Information (as Requested by the PHMC-BHP in June 5, 2008 Letter)					
155049 (GAI-03) (previous PHMC Key # 086527)	Union Reformed and Lutheran Church (Old River Church and Burying Ground)	3200 SR 239, Conyngham Twp	Federal Church and Cemetery	1833 (Church), 1805 (Cemetery)	Eligible, Criteria A and C <i>Further research recommended to determine Criterion B eligibility.</i>
155052 (GAI-04)	Woodcrest	3209 SR 239, Conyngham Twp	Federal, Vernacular Farmstead	1805, 1822	Eligible, Criteria A and C
155059 (GAI-05)	Hummel Farmstead	371 Beach Grove Road, Salem Twp	Frame Vernacular Farmstead	c1890	Not Eligible
155054 (GAI-06)	Stone Arch Bridge	Beach Grove Road at Stone Church Road, Salem Twp	Vernacular Stone Arch Bridge	c1935	Eligible, Criterion C
155058 (GAI-07)	Kiliti Farm	62 Kiliti Road, Salem Twp	American Foursquare, Vernacular Farmstead	c1925	Not Eligible
155057 (GAI-08)	Heller Farm	4210 North Market Street, Salem Twp	Frame Vernacular Farmstead	c1930	<i>Undetermined. Further research recommended following property access.</i>

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ID No.	Name	Address	Style and Type	Date	Preliminary Eligibility Recommendation
155055 (GAI-09)	North Market Street Bridge	North Market Street, Salem Twp	Vernacular Stone Arch Bridge	c1935	Eligible, Criterion C
141673 (GAI-10)	North Branch Pennsylvania Canal	Along Susquehanna River, US Rt. 11 Vicinity, Salem Twp	Vernacular Canal	1828	Eligible, Criteria A and C
155053 (GAI-11)	The Bloomsburg Division of the Delaware, Lackawanna & Western Railway	Along Susquehanna River, US Rt. 11 Vicinity, Salem Twp	Vernacular Railroad	1858	Eligible, Criterion A
155056 (GAI-12)	Susquehanna and Tioga Turnpike	US Rt. 11, Salem Twp	Vernacular Highway	1807-1810	Eligible, Criterion A
155060 (GAI-13)	House	29 Bell Bend Road, Salem Twp	Bungalow Residence	c1925	Not Eligible
155061 (GAI-14)	House	49 Bell Bend Road, Salem Twp	Frame Vernacular, Georgian Residence	c1875	Not Eligible
155062 (GAI-20)	Valley View Farm	1022 Salem Boulevard, Salem Twp	Frame Vernacular Farmstead	c1900	Not Eligible
155063 (GAI-25)	Michaels Farm	4252 N. Market Street, Salem Twp	Frame Vernacular Farmstead	c1880	Not Eligible
155064 (GAI-26)	House (Red Brick Studios)	1405 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Masonry Vernacular, Gothic Revival Residence	c1880	Eligible, Criterion C
155065 (GAI-27)	Pennsylvania Railroad- Sunbury Line/ Delaware & Hudson Railroad	Along Susquehanna River in Vicinity of River Road and SR 239, Nescopeck Twp	Vernacular Railroad	c1870	Eligible, Criterion A
155071 (GAI-29)	Farm	950 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Greek Revival Farmstead	c1870-c1960	Not Eligible
155066 (GAI-30)	House	944 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Masonry Vernacular, Georgian Residence	c1870	Not Eligible
155067 (GAI-33)	Farm	783 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Masonry Vernacular, Greek Revival Farmstead	c1880	Not Eligible
155068 (GAI-35)	Farm	212 East Cherry Road (T379), Nescopeck Twp	Frame Vernacular Farmstead	c1890	Not Eligible
155070 (GAI-36 through GAI-45)	Wapwallopen Historic District	454 through 480 South River Street, Wapwallopen	Vernacular, Italianate, Gothic Revival, Queen Anne, Stick, Colonial Revival Historic District	c1870-c1900	Eligible, Criteria A and C <i>Further study recommended to determine all contributing resources and district boundary.</i>
155069 (GAI-50)	Farm	811 River Road (SR 3036), Nescopeck Twp	Vernacular, Georgian Farmstead	c1880-c2000	Not Eligible
<b>Identified Resources Requiring no Further Survey Work (as Requested by PHMC/BHP in June 5, 2008 Letter)</b>					
GAI-01	Beach Grove Cemetery	Beach Grove Road, Salem Twp	Vernacular Cemetery	c1850-c2004	Not Eligible

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ID No.	Name	Address	Style and Type	Date	Preliminary Eligibility Recommendation
GAI-02	Stone Walls	Bell Bend Road at US Rt. 11, Salem Twp	Vernacular Walls	c1810-c1850?	<i>Undetermined. Further research recommended.</i>
GAI-15	House	65 Bell Bend Road, Salem Twp	Frame Vernacular Residence	c1880	Not Eligible
GAI-16	House	155 Bell Bend Road, Salem Twp	Minimal Traditional, Cape Cod Residence	c1950	Not Eligible
GAI-17	House	189 Bell Bend Road, Salem Twp	Colonial Revival Residence	c1925	Not Eligible
GAI-18	House	193 Bell Bend Road, Salem Twp	Minimal Traditional Residence	c1950	Not Eligible
GAI-19	House	1021 Salem Boulevard, Salem Twp	Frame Vernacular Residence	c1950	Not Eligible
GAI-21	Bell Bend Efficiency Apartments	1043 Salem Boulevard, Salem Twp	Frame Vernacular Apartment	c1940	Not Eligible
GAI-22	House	1047 Salem Boulevard, Salem Twp	Frame Vernacular Residence	c1910	Not Eligible
GAI-23	House	1091 Salem Boulevard, Salem Twp	Frame Vernacular Residence	c1910	Not Eligible
GAI-24	House	1069 Salem Boulevard, Salem Twp	American Foursquare Residence	c1925	Not Eligible
GAI-28	Barn and Trailer	998 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Vernacular Former Farmstead	c1900-c1990	Not Eligible
GAI-31	House	906 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Frame Vernacular Residence	c1900	Not Eligible
GAI-32	House	809 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Frame Vernacular Residence	c1910	Not Eligible
GAI-34	House	175 East Cherry Road (T379), Nescopeck Twp	Frame Vernacular Residence	c1930	Not Eligible
GAI-46	House (Opossum Lodge)	598 River Road (SR 3036), Nescopeck Twp	Frame Vernacular Residence	c1920	Not Eligible
GAI-47	House	546 River Road (SR 3036), Nescopeck Twp	Frame Vernacular Residence	c1920	Not Eligible
GAI-48	House	520 River Road (SR 3036), Nescopeck Twp	Frame Vernacular Residence	c1920	Not Eligible
GAI-49	House	510 River Road (SR 3036), Nescopeck Twp	Frame Vernacular Residence	c1920	Not Eligible
GAI-51	Quarry	SR 3036 (River Road) vicinity, Nescopeck Twp	Vernacular Extraction Facility	c1930	Not Eligible
GAI-52 (135820)	Bridge	N. Market Street, Salem Twp	Vernacular Concrete Bridge	1937	Not Eligible

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**Figure 20-1. Initial Phase Ia Identified Architectural and Historical Resources**

11x17

*REDACTED Figure 20-1  
Initial Phase Ia Identified  
Architectural and Historical  
Resources*

(back of Figure 20-1)

*Side two of REDACTED Figure 20-1*

**Figure 20-2. Identified Architectural and Historical Resources Requiring PHRS Forms**  
11x17

*REDACTED Figure 20-2  
Identified Architectural and  
Historical Resources Requiring  
PHRS Forms*

(back of Figure 20-2)

*Side two of REDACTED Figure  
20-2*



In August 2008, GAI conducted a supplemental architectural and historical survey of the BBNPP project area in conjunction with GAI's initial Phase Ib archaeological survey (Munford et al. 2008). Supplemental fieldwork consisted of the compilation of digital photographs of resources and the formal evaluation of their NRHP eligibility according to NRHP criteria for significance and standards of integrity. Based on the results of the supplemental survey, GAI recommended that the Union Reformed and Lutheran Church (155049) was NRHP-eligible under Criterion B, as well as Criteria A and C; the Heller Farm (155057) did not possess sufficient historical associations, architectural significance, or integrity for NRHP listing; and the Wapwallopen Historic District (155070) encompassed a number of resources outside the APE, including several orchards associated with the community. The PHRS forms for the 22 historic resources requested by the PHMC-BHP were submitted as an appendix to the Phase Ib report (Munford and Tuk 2008) (see Table 20-1).

The PHMC-BHP reviewed the PHRS forms submitted for the 22 surveyed architectural and historical resources, and responded in a letter dated October 28, 2008, requesting additional information on select resources (see Appendix A). The PHMC-BHP requested that GAI provide additional contextual information on identified farmsteads, as well as information concerning the potential for a rural historic agricultural district and recurring vernacular architectural traits within the project area. Furthermore, additional information was requested supporting the eligibility findings for eight resources including: the Pennsylvania Railroad-Sunbury Line/Delaware and Hudson Railroad (155065), Bloomsburg Division of the Delaware, Lackawanna and Western Railway (155053), Susquehanna and Tioga Turnpike (155056), Stone Arch Bridge (155054), North Market Street Bridge (155055), Union Reformed and Lutheran Church (155049), North Branch Pennsylvania Canal (141673), and the Wapwallopen Historic District (155070).

In November 2009, GAI conducted additional research and fieldwork, and provided the PHMC-BHP with the requested supplemental information in a response letter dated November 16, 2009 (see Appendix A). As a result of this most recent study, the previously recommended NRHP-eligible Susquehanna and Tioga Turnpike (155056) was recommended not NRHP-eligible. However, GAI's previous recommendations of eligibility for the remaining resources remained unchanged, and the Pennsylvania Railroad Sunbury Line/Delaware and Hudson Railroad (155065) was recommended eligible for NRHP listing under Criterion A; the Bloomsburg Division of the Delaware, Lackawanna, and Western Railway (155053) was recommended eligible for NRHP listing under Criterion A; the Stone Arch Bridge (155054) and the North Market Street Bridge (155055) were recommended eligible for NRHP listing under Criterion C; the Union Reformed and Lutheran Church (155049) was recommended eligible for NRHP listing under Criteria A, B, and C; the North Branch Pennsylvania Canal (141673) was recommended eligible for NRHP listing under Criterion A and C; the Wapwallopen Historic District (155070) was recommended eligible for NRHP listing under Criteria A and C; and Woodcrest (155052) was recommended eligible for NRHP listing under Criteria A and C. The Kiliti Farm (155058), the Heller Farm (155057), the Valley View Farm (155062), the Michaels Farm (155063), the farm at 950 Berwick-Hazleton Highway (155071), the farm at 783 Berwick-Hazleton Highway (155067), the farm at 811 River Road (155069), and the farm at 212 East Cherry Road (155068) were again recommended not eligible for NRHP listing. Furthermore, GAI concluded that there was no potential for a rural historic agricultural district due to the infill of modern residential, commercial, and industrial buildings and changing land-use patterns throughout the project area.

The PHMC-BHP responded in a letter dated March 17, 2010 (see Appendix A), and concurred with GAI's recommendations that the Union Reformed and Lutheran Church (155049) was eligible for NRHP listing under Criterion C, Woodcrest (155052) was eligible for NRHP listing under Criterion A and possibly Criterion C, and the North Branch Pennsylvania Canal (141673) was eligible for NRHP listing under Criterion A. The PHMC-BHP also concurred with GAI's recommendations that the farm at 783 Berwick-Hazleton Highway (155067), the farm at 212 East Cherry Road (155068), the farm at 811 River Road (155069), the farm at 950 Berwick-Hazleton Highway (155071), the Michaels Farm (155063), the Heller Farm (155057), the Valley View Farm (155062), the Jameson Farm (a/k/a the Kiliti Farm)(155058), and the Susquehanna and Tioga Turnpike (155056) were not eligible for NRHP listing. Furthermore, the PHMC-BHP determined that the previously recommended eligible resources, the Pennsylvania Railroad Sunbury Line/Delaware and Hudson Railroad (155065) and the Bloomsburg Division of the Delaware, Lackawanna, and Western Railway (155053) were not eligible for NRHP listing. The PHMC-BHP did not provide a determination of eligibility for the Stone Arch Bridge (155054), the North Market Street Bridge (155055), or the Wapwallopen Historic District (155070), but rather requested additional research for the bridges and a field view of the potential historic district to guide their eligibility determinations.

### Area of Potential Effect

The initial Phase Ia APE consisted of a 511-acre footprint and a 410-acre footprint of the previously surveyed West Alternative, plus the surrounding viewshed. The current APE for architectural resources consists of the 902-acre (365 hectares) BBNPP Phase Ib project footprint in addition to the surrounding viewshed. The modified footprint APE did not change the viewshed APE. The viewshed was defined as those areas within reasonable limits from which the proposed project may be seen, as appropriate, based on landforms, terrain, and vegetation features. Based on project information provided by the client, and in consultation with Ann Safley of the PHMC-BHP (teleconference on January 23, 2008), the limits of the viewshed for the study was defined as extending at least 0.8-kilometers (0.5 miles) beyond the project footprint. In some areas (i.e. along the elevated riverbank), the viewshed APE was extended to include additional resources located within a clear line of sight of the project area, and in one case extended as far as 4.21 kilometers (2.62 miles).

### Field Survey Results

As part of the initial Phase Ia cultural resource investigations, GAI identified 52 architectural and historical resources within the project APE on a reconnaissance level. The PHMC-BHP subsequently requested that additional work be completed on 22 (including the ten resources comprising part of the potentially NRHP-eligible Wapwallopen Historic District) of these 52 resources, and that no further survey work was required on the remaining 21 resources. PHRS forms were prepared for the 22 architectural and historical resources (see Table 20-1). Of the 22 resources, three (141673, 155049, and 155052) have been determined eligible for NRHP listing by the PHMC-BHP, and four (155054, 155055, 155064, and 155070) were recommended eligible for listing in the NRHP (PHMC-BHP letter dated March 17, 2010) (Appendix A). Of the remaining 15 resources, 11 (155053, 155056, 155057, 155058, 155062, 155063, 155065, 155067, 155068, 155069, and 155071) have been determined ineligible for NRHP listing by the PHMC-BHP, and four (155059, 155060, 155061, and 155066) were recommended ineligible for NRHP listing (PHMC-BHP letter dated March 17, 2010) (see Appendix A). The 22 surveyed resources for which the PHMC-BHP required completion of PHRS forms are described in Table 20-2 and their locations are depicted in Figure 20-2. This table contains PHMC-BHP determinations of eligibility where provided. Resources determined

eligible by the PHMC-BHP and recommended eligible by GAI are further discussed below. Updated PHRS forms for the seven NRHP-eligible resources are provided in Appendix E.

**Table 20-2. Identified Architectural and Historical Resources Requiring PHRS Forms**

ID No.	Name	Address	Style and Type	Date	Eligibility Recommendation
141673 (GAI-10)	North Branch Pennsylvania Canal	Along Susquehanna River, US Rt. 11 Vicinity, Salem Twp	Vernacular Canal	1828	Determined Eligible by PHMC-BHP, Criterion A
155049 (GAI-03) (previous PHMC Key # 086527)	Union Reformed and Lutheran Church (Old River Church and Burying Ground)	3200 SR 239, Conyngham Twp	Federal Church and Cemetery	1833 (Church), 1805 (Cemetery)	Determined Eligible by PHMC-BHP, Criterion C
155052 (GAI-04)	Woodcrest	3209 SR 239, Conyngham Twp	Federal, Vernacular Farmstead	1805, 1822	Determined Eligible by PHMC-BHP, Criterion A and Possibly C
155054 (GAI-06)	Stone Arch Bridge	Beach Grove Road at Stone Church Road, Salem Twp	Vernacular Stone Arch Bridge	c1935	Recommended Potentially Eligible, Criterion A <i>Further study recommended</i>
155055 (GAI-09)	North Market Street Bridge	North Market Street, Salem Twp	Vernacular Stone Arch Bridge	c1935	Recommended Potentially Eligible, Criterion A <i>Further study recommended</i>
155064 (GAI-26)	House (Red Brick Studios)	1405 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Masonry Vernacular, Gothic Revival Residence	c1880	Recommended Eligible, Criterion C
155070 (GAI-36 through GAI-45)	Wapwalopen Historic District	454 through 480 South River Street, Wapwalopen	Vernacular, Italianate, Gothic Revival, Queen Anne, Stick, Colonial Revival Historic District	c1870-c1900	Recommended Eligible, Criteria A and C <i>Further study recommended in order to determine all contributing resources and district boundary.</i>
155053 (GAI-11)	The Bloomsburg Division of the Delaware, Lackawanna & Western Railway	Along Susquehanna River, US Rt. 11 Vicinity, Salem Twp	Vernacular Railroad	1858	Determined Not Eligible by PHMC-BHP
155056 (GAI-12)	Susquehanna and Tioga Turnpike	US Rt. 11, Salem Twp	Vernacular Highway	1807-1810	Determined Not Eligible by PHMC-BHP
155057 (GAI-08)	Heller Farm	4210 North Market Street, Salem Twp	Frame Vernacular Farmstead	c1930	Determined Not Eligible by PHMC-BHP
155058 (GAI-07)	Kiliti Farm	62 Kiliti Road, Salem Twp	American Foursquare, Vernacular Farmstead	c1925	Determined Not Eligible by PHMC-BHP
155059 (GAI-05)	Hummel Farmstead	371 Beach Grove Road, Salem Twp	Frame Vernacular Farmstead	c1890	Recommended Not Eligible
155060 (GAI-13)	House	29 Bell Bend Road, Salem Twp	Bungalow Residence	c1925	Recommended Not Eligible
155061 (GAI-14)	House	49 Bell Bend Road, Salem Twp	Frame Vernacular, Georgian Residence	c1875	Recommended Not Eligible
155062 (GAI-20)	Valley View Farm	1022 Salem Boulevard, Salem Twp	Frame Vernacular Farmstead	c1900	Determined Not Eligible by PHMC-BHP

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ID No.	Name	Address	Style and Type	Date	Eligibility Recommendation
155063 (GAI-25)	Michaels Farm	4252 N. Market Street, Salem Twp	Frame Vernacular Farmstead	c1880	Determined Not Eligible by PHMC-BHP
155065 (GAI-27)	Pennsylvania Railroad-Sunbury Line/ Delaware & Hudson Railroad	Along Susquehanna River in Vicinity of River Road and SR 239, Nescopeck Twp	Vernacular Railroad	c1870	Determined Not Eligible by PHMC-BHP
155066 (GAI-30)	House	944 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Masonry Vernacular, Georgian Residence	c1870	Recommended Not Eligible
155067 (GAI-33)	Farm	783 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Masonry Vernacular, Greek Revival Farmstead	c1880	Determined Not Eligible by PHMC-BHP
155068 (GAI-35)	Farm	212 East Cherry Road (T379), Nescopeck Twp	Frame Vernacular Farmstead	c1890	Determined Not Eligible by PHMC-BHP
155069 (GAI-50)	Farm	811 River Road (SR 3036), Nescopeck Twp	Vernacular, Georgian Farmstead	c1880-c2000	Determined Not Eligible by PHMC-BHP
155071 (GAI-29)	Farm	950 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Greek Revival Farmstead	c1870-c1960	Determined Not Eligible by PHMC-BHP

**141673 (GAI-10)**  
**North Branch Pennsylvania Canal**  
**Along Susquehanna River**  
**Salem Township**  
**Luzerne County**

Today, there are only a limited number of readily-identifiable sections of this canal remaining. Within the project area an intact section of the canal survives. This canal consists of an earthen basin approximately 50 feet (15.3 meters) wide and a towpath approximately 6 feet (1.8 meters) wide located on the floodplain between an existing railroad - The Bloomsburg Division of the Delaware, Lackawanna, & Western Railway (155053) - and the Susquehanna River. Sections of the canal are located within the BBNPP project footprint in Areas 6 and 7. Between Areas 6 and 7 the canal falls within the viewshed APE. Within this area, the canal is located in the PPL Susquehanna Riverlands Environmental Preserve, and Lake Took-A-While is located just to the west of the canal. Within the recreation area of the PPL Susquehanna Riverlands Environmental Preserve, the towpath of the canal is maintained and used as a walking trail.



**Photograph 20-1. North Branch Pennsylvania Canal, Area 6, Facing North**

While the canal contains water in the majority of the project area, in Area 7 the canal prism is dry and not maintained (Photograph 20-2). A cross section of the canal in Area 7 is provided in Figure 20-3. In Area 6, a paved access road crosses the canal. This road leads to an existing SSES intake facility on the bank of the Susquehanna River. A large metal culvert has been placed in the canal where the access road crosses. A spillway has been built into the canal south of the access road that likely serves as flood control for the canal basin. South of the spillway, dirt walking paths associated with the PPL Susquehanna Riverlands Environment Preserve cross the canal. In these areas corrugated plastic culverts under the trail allow water-flow between sections of the canal.



**Photograph 20-2. West Bank of North Branch Pennsylvania Canal, Area 7, Facing Northwest**

Construction of the North Branch Canal began in 1828 in Berwick, Pennsylvania. The initial length of the canal ran 55 miles from Northumberland, Pennsylvania, at the fork of the West and North Branches of the Susquehanna River, to a feeder pool at Nanticoke Falls. This 55-mile section of the canal was completed by 1831 and contained nine 17-foot-wide by 90-foot-long locks. The canal's main purpose was to transport the anthracite coal being extracted in the Wyoming Valley to the rest of the Pennsylvania canal system to the south and east of Nanticoke. The canal originally featured a large aqueduct crossing Fishing Creek at Rupert (near Bloomsburg), a weigh-lock at Beach Haven, and a dam crossing the river at Nanticoke (Shank 1991:51).

In 1834, the canal was extended northeast another 17 miles through Wilkes-Barre to Pittston. This extension was originally known as the Wyoming Extension. In 1836, construction began on a further extension from Pittston to Athens, Pennsylvania and the New York state line. However, due to financial difficulties and the rugged terrain through which it passed, this section of the canal was not fully operable until 1856. The entire section of the North Branch Canal in Pennsylvania, from Northumberland to the New York state line, was 169 miles long and contained 43 locks that navigated an elevation change of 334 feet. In addition to the locks, 229 bridges were built to carry local traffic over the canal, 29 aqueducts were constructed, and five dams were constructed to allow slackwater in the river, as well as provide water to fill the canal sections. Eventually, the canal was connected to the Erie Canal by an 18 mile privately-built section in New York state (Shank 1991:51). By 1858, however, the canal system was sold to the Sunbury and Erie Railroad Company. They operated a 65-mile-long section of the line from Northumberland to Wilkes-Barre. In 1869, it was sold to the Pennsylvania Canal Company, who operated it until its closure in 1901.

This section of the North Branch Pennsylvania Canal reflects a clear association with the nineteenth-century canal-building transportation movement throughout Pennsylvania. This section of the canal retains sufficient integrity to convey its historical associations and has been determined by the PHMC-BHP to be eligible for NRHP listing under Criterion A (IPHMC-BHP letter dated March 17, 2010, see Appendix A). The proposed NRHP boundary of the North Branch Pennsylvania Canal in the project area encompasses the main resource and includes the current Right-of-Way to its limits (Figure 20-4). However, the historical significance of the section of canal in the project vicinity cannot be conveyed in its entirety apart from the North Branch Canal District (141673) in adjacent Berwick Borough. As such, it should be considered as a contributing resource to the North Branch Canal District, which has been previously surveyed.

NORTH BRANCH PENNSYLVANIA CANAL  
 CROSS SECTION IN AREA 7  
 SOUTH PROFILE

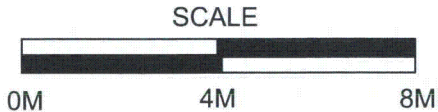
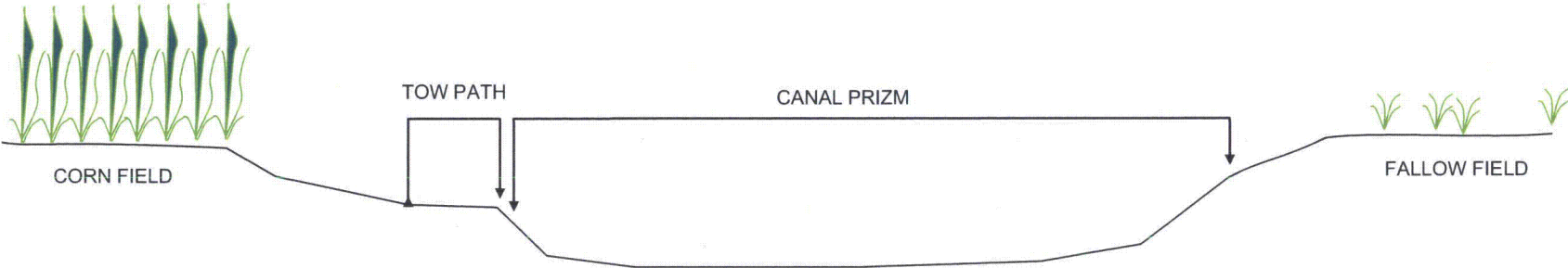


FIGURE 20-3.  
 NORTH BRANCH PENNSYLVANIA CANAL (141673/GAI-10)  
 SOUTH PROFILE



BELL BEND NUCLEAR POWER PLANT  
 UNISTAR NUCLEAR DEVELOPMENT,  
 LLC.

DRWN: SJS  
 CHECKED:

DATE: 05/25/10  
 APPROVED:

**Figure 20-4. Recommended NRHP Boundary for North Branch Pennsylvania Canal (141673)**

*REDACTED Figure 20-4  
Recommended NRHP Boundary  
for North Branch Pennsylvania  
Canal (141673)*



155049 (GAI-03) (previous PHMC Key # 086527)  
Union Reformed and Lutheran Church (Old River Church and Burying Ground)  
3200 SR 239  
Conyngnam Township  
Luzerne County

The Old River Church was constructed in 1833 by the Union Reformed and Lutheran Congregations. The woodwork was hand-carved by Master Carpenter Daniel Walp, with the



assistance of Michael Weiss and William Hess. Hardware for the building may have been supplied by Peter Maurer, a local blacksmith. On September 4, 1887, the Reformed congregation discontinued their use of the church, and on October 4, 1908, the Lutheran congregation did as well. The building underwent restoration in 1952 by the Wapwallopen Historical Society.

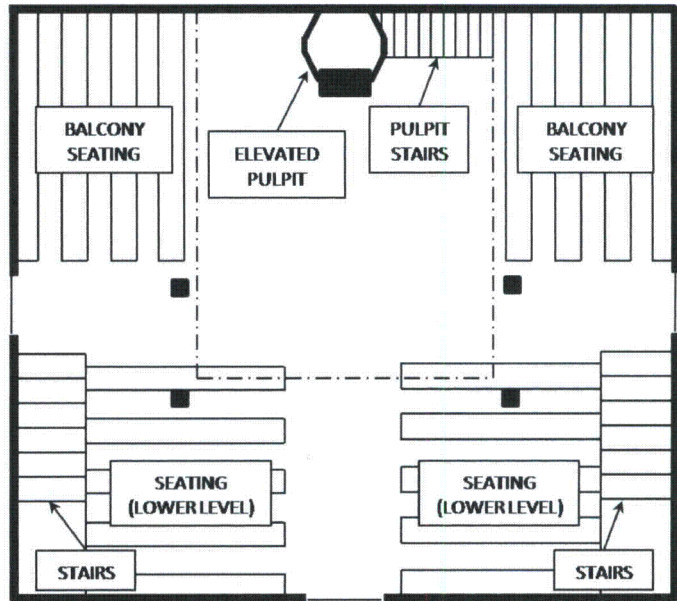
**Photograph 20-3. Union Reformed and Lutheran Church (Old River Church and Burying Ground), Front and Side Elevation, Facing Northeast**

The cemetery at the Union Lutheran and Reformed Church includes the graves of many of Wapwallopen's prominent local founding families. For example, John Andress, Abraham Andress, Peter Ennes, John Fenstermacher, Philip Fenstermacher, Michael Weiss, Johann Martin Harter (a veteran of the American Revolution), Isaac Heller, Jeremiah Hess, Peter Maurer, and their families are buried here. The Heller and Fenstermacher families were prominent millers in Wapwallopen (Wapwallopen Historical Society 1964: 30-62). Being the second Lutheran Church established in Nescopeck, this church community building and cemetery illustrate the growth and development of the Lutheran church in Nescopeck Township. In 1860, the congregation included 52 German Reformed Lutherans and 70 Lutherans (Pearce 1866:306).

The massing and plan, as well as the architectural refinement, of the church reflect theological attitudes of the Wapwallopen congregation toward the material world, as well as the transformation of ecclesiastical architecture on the national level. The Union Lutheran and Reformed Church's "squarish rectangular" design is a late example of the traditional meetinghouse form, which featured an entrance aperture in the long wall and a three-sided gallery embracing a pulpit positioned on the back wall.

Although the location of the communion table varied within this common meetinghouse form throughout the eighteenth and nineteenth centuries, at Wapwallopen, the table stood in an enclosed area before the pulpit. The original pulpit was replaced in the late-nineteenth century by a low rostrum. This feature was removed and a new pulpit approximating the configuration of the original one was installed during the 1952 restoration (Lounsbury 2006:2).

Figure 20-5 Plan of the Union Reformed and Lutheran Church



Photograph 20-4. Union Reformed, Lutheran Church Interior, and Restored Pulpit (left)

By 1800, preferences in American ecclesiastical architecture were evolving in favor of decidedly rectangular and axial plans--with the principal entrance in the shorter gable end and larger window apertures. The intricate detailing in each doorway's frontispiece symbolizes the congregation's emphasis on music and the Eucharist in the liturgy. The pulpit and the altar in the interior mark the importance of the sacrament and scriptural exegesis in Lutheran worship in comparison to other Protestant sects. Furthermore, the church's ornamentation illustrates the Lutheran's appreciation for embellishments that "glorify the majesty of God." While the church's design and style symbolize Lutheran spiritual practices, the church's character also manifests a historic period during the Second Great Awakening when a church building's components, which had been indexical of the denomination worshipping there, no longer clearly differentiated regional or denominational attributes and preferences (Lounsbury 2006: 1-18).

The church building has been restored, but clearly the restoration was carried out to preserve and retain the massing and plan intended by the Union Reformed and Lutheran Congregations, specifically concerning the replacement of the original pulpit. Likewise, the restoration did not rob the building of any of its architectural refinement as the building is still trimmed with a number of delicate features. The exquisite hand-carved woodwork executed by Master Carpenter Daniel Walp (with assistance from Michael Weiss and William Hess) survives on the church building. Special flourishes include the “stylized patera and cabling in the breastwork” of the gallery, and the Christian symbolism carved in the entablature of the main entrance frontispiece consisting of lyres, harps, flagon, and a chalice.



**Photograph 20-5. Detail of the South Frontispiece, United Reformed & Lutheran Church.**

A row of lyres decorates the frieze above the transom. Just below are symbols of the Eucharist with a flagon on the left and chalice on the right.

Because the church represents an excellent example of the Federal style of architecture, it has been determined by the PHMC-BHP to be eligible for listing in the NRHP under Criterion C (PHMC-BHP letter dated March 17, 2010, see Appendix A). The proposed NRHP boundary for this resource has been drawn to include the contributing church and cemetery, as well as the non-contributing privy (Figure 20-6).

**Figure 20-6. Recommended NRHP Boundary for Union Reformed and Lutheran Church (155049)**

*REDACTED Figure 20-6  
Recommended NRHP Boundary  
for Union Reformed and  
Lutheran Church (155049)*

155052 (GAI-04)

Woodcrest

3209 SR 239

Conyngham Township

Luzerne County

Originally dating from 1805, Woodcrest is a farmstead anchored by a 2-story, brick, Federal style house which was built in 1822. This house has a 1-story rear ell, and is constructed on a stone foundation with a common bond brick exterior. The gable roof is clad in asphalt shingles. Three brick interior chimneys pierce the roof, which is marked by a molded frieze and rakeboards and is trimmed with cornice returns and late-nineteenth-century Italianate style corbels and brackets. The full-width, hip-roofed porch also appears to date from the later 1800s, as it is executed in an Eastlake style with detailed spandrels and pendants. The fenestration consists of 2/2 and 2/4 double-hung, wood sash windows, all trimmed with shutters. Each gable end is also marked by a pair of quarter-round, attic story windows.



**Photograph 20-6. Woodcrest, Main Dwelling, Front and Side Elevation, Facing Southeast**

Also associated with the main house is a 1.5-story, gable roofed, brick secondary living quarters. Built on a stone foundation, this building is constructed of brick laid in common bond and has a gable roof clad in asphalt shingles. There are entrances on the south and west elevations, marked by a gable-roofed portico and shed-roofed porch, respectively. The fenestration consists of 2/2 double-hung, wood sash windows, with shorter windows on the second story. A single brick interior chimney pierces the roofline.



**Photograph 20-7. Woodcrest, Secondary Dwelling, Front Elevation, Facing East**

A second brick outbuilding is located to the south and east of the main house. Constructed on a smaller scale, this building with a gable roof may have been used as a summer kitchen.

**Photograph 20-8. Woodcrest Farmstead, Summer Kitchen, Facing Southeast**



Located opposite these residential buildings is a large, gable-roofed, heavy timber-framed bank barn. This large barn is built on a stone foundation and is clad in horizontal wood siding. The roof is clad in V-crimp metal, and two gable-roofed cupola vents are located along the ridge line. The

fenestration throughout consists of louvered vent openings with molded wood drip caps and surrounds. A sliding double door marks the entrance from the earthen embankment approach. A small, one-room concrete block addition is located on the south elevation. To the northeast of the barn is a twentieth-century concrete block garage with a shed roof. The façade of this building is marked by a large, 40-light, central sliding door flanked by two smaller solid doors on strap hinges. Additionally, there is a small, 1-story, wood-framed shed to the west of these outbuildings. This shed-roofed building is clad in vertical wood siding. It is in deteriorated condition.



**Photograph 20-9. Woodcrest Barn, Front and Side Elevation, Facing Northwest**

Around 1840, the North (and West) Branch Susquehanna Diversified Farming Region emerged as a distinct region. Between 1840 and 1860, developments in transportation systems as well as the general temperance movement that was effecting the entire nation, facilitated a shift away from the trend of cultivating grain for whiskey and prompted a surge in the production of corn, wheat, pork, and butter (PHMC

–BHP 2005:152). Between 1860 and 1940, agriculture in the region was influenced by nearby growing industrial areas, easily reached by the newly constructed canal and rail transportation systems. Local farms focused on a diverse mix of products to satisfy these markets. However, the crops and livestock changed only subtly in this region, and farming in the area continued to exhibit a highly diversified approach consisting mainly of wheat, corn, hay, and oat crops, with the raising of milk cows, sheep, cattle, and swine (PHMC 2005: 153).



**Photograph 20-10. Woodcrest, Outbuilding, Side and Front Elevations, Facing Northwest**

Typical of farmsteads in the North Branch Susquehanna Diversified Farming Region in the 1840-1860 period, the current Woodcrest property, historically the William Harter farmstead, witnessed a diversification of agriculture—characterized by crops of wheat, corn, hay, and oats, a small

surplus of butter, small numbers of milk cows, sheep, and beef animals, and higher than average numbers of swine (PHMC 2005: 153). 1850 Agricultural Census Manuscripts reflect this diversification, indicating that William Harter held 140 acres of improved and 40 acres of unimproved land in Hollenback (present-day Conyngham) Township, and owned four (4) milk cows, seven (7) sheep, eighteen (18) swine, and two (2) cattle. In 1849, Harter's farmstead produced 250 pounds of butter, 300 bushels of wheat, 600 bushels of Indian corn, and 600 bushels of oats (NARA 1850: Hollenback). Also indicative of subtle changes in the Harter Farmstead's product mix and consumption by both family and livestock is the presence of the Pennsylvania Barn which represents "an efficient adaptation to new conditions throughout eastern Pennsylvania in the early-nineteenth century...as it reflected new grain and livestock systems in that it housed livestock on the lower level and accommodated hay storage, grain storage, and threshing on the upper level" (PHMC 2005:165).

The Harter farmstead continued to adapt in the latter part of the nineteenth century and seemingly followed the trend of many farmers in the North and West Branch Susquehanna River Valley who when presented with stiff competition from western wheat and flour growers, decided to develop and sell more perishable products and local specialties (PHMC 2005:173). 1880 Agricultural Census Manuscripts indicate that 750 pounds of butter were produced on the farm in 1879, as compared to only 250 in 1849 (NARA 1880:Conyngham).

Family labor still predominated on farms in the 1860-1940 period. On average, the 1880 manuscript census indicates that a typical farm seldom hired even a single laborer (usually male) for more than 28 weeks, and most were only kept for ten or fewer weeks (PHMC 2005:180). However, the 1880 Agricultural Census Manuscripts for Conyngham Township indicated that \$250 was "paid for wages for farm labor during 1879 including value of board" by the Harter farmstead. This agricultural census data is further supported by the presence of the secondary living quarters, which could have served as a tenant house. Unfortunately, J. Hiram Miller, the owner of the farmstead in 1927 could not be located in the Agricultural Census Manuscripts for that year; therefore, twentieth century agricultural census data is not available for comparison.

This collection of residential and agricultural buildings combines to form a resource that clearly reflects the rural agrarian life and agricultural practices of Conyngham (formerly Hollenback) Township in the nineteenth and twentieth centuries. Further confirmed by 1938 aerial

photography is the presence of associated agricultural outbuildings identified extant by historical and architectural survey fieldwork (Penn Pilot 1938). As such, Woodcrest has been determined by the PHMC-BHP to be eligible for listing in the NRHP under Criterion A (PHMC-BHP letter dated March 17, 2010, see Appedix A). Furthermore, the PHMC-BHP has suggested that this resource may be eligible under Criterion C, due to its architectural significance. The recommended NRHP boundary for this resource has been drawn to include the extant buildings and the adjacent agricultural field (Figure 20-7).



Figure 20-7. Recommended NRHP Boundary for Woodcrest (155052).

*REDACTED Figure 20-7  
Recommended NRHP Boundary  
for Woodcrest (155052)*

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155054 (GAI-06)

**Stone Arch Bridge**  
**Beach Grove Road at Stone Church Road**  
**Salem Township**  
**Luzerne County**

Built circa 1935, the Stone Arch Bridge carries a single, asphalt-paved traffic lane of Beach Grove Road (Township Road 419) over Walker Run. The bridge is constructed of stone with stone voussoirs marked by granite keystones. The stones are joined by beaded mortar joints, some of which have been repointed.



The main span is extended by short wing walls on each end, and the superstructure is capped by pre-cast concrete coping. The Stone Arch Bridge is located within Lot 4 of the supplemental BBNPP Phase Ib footprint.

**Photograph 20-11. Stone Arch Bridge, Facing Northeast**

The overall length of the Stone Arch Bridge measures 35 feet, six inches with a deck width of 18 feet, and a roadway width of 14 feet. The total inside arch width is 10 feet and the total arch length is 12 feet. The total arch height is 7 feet, six inches, and the total bridge height measures 9 feet at mid-span.

As a county bridge, the Stone Arch Bridge (155054) is not identified by a Department of Transportation BMS number. Likewise, the bridge bears no date stone. However, a review of the Pennsylvania CRGIS, maintained by the PHMC and PennDOT, revealed the presence of four previously recorded stone arch bridges in Salem Township, in addition to the Stone Arch Bridge (155054) and the North Market Street Bridge (155055). The four previously recorded bridges (092631, 092634, 092644, and 092645) are located outside of the project area. Two are noted as being constructed in 1940 (092645) and 1941 (092634), while two (092631 and 092644) have no dates of construction mentioned. One of the bridges (092634) was noted as being constructed by the WPA.

As a result of the Great Depression, The WPA was created in 1935. The administration hired thousands of unemployed workers to build bridges and roads for state, county, and municipal projects, and at the peak of the program the Pennsylvania Department of Highways employed 143,000 workers (PennDOT 1998:44). While no documentary evidence is available that specifically links the Stone Arch Bridge (155054) to a WPA construction project, the presence of other rural stone arch bridges in Salem Township dating from the same time period, one of which has been noted as being constructed by the WPA, suggests a possible link. As such, the Stone Arch Bridge (155054) should be considered *potentially* eligible for listing in the NRHP under Criterion A as part of a larger thematic WPA context. GAI recommends a thematic study be conducted in order to further evaluate WPA projects in the region (such a

thematic study is outside the scope of work for the current project). No documentary evidence linking the bridge to any significant individuals in local or regional history could be identified. Therefore, this bridge is recommended not eligible for NRHP listing under Criterion B. Recent research has suggested that the Stone Arch Bridge is a relatively common architectural resource in rural Salem Township, and a review of the *Pennsylvania Historic Bridge Survey* revealed the presence of 16 stone arch bridges in Luzerne County (PennDOT 1998). Furthermore, the bridge does not exhibit the work of a master, and while the bridge represents distinctive characteristics of early stone arch bridge technology, due to its later construction date, it is not an identifying example that marked the introduction of that early technology within the region. Therefore the Stone Arch Bridge is recommended not NRHP-eligible under Criterion C. The recommended NRHP boundary for the Stone Arch Bridge has been drawn to include the substructure, superstructure, and decking associated with the bridge (Figure 20-8).

Figure 20-8. Recommended NRHP Boundary for Stone Arch Bridge (155054)

*REDACTED Figure 20-8  
Recommended NRHP Boundary  
for Stone Arch Bridge (155054)*

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**155055 (GAI-09)**  
**North Market Street Bridge,**  
**North Market Street**  
**Salem Township**  
**Luzerne County**

Built circa 1935, this stone arch bridge carries North Market Street (Township Road 436) over Walker Run approximately 1 mile north of the small community of Beach Haven. The bridge is constructed of stone with stone voussoirs marked by keystones. The stones are joined by beaded mortar joints, some of which have been repointed. The single main span reaches a pointed apex in the middle and is extended by short wing walls on each end. The parapets of the superstructure are capped by granite coping. The bridge carries a single, asphalt-paved traffic lane.



**Photograph 20-12. North Market Street Bridge, Facing Southwest**

The overall length of the North Market Street Bridge measures 41 feet, six inches, with a deck width of 24 feet and a roadway width of 20 feet. The total inside arch width is 10 feet, six inches, and the total arch length is 13 feet six inches. The total arch height is seven feet, and the total bridge height measures 11 feet at the mid-span apex.

Like the Stone Arch Bridge (155054), the North Market Street Bridge (155055) is a county bridge, and is not identified by a Department of Transportation BMS number. Likewise, the bridge bears no date stone. However, a review of the Pennsylvania CRGIS, maintained by the PHMC and PennDOT, revealed the presence of four previously recorded stone arch bridges in Salem Township, in addition to the North Market Street Bridge (155055) and the Stone Arch Bridge (155054). The four previously recorded bridges (092631, 092634, 092644, and 092645) are located outside of the project area. Two are noted as being constructed in 1940 (092645) and 1941 (092634), while two (092631 and 092644) have no dates of construction mentioned. One of the bridges (092634) was noted as being constructed by the Works Progress Administration (WPA).

As a result of the Great Depression, The WPA was created in 1935. The administration hired thousands of unemployed workers to build bridges and roads for state, county, and municipal projects and, at the peak of the program, the Pennsylvania Department of Highways employed 143,000 workers (PennDOT 1998:44). While no documentary evidence is available that specifically links the North Market Street Bridge (155055) to a WPA construction project, the presence of other rural stone arch bridges in Salem Township dating from the same time period, one of which has been noted as being constructed by the WPA, suggests a possible link. As such, the North Market Street Bridge (155055) should be considered *potentially* eligible for listing in the NRHP under Criterion A as part of a larger thematic WPA context. GAI recommends a thematic study be conducted in order to further evaluate WPA projects in the region (such a thematic study is outside the scope of work for the current project). No documentary evidence linking the bridge to any significant individuals in local or regional

history could be identified. Therefore, this bridge is recommended not eligible for NRHP listing under Criterion B. Recent research has suggested that the North Market Street Bridge is a relatively common architectural resource in rural Salem Township, and a review of the *Pennsylvania Historic Bridge Survey* revealed the presence of 16 stone arch bridges in Luzerne County (PennDOT 1998). Furthermore, the bridge does not exhibit the work of a master, and while the bridge represents distinctive characteristics of early stone arch bridge technology, due to its later construction date, it is not an identifying example that marked the introduction of that early technology within the region. Therefore the Stone Arch Bridge is recommended not NRHP-eligible under Criterion C. The recommended NRHP boundary for the North Market Street Bridge has been drawn to include the substructure, superstructure, and decking associated with the bridge (Figure 20-9).



Figure 20-9. Recommended NRHP Boundary for North Market Street Bridge (155055)

*REDACTED Figure 20-9  
Recommended NRHP Boundary  
for North Market Street Bridge  
(155055)*

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**155064 (GAI-26)**  
**(House) Red Brick Studios**  
**1405 Berwick-Hazleton Highway**  
**Nescopeck Township**  
**Luzerne County**

Constructed circa 1880, this house (Red Brick Studios) is a 2-story, gable-roofed, vernacular brick house with elements of the Gothic Revival style, built on a modified T plan. This structure is built on a brick foundation and has common bond brick exterior walls. The steeply-pitched gable roof is clad in asphalt shingles, and it is marked by a steeply-pitched cross gable with pent eaves. This cross gable is clad in fish scale shingles, as are the gable ends. The roofline is marked by a molded frieze band and gable end returns. A full-width, hip-roofed porch with Doric columns is located on the façade. The centered door is flanked by squared pilasters with



a splayed reveal and decorative door molding with cornerblocks. A shallow, screened side porch is also marked by Doric columns with decorative detailing similar to that of the principal entrance. The fenestration on the house includes 1/1 double-hung vinyl sash windows with splayed reveals and cut stone lintels and sills. The rear ell has a corbelled gable end chimney.

**Photograph 20-13. Red Brick Studios, Facing North**

Associated with this property is a collection of several domestic outbuildings that date from circa 1880 to circa 1970. Immediately to the rear of the house is a modern 3-bay, gable-roofed, wood-framed garage (garage #1). This building is clad in vinyl and has a composition shingle-clad roof. Three vinyl doors mark the vehicle entrances, and a man door is located on



the south elevation. Located next to this modern garage is an original smokehouse/summer kitchen building. This wood-framed building is built on a stone foundation, is clad in weatherboard, and is topped by a gable roof clad in asphalt shingles. The west elevation of this building is marked by a substantial exterior brick chimney that is built on a stone foundation.

**Photograph 20-14. Red Brick Studios, showing Smokehouse/Summer Kitchen and Modern Garage, Facing Northeast**

Located to the east of the house and opposite the modern garage is an early-twentieth-century wood-framed garage (garage #2). This building is clad in weatherboard and has a steeply-pitched gable roof clad in asphalt shingles. The sides of this building have 6-light windows. A large barn and a small agricultural outbuilding have been demolished.

The extant collection of buildings at this property do not definitively convey the history of farming practices at this location in the late-nineteenth and early-twentieth centuries. Furthermore, no documentary evidence could be located that identified a connection between this property and any significant trends or events in local history. Therefore, this resource is recommended not eligible for NRHP listing under Criterion A. No information identifying a connection between this property and any significant individuals in local history could be located. As such, this resource is recommended not NRHP-eligible under Criterion B. The main house of this property stands as a well-preserved and rare example of Gothic Revival-influenced vernacular architecture in this area from the late-nineteenth century. Additionally, two of the outbuildings maintain sufficient integrity to convey their architectural significance. As such, this resource is recommended eligible for NRHP listing under Criterion C. The recommended NRHP boundary for this resource has been drawn to include the contributing main house, smokehouse/summer kitchen, and garage #2 while excluding the non-contributing garage #1 (Figure 20-10).

Figure 20-10. Recommended NRHP Boundary for Red Brick Studios (155064)

*REDACTED Figure 20-10  
Recommended NRHP Boundary  
for Red Brick Studios (155064)*

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155070 (GAI-36-45)

*Wapwallopen Historic District*

*South Church Street, Main Street, Orchard Street, South River Street, Weiss Street*

*Wapwallopen*

*Luzerne County*

The extant collection of buildings in Wapwallopen range from commercial and ecclesiastical to residential, and many are very well preserved. For the purposes of the current study, ten resources located along South River Street were defined within the APE for the BBNPP project. While these resources were inventoried and photographed, there remain a number of additional resources located outside the current study area that contribute to a collective historic district. The ten resources on South River Street date roughly from circa 1870 through circa 1900, and include representative examples of vernacular variants of several styles popular during the period, including Italianate, Gothic Revival, Queen Anne, Stick, and even Colonial Revival. While the wood frame residences typically exhibit meticulously-crafted

woodwork, such as highly detailed spindlework, pedimented window moldings, and ornate brackets and corbels, some masonry buildings use unusual joinery and brick configurations in addition to fine woodwork. Overall, the resources located along South River Street maintain good integrity and clearly display much of the original craftsmanship employed in late-nineteenth-century construction.



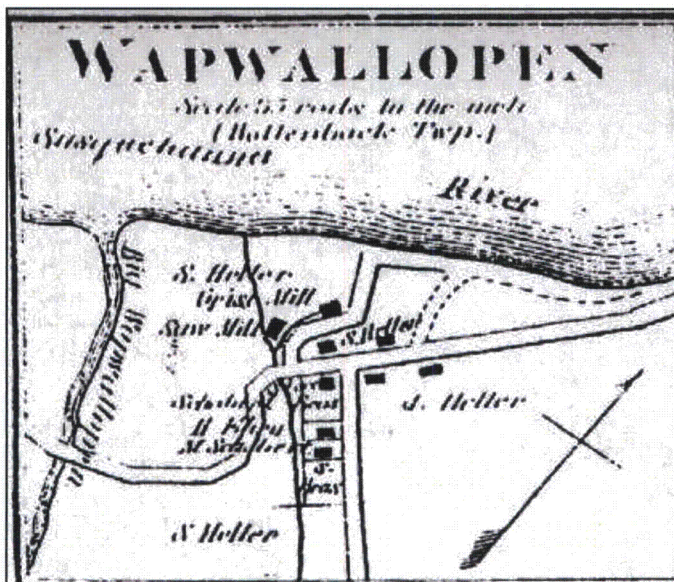
**Photograph 20-15. Wapwallopen Historic District, Orchard and Houses Along Main Street, Facing Northwest**

The potential Wapwallopen Historic District contains 94 resources. There are 77 contributing resources, and 17 non-contributing resources. Contributing resources include two churches, a church bell, orchards, garages, single family dwellings, multiple family dwellings, a mill, and a fruit retailer (Heller Orchards). Non-contributing resources are recently-constructed buildings, dating after the historic district's period of significance.



**Photograph 20-16. Wapwallopen Historic District, Orchard and Rear Elevations of Houses Fronting River Street, Facing Northwest**

Wapwallopen's early history begins with missionary contact with Delaware and Shawnee groups and later the arrival of agricultural pioneers. European missionaries visited native groups at Wapwallopen in 1744. At that time, John Martin Mack and Christian Fröhlich, Moravian missionaries, called the area Hallobanck. In 1748, John Martin Mack and David Zeisberger noted one family living there. Colonial land grants to tracts in the Wapwallopen area date from 1769. Early Euro-American settlers of German, Swiss, and Alsatian ancestry arrived from Northampton County, Pennsylvania. Nescopeck Township was formed in 1792 after the American Revolution. Local trade in agricultural products and merchandise utilized road networks that connected Wapwallopen to Easton and Philadelphia. Residents established a school in Wapwallopen in 1808. Classes were taught in German. After 1811, Wapwallopen featured a grist mill, a sawmill, and a distillery. A ferry across the Susquehanna River connected Wapwallopen to Beach Haven, and later to the improved transportation networks of the canal and railroad on the opposite shore (Wapwallopen Historical Society 1964: 3, 14-20).



Wapwallopen's domestic economy remained agricultural in character throughout the nineteenth century until the DuPont Powder Company recapitalized an existing powder works in 1859. Established in 1856, the Parrish, Silver & Company powder works operated a mill along Wapwallopen Creek to the south of the settlement until 1859, when bankruptcy forced a sale to the DuPont Company. These powder companies profited from the anthracite industry's demand for blasting powder. The DuPont Company closed the mill in 1912 (Janosov 1991: 84-85).

Figure 20-11. Wapwallopen, 1873 Beers Map

The multiple family dwellings in the Wapwallopen Historic District relate to the community's growth from the expansion of the powderworks by DuPont. DuPont workers lived here during the powderworks operation. Life in Wapwallopen was closely related to the powderworks. For example, mill explosions frequently caused property damage in Wapwallopen (Janosov 1991: 85).

Photograph 20-17. Wapwallopen Historic District, Representative





***Streetscape, Houses Fronting River Street, Facing South***

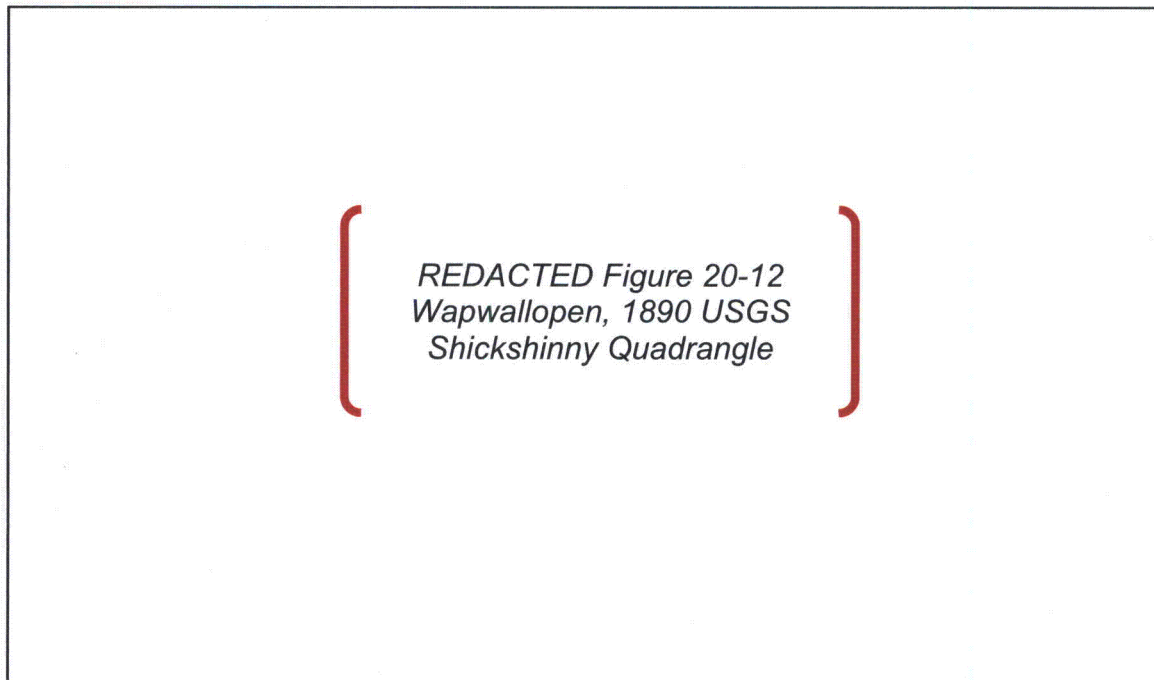
The 10 resources identified along South River Street contribute to an overall Wapwallopen Historic District. For the purposes of the current study, the other buildings in the town were not inventoried, as they fell outside the project APE. However, a subsequent site visit generated a list of resources contributing to the potential Wapwallopen Historic District.

***Recommended Contributing Resources***

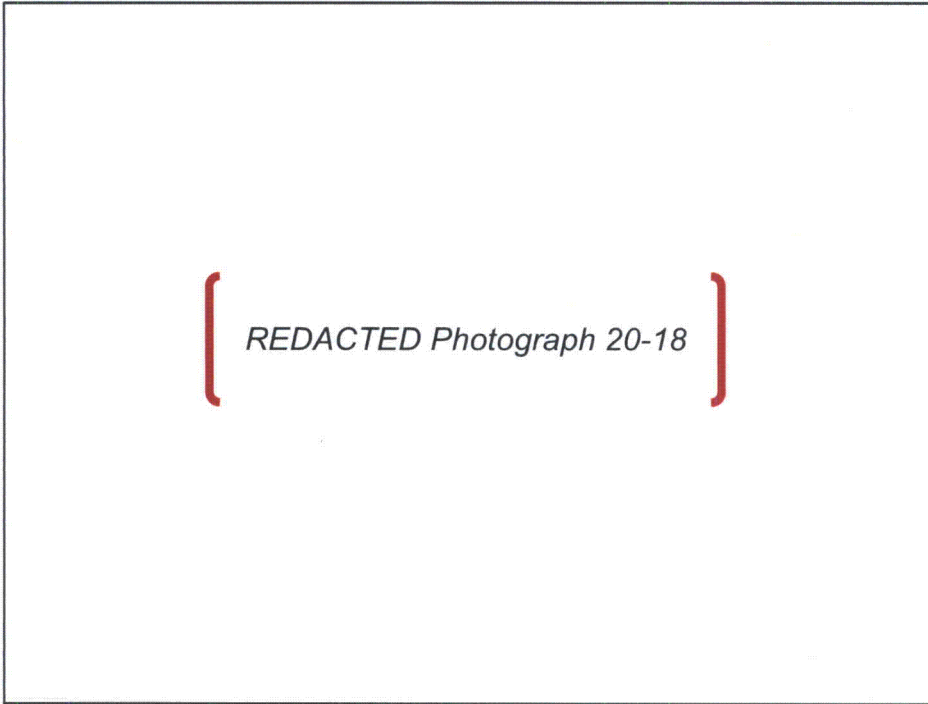
- 1-2. House at 404 S. Church Street and garage (2)
3. House at 406 S. Church Street
4. House at 408 S. Church Street
- 5-6. House at 410 S. Church Street and garage (2)
- 7-8. Holy Trinity Evangelical Lutheran Church and bell (2)
9. St. John's U.C.C. (formerly St. John's Reformed Chapel)
10. House at 476 S. River Street (**within project viewshed APE**)
11. House at 480 S. River Street (**within project viewshed APE**)
- 12-13. House at 484 S. River Street and garage (2)
- 14-16. House at 486 S. River Street, garage, and outbuilding (3)
17. House at 487 S. River Street
18. House at 491 S. River Street
- 19-20. House at 494 S. River Street and garage (2)
- 21-22. House at 409 S. Main Street and shed (2)
23. House at 405 S. Main Street
24. House at 406 S. Main Street
25. House at 409 S. Main Street
- 26-27. House at 410 S. Main Street and garage (2)
- 28-29. House at 411 S. Main Street and garage (2)
30. House at 413 S. Main Street
31. House at 414 S. Main Street
32. House at 416 S. Main Street
- 33-34. House at 417 S. Main Street and garage (2)
35. House at 418 S. Main Street
36. House at 419 S. Main Street
37. House at 421 S. Main Street
38. House at 422 S. Main Street
39. House at 424 S. Main Street
40. House at 426 S. Main Street
41. House at 428 S. Main Street
42. House at 431 S. Main Street
43. House at 432 S. Main Street
44. House at 434 S. Main Street
45. E.R. Heller Milling Company
46. House at Corner of South River Street and South Main Street (Beside Heeler Gas Office)
- 47-49. House at 472 South River Street, garage, garden house, and hothouse (3) (**within project viewshed APE**)

- 50-51. House at 470 South River Street and garage (2) (**within project viewshed APE**)
- 52-53. House at 468 South River Street and garage (2) (**within project viewshed APE**)
- 54-55. House at 466 South River Street and garage (2) (**within project viewshed APE**)
- 56-57. House at 464 South River Street and garage (2) (**within project viewshed APE**)
- 58-59. House at 462 South River Street and garage (2) (**within project viewshed APE**)
- 60-62. House at 458 South River Street, garage, and outbuilding (3) (**within project APE**)
- 63-64. House at 454 South River Street and garage (2) (**within project viewshed APE**)
- 65-66. House at 452 South River Street and garage (2)
- 67-68. House at 54 Orchard Street and garage (2)
- 69-73. Heller Orchards (Orchard Street), apple house, pole barn, heavy timber frame barn, and granary
- 74. House at 425 South River Street
- 75-76. House at 423 South River Street and a garage (2)
- 77. House at 411 South River Street

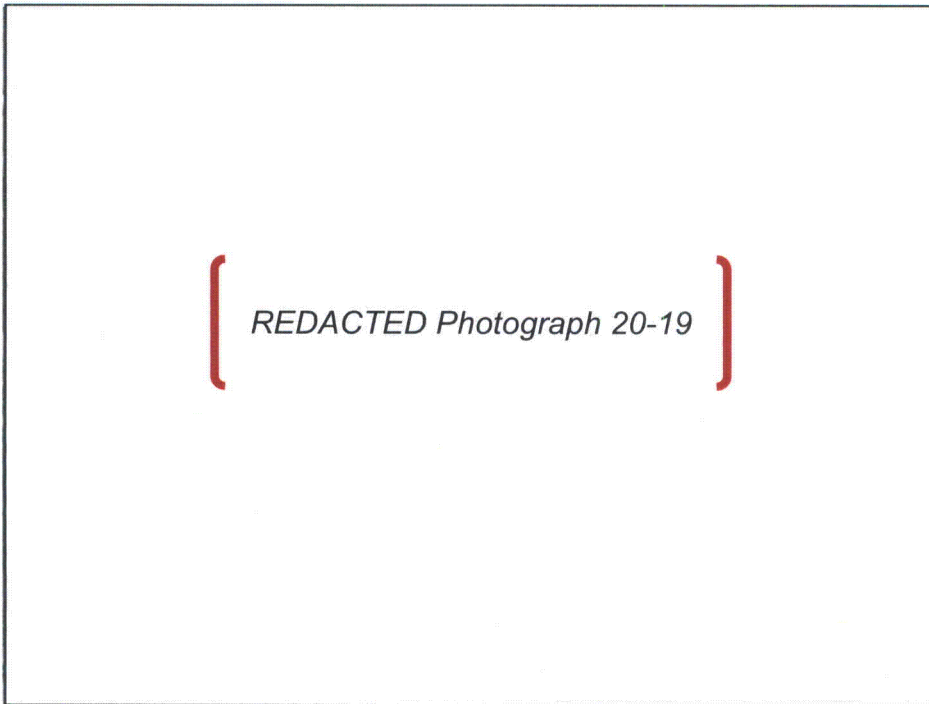
A USGS Quadrangle map, surveyed in 1890, shows the development of Wapwallopen (Figure 20-12). This map reveals a concentration of buildings along present-day Main St. and River St., and the basic triangular street layout that currently exists in Wapwallopen. Aerial photographs dating from 1939, 1959, and 1969 show the same street configuration and concentration of buildings along Main St. and River St., as well as the presence of orchards (Photographs 20-18 through 20-21).



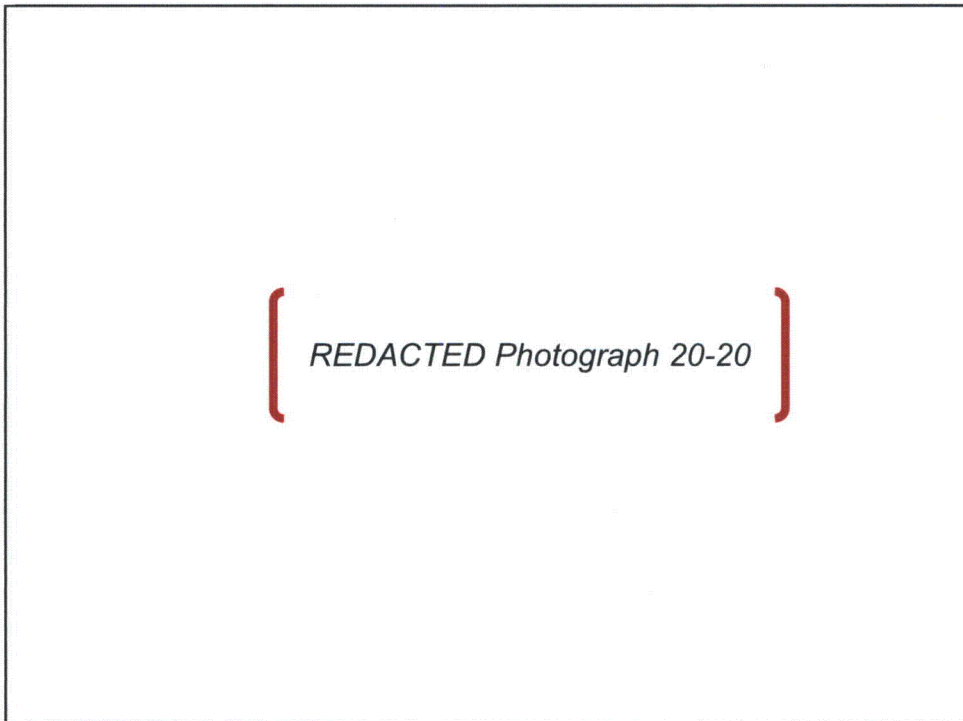
**Figure 20-12. Wapwallopen, 1890 USGS Shickshinny Quadrangle**



*Photograph 20-18. Wapwallopen, 1939 Aerial Photograph*

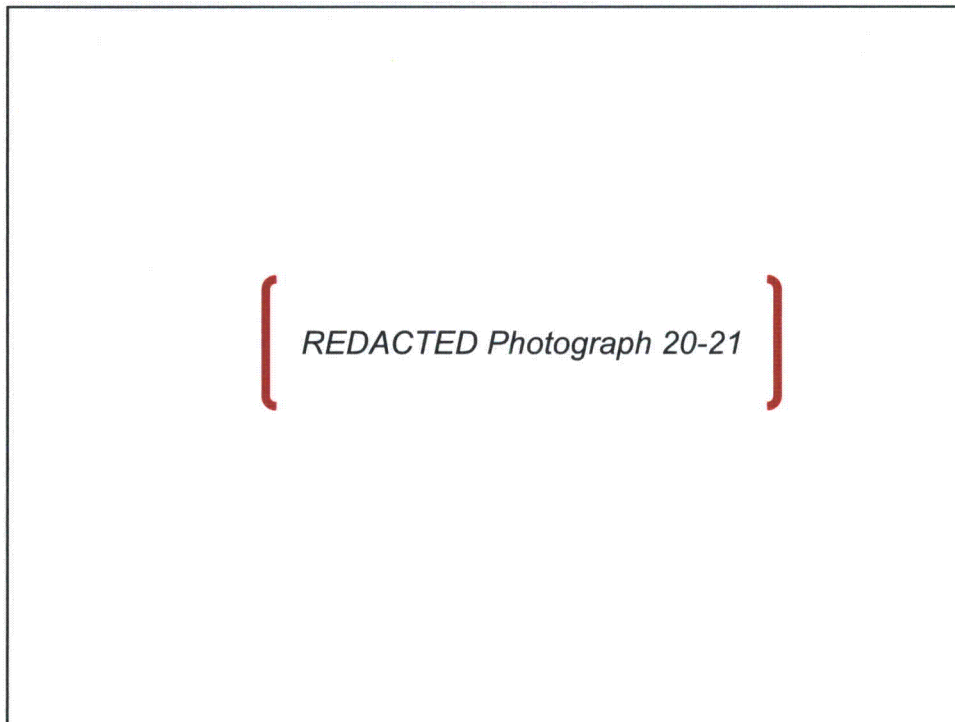


*Photograph 20-19. Wapwallopen, 1959 Aerial Photograph*



***Photograph 20-20. Wapwallopen, 1969 Aerial Photograph***

An aerial photograph taken in 1999 reveals that the concentration of buildings along Main St. and River St. are extant, as are the presence of orchards. By 1999, SR 239 was constructed, incorporating part of Orchard St. and traversing to the east of Wapwallopen (Photograph 20-21).



***Photograph 20-21.  
Wapwallopen,  
1999 Aerial  
Photograph***

Based on the history of the town's development and its relatively self-contained nature, and based upon the well-preserved extant examples of architectural styles popular in the late-nineteenth and early-twentieth centuries, the resources that comprise the potential Wapwallopen Historic District (see list above) are collectively recommended eligible for NRHP listing under Criteria A and C. No information could be located that connects this potential historic district to any significant individuals; therefore, it is recommended not eligible for NRHP listing under Criterion B.

While further study is recommended to better delineate the potential historic district boundary, a preliminary district boundary has been provided that encompasses the cohesive community of Wapwallopen and includes the houses, stores, orchards, and mills. The boundary is delineated by Main St. on the south, River St., running along the Susquehanna River, on the west, and just to the east of Orchard St. on the east (Figure 20-13). These streets represent the early configuration of Wapwallopen and are clearly visible on the above USGS Quadrangle and aerial photographs (see Photographs 20-18 through 20-21).

**Figure 20-13. Preliminary NRHP Boundary of Wapwallopen Historic District (155070)**

*REDACTED Figure 20-13  
Preliminary NRHP Boundary of  
Wapwallopen Historic District  
(155070)*

## Summary and Recommendations

As part of the initial Phase Ia cultural resource investigations, GAI identified 52 architectural and historical resources within the project APE on a reconnaissance level. The PHMC-BHP subsequently requested that additional work be completed on 22 (including the ten resources comprising part of the potentially NRHP-eligible Wapwallopen Historic District) of these 52 resources, and that no further survey work was required on the remaining 21 resources. GAI recommends that seven of the 22 architectural and historical resources identified in the project APE that required PHRS forms are NRHP-eligible. The seven NRHP-eligible historic resources include the North Branch Pennsylvania Canal (141673), Union Reformed and Lutheran Church (155049), Woodcrest (155052), Stone Arch Bridge (155054) (*potentially* eligible as a contributor under a WPA thematic cover), North Market Street Bridge (155055) (*potentially* eligible as a contributor under a WPA thematic cover), Red Brick Studios (155064), and the Wapwallopen Historic District (155070). Three of the seven resources, North Branch Pennsylvania Canal (141673), Union Reformed and Lutheran Church (155049), and Woodcrest (155052), have previously been determined NRHP-eligible by the PHMC-BHP (PHMC-BHP letter dated March 17, 2010) (see Appendix A); eligibility determinations have not been provided yet for the other four resources recommended as NRHP-eligible: Stone Arch Bridge (155054), North Market Street Bridge (155055), Red Brick Studios (155064), and the Wapwallopen Historic District (155070). The remaining 15 architectural and historical resources (155053, 155056-155063, 155065-155069, and 155071) identified in the project APE are considered ineligible for NRHP listing. Eleven of the fifteen ineligible resources (155053, 155056-155058, 155062, 155063, 155065, 155067-155069, and 155071) have previously been determined ineligible for NRHP listing by the PHMC-BHP (PHMC-BHP letter dated March 17, 2010) (see Appendix A); formal eligibility determinations for 155059, 155060, 155061, and 155065 are outstanding. The 21 resources that no further work was required by the PHMC-BHP are considered ineligible.

Of the seven NRHP-eligible resources identified within the project area, only two, the North Branch Pennsylvania Canal (141673) and the Stone Arch Bridge (155054), fall within the proposed footprint (APE). [Based on information provided by Jerry Fields (PPL) at the NRC Audit of BBNPP Alternative Sites, in June 2010, it is anticipated that the proposed project will result in no impacts to the Stone Arch Bridge (155054).] The remaining NRHP-eligible resources are located within the viewshed APE. Once project design has been finalized, GAI will conduct a formal assessment of project effects and will present results in a separate Criteria of Effects Evaluation Report.

GAI concurs with the PHMC-BHP's recommendation of a coordinated site visit with PHMC-BHP staff to verify further the boundary and contributing resources of the recommended NRHP-eligible Wapwallopen Historic District (155071). Furthermore, GAI recommends additional research on the Stone Arch Bridge (155054) and the North Market Street Bridge (155055) in order to evaluate these resources further in a possible WPA thematic context.

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## Chapter 21. Summary and Recommendations

### Project Summary

GAI conducted Phase I archaeological resources investigations and Phase II National Register Site Evaluations at the Bell Bend Nuclear Power Plant (BBNPP), Luzerne County, Pennsylvania, under contracts to UniStar and AREVA. PPL proposes construction of a new nuclear power generating unit and associated facilities in this locality. Phase I archaeological survey and supplemental architectural and historical survey of the initial 639-acre (259-hectare) project area were performed between May and August 2008. Supplemental Phase I survey of 263-acres (104 hectares) of new project locations occurred between August and November, 2008. GAI conducted Phase II site evaluations of seven potentially NRHP-eligible archaeological sites between July and November, 2009. Phase I field investigations of the overall 902-acre (365-hectare) project area included pedestrian ground survey, the excavation of 5,726 shovel test pits (STPs), and one deep testing area (Table 21-1). GAI's Phase II testing of seven sites involved controlled surface collection, excavation of 1,169 STPs and 80 test units, and the mechanical stripping of the plowzone. In total, these excavations resulted in the recovery of 65,340 artifacts (64,930 historic specimens and 410 prehistoric lithics) and the identification of 11 archaeological sites and 25 Isolated Finds.

GAI's supplemental architectural field survey included examination of 22 of the 52 resources initially identified within the project viewshed to conclusively evaluate their NRHP eligibility and to define the boundaries of NRHP-eligible resources.

**Table 21-1. Summary of Phase I and Phase II Results**

Phase of Work	Surface Collection (acres)	# STPs	Deep Testing	#TUs	Plowzone Stripping ft <sup>2</sup> (m <sup>2</sup> )	# Sites	# IFs	# NRHP Eligible Architectural Resources in Project Footprint
Initial Phase I	114 ac. PS	3,789	11 trenches, 8 units	--	--	11	25	1
Supplemental Phase I	0	1,937	--	--	--	0	0	1
<i>Subtotal Phase I</i>	<i>114 ac. PS</i>	<i>5,726</i>	<i>11 trenches, 8 units</i>	<i>--</i>	<i>--</i>	<i>11</i>	<i>25</i>	<i>2</i>
Phase II (7 sites)	12 ac. CSC (4 sites)	1,169	--	80	29,658 ft <sup>2</sup> (2755 m <sup>2</sup> )	--	--	---
<b>Total Phase I and II</b>	<b>114 ac</b>	<b>6,895</b>	<b>11 trenches, 8 units</b>	<b>80</b>	<b>29,658 ft<sup>2</sup> (2755 m<sup>2</sup>)</b>	<b>11</b>	<b>25</b>	<b>2</b>

\*PS=Phase I pedestrian ground survey; CSC=Phase II controlled surface collection within area of Phase I pedestrian ground survey

### Archaeological Sites: Summary and Recommendations

GAI identified 11 archaeological sites and 25 isolated finds within the project APE during the Phase I archaeological survey. The 25 isolated finds each represent single prehistoric findspots (see Table 6-6, Chapter 6). These isolated finds do not meet PHMC-BHP's criteria to qualify as archaeological sites and do not represent significant archaeological resources; these isolated finds warrant no further investigations. The 11 archaeological sites identified during Phase I survey include eight historic-period sites and three prehistoric sites. Summaries and recommendations for these sites are presented in Table 21-2 and are reviewed briefly below.

**Table 21-2. Identified Archaeological Sites: Phase II Summary and Recommendations**

Site #	GAI Site #	Site Name	Area	Sect.	Site Type	Age	Work Effort Ph Ib / Ph II	Integrity	Info Potential	NRHP Eligibility Recommend.	Recommendations
36LU278	1	--	West Alt	1	Lithic scatter	Unknown Prehistoric	Ph Ib	Good	Low	Not Eligible	No Further Work
36LU279	2	--	West Alt	7	Domestic	Early to Mid 19 <sup>th</sup> c	Ph Ib / II	Poor	Low	Not Eligible	No Further Work
36LU280	3	--	West Alt	13	Domestic	Late 19 <sup>th</sup> to Mid 20 <sup>th</sup> c	Ph Ib /II	Good	Low	Not Eligible	No Further Work
36LU281	4	--	West Alt	14	Farmstead	Mid 19 <sup>th</sup> to Early 20 <sup>th</sup> c	Ph Ib / II	Poor	Low	Not Eligible	No Further Work
36LU282	6	--	West Alt	3	Lithic scatter	Unknown Prehistoric	Ph Ib	Good	Low	Not Eligible	No Further Work
36LU283	7	Sink Site	West Alt	30	Farmstead	Late 19 <sup>th</sup> to Late 20 <sup>th</sup> c	Ph Ib / II	Poor	Low	Not Eligible	No Further Work
36LU284	8	Shortz	Confers Lane	26	Domestic	Mid to Late 20 <sup>th</sup> c	Ph Ib	Poor	Low	Not Eligible	No Further Work
36LU285	9	Johnson/Folk	West Alt	17	Domestic	Mid to Late 19 <sup>th</sup> c and 20 <sup>th</sup> c	Ph Ib / II	Poor	Low	Not Eligible	No Further Work
36LU286	10	Kisner	West Alt	31	Farmstead	Mid 19 <sup>th</sup> to 20 <sup>th</sup> c	Ph Ib / II	Poor	Low	Not Eligible	No Further Work
36LU287	11	--	West Alt	21	Artifact Scatter	19 <sup>th</sup> c	Ph Ib	Good	Low	Not Eligible	No Further Work
36LU288	5	--	Area 7	2	Lithic Scatter/Camp	Paleo, LA,TA/EW, LW	Ph Ib / II	Poor	Low	Not Eligible	No Further Work

\*Paleo=Paleoindian, LA=Late Archaic, TA=Terminal Archaic, EW=Early Woodland, LW=Late Woodland

## Historic Period Sites

Eight archaeological sites with historic-period components were documented within the BBNPP project area. All of these sites occur in upland settings in the western portion of the project. Seven sites were located in the West Alternative while one was identified in the Confers Lane Parcel, adjacent to the east edge of the West Alternative. Historic sites include three farmsteads (36LU281, 36LU283 and 36LU286), four domestic sites (36LU279, 36LU280, 36LU284 and 36LU285) and one artifact scatter (36LU287).

Based on the results of Phase Ib and Phase II investigations all eight of these sites are concluded to have low information potential along with integrity ranging from poor ( $n=7$ ) to good ( $n=1$ ). Accordingly, these eight sites are recommended as Not Eligible for listing in the NRHP (see Table 21-2). GAI recommends no further work at these sites. This section summarizes GAI's evaluations and recommendations for the eight historic period sites by grouping them according to site type (i.e. farmsteads, domestic sites, and artifact scatters).

### *Farmsteads (n=3)*

Sites 36LU281, 36LU283 and 36LU286 represent nineteenth to twentieth-century farmsteads.

Site 36LU281 is a mid-nineteenth to early twentieth-century farmstead site located south of Confers Lane. Phase Ib and II investigations produced a relatively high density scatter of historic artifacts ( $n=9456$ ) and identified two cultural features—a stone foundation with a cellar hole and a post hole. The bulk of the artifact assemblage was recovered either from plow-disturbed contexts or from the cellar hole, which was filled in sometime during the twentieth century. Due to their mixed context, these artifacts cannot be associated with specific historic era occupations of the site. Based on the results of Phase II testing, the integrity of Site 36LU281 is concluded to be poor. The site is concluded to have a low potential to provide important information towards our understanding of farmsteads in the region during the mid-nineteenth to early twentieth century. Accordingly, *Site 36LU281 is recommended as Not Eligible for listing in the National Register. No further archaeological investigations of Site 36LU281 are recommended*

Site 36LU283 (Sink Site) represents the location of a late-nineteenth to late-twentieth-century farmstead. It includes the foundations of two buildings (house and barn/silo), a stone-lined well, a wastewater feature, and a relatively high-density scatter of historic artifacts ( $n=14,893$ ), recovered largely from a disturbed context. The two shaft features contain no fill (or artifacts) and the cellar of the house foundation is filled with demolition rubble. Cultural materials from the site cannot be associated with specific historic site occupations. Based on Phase Ib and II testing, although the site contains small areas of good integrity, its overall all integrity is low. GAI concludes that Site 36LU283 lacks the potential to contribute important information on the historic utilization of this area during the late-nineteenth to late-twentieth century. *GAI recommends that Site 36LU283 is Not Eligible to the National Register. GAI recommends no further archaeological investigations of Site 36LU283.*

Site 36LU286 (Kisner Farmstead) consists of the remains of a mid-nineteenth to twentieth-century farmstead. Historic mapping indicates a house in this locality prior to 1873 (perhaps as early as 1845). At least 10 structures (including a farmhouse, barns, outbuildings and a springhouse) were standing in this locality as recently as 2005; all structures were demolished prior to 2007. Phase Ib and II investigations yielded a relatively high density of mid-nineteenth to mid-twentieth century artifacts and identified the remains of four structures, including a residence, a barn complex, an outbuilding and a springhouse. Phase II testing determined that the site's archaeological integrity has been significantly compromised by recent structure

demolition and landscaping activities (using heavy equipment). Additional disturbances likely reflect construction activities conducted during the farm's operation associated with building and/or expanding structures and with the construction and maintenance of the pond, located in the southwest corner of the site. Due to the site's reduced integrity, GAI concludes that it has a low potential to contribute important information on the historic use of this area. *GAI recommends that Site 36LU286 is Not Eligible for listing in the National Register. No further archaeological investigations are recommended for this site.*

**Domestic Sites (n=4)**

Sites 36LU279, 36LU280, 36LU284 and 36LU285 consist of the remains of domestic sites ranging in age from the early-nineteenth century to the late-twentieth century.

Site 36LU279 likely represents the remains of an early to mid-nineteenth-century domestic site located in a field between North Market Street and Walker Run. Phase Ib and II investigations produced 1,403 artifacts, consisting overwhelmingly (95 percent) of kitchen-related specimens; architectural remains occurred in very low frequencies. All artifacts were recovered from plowzone contexts. Although archival research suggests that a house stood on the property between 1814 and 1866, no cultural features or evidence of structural remains were identified. Site 36LU279 is concluded to have a low potential to contribute important information on the historic occupation of this locality. *Site 36LU279 is recommended as Not Eligible for listing in NRHP. GAI recommends no further archaeological investigations of Site 36LU279.*

Site 36LU280 represents the remains of a late-nineteenth to mid-twentieth-century domestic occupation. Phase Ib and II investigations of this site recovered 2,060 historic artifacts (and one prehistoric lithic) consisting predominantly of kitchen-related specimens, along with architectural debris and low frequencies of other materials; artifacts were recovered primarily from plow-disturbed contexts. Testing also exposed six cultural features and one possible cultural feature including two utility trenches, two post holes, one burn pit, one possible trash pit, and one pit feature); no deep shaft features or structural remains were identified. Cartographic research documents a complex of structures in this locality in 1939; these structures were constructed sometime after 1873 and were demolished prior to 1959. Site 36LU280 appears to have good integrity with disturbances limited to cultivation. However, because of its lack of deep shaft features or structural remains, the site has a low potential to address questions associated with site proxemics (use of the landscape/space within a domestic site), architecture, or other broader research questions related to its late-nineteenth-century to mid-twentieth century occupation. Based on its low information potential *Site 36LU280 is recommended as Not Eligible for listing in the NRHP. No further archaeological investigations of this site are recommended*

Site 36LU284 (Shortz Site) consists of a mid- to late-twentieth-century artifact scatter associated with a shallow, surface depression (possible foundation) and an above-ground well/cistern. The Phase Ib artifact assemblage is composed predominantly of kitchen-related specimens and architectural debris, characteristic of a domestic site; many of these artifacts are modern. Cartographic review documents structures in this locality in 1939 and 1955. The concrete-capped well/cistern appears to date to the twentieth century. The presence of modern artifacts, a twentieth-century feature, and localized fill deposits (likely associated with demolition activities) indicates a reduced integrity in portions of the site. Accordingly, GAI concludes that Site 36LU284 has a low potential to contribute important information on mid-twentieth century historic utilization of this area. *Based on its low information potential Site*

*36LU284 is recommended as Not Eligible to the NRHP. No further archaeological investigations are recommended at this site.*

Site 36LU285 (Johnson/Folk Site) represents the remains of two horizontally-distinct historic components, situated along the south edge of Beach Grove Road. Based on Phase Ib investigations, the western portion of the site was the location of a twentieth-century outbuilding (likely a barn), while the eastern portion contained the remains of a mid- to late-nineteenth-century component. Phase II investigations were restricted to the mid- to late-nineteenth-century component in the eastern portion of the site. This study produced a high artifact density ( $n=26,627$ ) and identified six cultural features or potential features, including a possible structure locus, a firebox and flue for a smoke house, a pipe trench and pipeline, two post holes, and a large area of twentieth-century fill. The bulk of the artifacts were recovered from disturbed fill deposits and large areas of disturbance were documented across the site. Based on the results of Phase II testing GAI concludes that site has reduced integrity and lacks the features and artifacts from good contexts necessary to address important research questions. *GAI recommends that Site 36LU285 is Not Eligible for listing in the National Register. No further archaeological investigations are recommended for Site 36LU285.*

#### **Artifact Scatters ( $n=1$ )**

Site 36LU287 (Site 11) represents a small, low density, mid 19<sup>th</sup> century artifact scatter located in a wooded upland setting. The Phase Ib artifact assemblage consists of kitchen and architectural debris (22 ceramics and 1 cut nail). The integrity of this site is good. Because of its small size, low density, and lack of associated features or structures, GAI concludes that Site 11 has a low potential to contribute important information on the historic utilization of this locality. Based on its low information potential *Site 36LU287 is recommended as Not Eligible to the NRHP. No further archaeological investigations are recommended at this site.*

#### **Prehistoric Sites**

GAI identified three prehistoric sites (Sites 36LU278, 36LU282, and 36LU288) in the project area. These sites include two undated lithic scatters (36LU278 and 36LU282) and one multicomponent lithic scatter/prehistoric camp.

Based on the results of Phase Ib and Phase II studies, these three sites are all determined to possess a low information potential along with site integrity ranging from low ( $n=1$ ) to good ( $n=2$ ). Accordingly, all three sites are recommended as Not Eligible for listing in the NRHP (see Table 21-2) and GAI recommends no further work at these sites.

This section summarizes GAI's evaluations and recommendations for the three prehistoric period sites by grouping them according to site type (i.e. undated lithic scatters and multicomponent lithic scatter/camp).

#### **Undated Lithic Scatters ( $n=2$ )**

Site 36LU278 is a small, low-density prehistoric artifact scatter ( $n=3$  lithics) located in a cultivated upland field. This site likely represents the remains of a small, brief prehistoric occupation. Because of the absence of diagnostic artifacts and cultural features, the age of the site is indeterminate. Based on its low density and indeterminate age, *Site 36LU278 is recommended as Not Eligible to the NRHP and no further investigations of this site are recommended.*

Site 36LU282 consists of a small, low-density prehistoric artifact scatter situated in a cultivated upland field. Its minimal artifact assemblage ( $n=2$  lithics) suggest that this site represents a small, brief prehistoric occupation. Because of the absence of diagnostic

artifacts and cultural features, the age of the site is indeterminate. Based on its low density and indeterminate age, *Site 36LU282 is recommended as Not Eligible to the NRHP and no further investigations of this site are recommended.*

#### **Multicomponent Lithic Scatter/Camp (n=1)**

Site 36LU288 represents low density multicomponent prehistoric site representing the remains of small, short-term Paleoindian, Late Archaic, Terminal Archaic/Early Woodland and Late Woodland occupations on a low terrace/floodplain adjacent to the North Branch Susquehanna River. Phase Ib and II investigations of this site yielded only 332 prehistoric artifacts (as well as a field scatter of 137 historic artifacts) and identified two Late Archaic hearth features (Features 1 and 2). The prehistoric assemblage included five diagnostic projectile points—a Paleoindian Holcombe point, an untyped Paleoindian point, a Terminal Archaic/Early Woodland Frost Island or Orient Fishtail point, a Late Archaic Brewerton corner-notched point and a Late Woodland Levanna point. Two-thirds of the prehistoric artifacts, including all diagnostic specimens, were found in plow-disturbed contexts. Both prehistoric features yielded almost exclusively fire-cracked rock and contained no evidence of subsistence remains. Feature 1 was identified in a discontinuous, localized buried A horizon (approximately 66 cm below ground surface) that was documented in northern portion of site; this Ab horizon produced just 41 artifacts consisting primarily of fire-cracked rock. Feature 2 was found at the Ap/B horizon contact (approximately 40 cm below ground surface) and had been truncated by plowing. Based on results of Phase II study, the site has mixed integrity—it retains small areas of intact cultural deposits (i.e. Feature 1 area) but majority of the site has poor integrity, as demonstrated by the recovery of Paleoindian through Late Woodland projectile points from plow-disturbed surface/plowzone contexts. Based on the low density and mixed multicomponent nature of the recovered artifacts, and the near absence of artifacts associated with the two prehistoric features, GAI recommends that prehistoric materials in the upper portion of the site's soil profile do not have a potential to contribute important information on the prehistoric occupation of this area. *GAI recommends that the portion of Site 36LU288 investigated by this study is Not Eligible for listing in the National Register under Criterion D. No further investigations of this site are recommended. In the event that modifications in project design should result in deeper impacts within Site 36LU288, additional Phase II Site Evaluation may be required to investigate more deeply buried deposits.*

In addition to these prehistoric sites, between one and 36 prehistoric lithic artifacts were recovered from disturbed contexts and/or in association with historic artifacts in historic period Sites 36LU279 (n=2), 36LU280 (n=1), 36LU283 (n=1), 36LU285 (n=6) and 36LU286 (n=36), as well as from deep testing in Area 6, Section 1 (n=2). *Due to their disturbed context, GAI recommends that these prehistoric artifacts do not represent significant archaeological resources and do not warrant further investigations.*

### **Architectural and Historical Resources: Summary and Recommendations**

#### **Summary and Recommendations**

The architectural and historical survey portion of the investigation initially identified 52 resources greater than 50 years of age within the APE. The property types included residences and farmsteads, outbuildings, structures, railroads, a canal, a highway, bridges, a church, cemeteries, and an extraction facility. All surveyed resources meeting the NRHP age criterion within the project APE were evaluated for NRHP eligibility according to NRHP criteria for significance and standards of integrity. GAI prepared a Phase Ia cultural resources report with preliminary recommendations of NRHP eligibility for architectural and historical

resources. Additionally, further work was recommended for four resources, as described in Chapter 20 above.

Subsequent to review of the Phase Ia report, the PHMC-BHP provided comments in a letter dated June 5, 2008, which stated that no further work was recommended for 21 resources identified during the Phase Ia study. The PHMC-BHP further requested that for the remaining 22 resources (which included a potential historic district composed of ten of the individually-identified resources), PHRS forms should be prepared. Supplemental work was conducted between August 25 and 28, 2008, to collect the necessary information for thorough evaluation of the 22 resources for which PHRS forms were completed (see Table 20-2). Of these 22 resources, three (141673, 155049, and 155052) have been determined eligible for NRHP listing by the PHMC-BHP (PHMC-BHP letter dated March 17, 2010) (see Appendix A), two (155064 and 155070) have been recommended eligible for listing in the NRHP by GAI, and two (155054 and 155055) have been recommended potentially eligible by GAI. Of the remaining 15 resources, 11 (155053, 155056, 155057, 155058, 155062, 155063, 155065, 155067, 155068, 155069, and 155071) have been determined ineligible for NRHP listing by the PHMC-BHP, and four (155059, 155060, 155061, and 155066) were recommended ineligible for NRHP listing (PHMC-BHP, March 17, 2010) (see Appendix A). Resources determined eligible by the PHMC-BHP and recommended eligible by GAI are further discussed below. Updated PHRS forms for the seven NRHP-eligible resources are provided in Appendix E.

Boundaries for the seven NRHP-eligible resources identified during the architectural field investigation were delineated according to National Register Bulletin 21 (NPS 1992b). The seven resources recommended eligible for NRHP listing are summarized in Table 21-3 below.

**Table 21-3. Architectural and Historical Resources in Project Viewshed Recommended Eligible for NRHP Listing**

ID No.	Name	Address	Style and Type	Date	NRHP Eligibility Recommendation
141673 (GAI-10)	North Branch Pennsylvania Canal	Along Susquehanna River, US Rt. 11 Vicinity, Salem Twp	Vernacular Canal	1828	Determined Eligible by PHMC-BHP, Criterion A
155049 (GAI-03)	Union Reformed and Lutheran Church (Old River Church and Burying Ground)	3200 SR 239, Conyngham Twp	Federal Church and Cemetery	1833 (Church), 1805 (Cemetery)	Determined Eligible by PHMC-BHP, Criterion C
155052 (GAI-04)	Woodcrest	3209 SR 239, Conyngham Twp	Federal Vernacular Farmstead	1805, 1822	Determined Eligible by PHMC-BHP, Criterion A and Possibly C
155054 (GAI-06)	Stone Arch Bridge	Beach Grove Road at Stone Church Road, Salem Twp	Vernacular Stone Arch Bridge	c1935	Recommended Potentially Eligible, Criterion A <i>Further study recommended</i>
155055 (GAI-09)	North Market Street Bridge	North Market Street, Salem Twp	Vernacular Stone Arch Bridge	c1935	Recommended Potentially Eligible, Criterion A <i>Further study recommended</i>

ID No.	Name	Address	Style and Type	Date	NRHP Eligibility Recommendation
155064 (GAI-26)	House (Red Brick Studios)	1405 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Masonry Vernacular, Gothic Revival Residence	c1880	Recommended Eligible, Criterion C
155070 (GAI-36 through GAI-45)	Wapwallopen Historic District	454 through 480 South River Street, Wapwallopen	Vernacular, Italianate, Gothic Revival, Queen Anne, Stick, Colonial Revival Historic District	c1870-c1900	Recommended Eligible, Criteria A and C <i>Further study recommended in order to determine all contributing resources and district boundary.</i>

### Assessment of Effects

In consideration of impacts from the undertaking, since the existing facility includes two cooling towers that reach 570 feet in height, it is unlikely that proposed construction activities will result in a visual effect that diminishes the significant historical and/or architectural features of these resources. However, GAI recommends the preparation of a Criteria of Effects Evaluation Report once concurrence on eligibility recommendations for the architectural and historical resources identified in the survey is received from the PHMC-BHP. This report will include a full assessment of the direct physical impacts to resources from the proposed project, as well as secondary effects.



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