

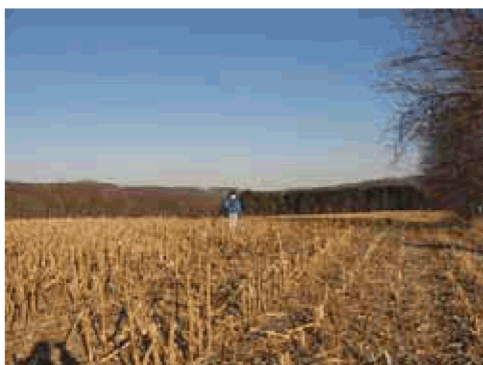
Technical Report

Phase IA Cultural Resources Reconnaissance

Berwick, PA NPP-1

Areas 6, 7, 8 and Confers Lane Parcel

Luzerne County, Pennsylvania



Prepared for:
Areva NP Inc.
and
UniStar Nuclear Development LLC.

Prepared by:
GAI Consultants, Inc.
385 East Waterfront Drive
Homestead, Pennsylvania 15120

GAI Project No. C080204.00

February 22, 2008



Technical Report
Phase IA Cultural Resources Reconnaissance
Berwick, PA NPP-1
Areas 6, 7, 8 and Confers Lane Parcel
Luzerne County, Pennsylvania

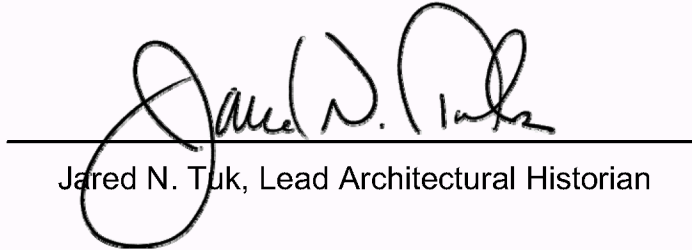
Prepared for:

Areva NP Inc.
And
UniStar Nuclear Development, LLC

Prepared by:



Barbara A. Munford, M.A., Principal Investigator



Jared N. Tuk, Lead Architectural Historian

GAI Consultants Inc.
385 East Waterfront Drive
Homestead, Pennsylvania

GAI Project No. C080204.00

February 22, 2008

Abstract

GAI conducted a Phase IA cultural resources reconnaissance of Areas 6, 7, and 8, and the Confers Lane Parcel, within the proposed Berwick, PA NPP-1 project, being developed by UniStar Nuclear Development, LLC (UniStar), and located adjacent to the existing PPL Corporation Susquehanna Steam Electric Station (SSES), in Luzerne County, Pennsylvania. This study represents an expansion of GAI's previous Phase IA reconnaissance of 760-acres within two potential project alternatives (West and Southeast Alternatives) conducted in June 2007 (GAI 2007). The current project area consists of approximately 511 acres of upland and low terrace/floodplain settings located between the previously-surveyed West Alternative (selected as the preferred alternative) and the North Branch Susquehanna River. Phase IA studies included background research, an architectural survey, and a geomorphological and archaeological reconnaissance. Field investigations were performed between January 23 and 30, 2008.

Background research indicated that 24 prehistoric archaeological sites and five architectural resources have been previously recorded within the project vicinity. Six recorded sites (36LU0015, 36LU0016, 36LU0048, 36LU0049, 36LU0050 and 36LU0051 and one architectural resource [the North Branch Pennsylvania Canal (141673)] occur within the proposed project footprint. The canal and four of these six sites have been recommended eligible for listing in the National Register of Historic Places (NRHP).

GAI's architectural survey documented 52 architectural resources within the project viewshed, including five within the proposed project footprint—fieldstone walls; the Beach Grove Cemetery; the Canadian Pacific/Bloomsburg Division of the Delaware, Lackawanna, & Western Railway; the Susquehanna and Tioga Turnpike (US Route 11); and the previously-recorded North Branch Pennsylvania Canal (141673). Of the 52 resources identified in the project area, ten are recommended NRHP-eligible, including the potential Wapwallopen Historic District.

The geomorphological and archaeological reconnaissance characterized the project area in terms of its archaeological potential (i.e. high/moderate, low or disturbed/no potential) and, based on surface observations, identified possible site locations. Based on this reconnaissance, upland portions of the project are expected to contain near-surface sites, while the low terrace/floodplain portion may yield both near-surface and deeply buried cultural deposits. In total, the project area includes 236 acres (46 percent) of high to moderate archaeological potential, 78 acres (15 percent) of low archaeological potential and 197 acres (39 percent) of disturbance/no archaeological potential. Approximately 67 percent (158 acres) of the high to moderate potential localities are found in uplands, with the remaining 33 percent (78 acres) occurring in low terrace/floodplain settings.

GAI recommends consultation with the Pennsylvania Historical and Museum Commission—Bureau of Historic Preservation (PHMC-BHP) (Pennsylvania SHPO) to determine the scope of further cultural resources investigations within the project area. Based on work conducted to date, these investigations will likely include a Phase IB subsurface archaeological survey, focused on areas of high to moderate archaeological potential. In the project's upland portions GAI recommends systematic shovel testing to identify near-surface sites. Subsurface survey of lowland areas may include shovel testing and a program of deep testing (test units and/or backhoe trenching) in order to identify near surface and/or deeply buried sites.

For architectural resources, GAI recommends completion of Pennsylvania Historic Resource Survey (PHRS) and consultation with PHMC-BHP on the project's Area of Potential Effect (APE) and on GAI's preliminary NRHP eligibility recommendations. Additionally, GAI recommends further work on four resources identified in this report, to assist in conclusively defining historical significance. Subsequent to PHMC-BHP concurrence on resource eligibility, GAI recommends preparation of a Criteria of Effects Evaluation Report for NRHP-eligible architectural and historical resources in the project area.

Table of Contents

Abstract

List of Figures ii

List of Tables iii

List of Photographs..... iii

I. Introduction and Project Description 1

 Project Overview 1

 Area of Potential Effect..... 3

 Project Staff and Acknowledgments..... 3

II. Background Research 4

 Previously Identified Cultural Resources 4

 Archaeological Sites..... 6

 Architectural Resources 8

 Prior Cultural Resources Investigations 9

 Historic Map Research 10

III. Geomorphological and Archaeological Reconnaissance..... 15

 Field Methods..... 15

 Results of Geomorphological Reconnaissance 15

 Results of Archaeological Reconnaissance 16

 Area 6 16

 Area 7 20

 Area 8 21

 Confers Lane Parcel 23

IV. Architectural Survey 24

 Methods of Architectural Survey 24

 Results of Architectural Survey 26

V. Summary and Conclusions 62

VI. Recommendations for Further Work 63

 Archaeological Investigations..... 63

 Architectural and Historical Investigations..... 64

References 65

List of Figures

Figure 1. Project Location	2
Figure 2. Previously Recorded Cultural Resources in Project Vicinity	5
Figure 3. Project Area and Vicinity, 1873.....	11
Figure 4. Project Area and Vicinity, 1894.....	13
Figure 5. Project Area and Vicinity, 1955.....	14
Figure 6. Project Area Showing Archaeological Potential and Possible Cultural Resource Locations ..	17
Figure 7. Surveyed Architectural and Historical Resources in Project Vicinity	25

List of Tables

Table 1. Summary of Previously Recorded Cultural Resources in Project Vicinity	4
Table 2. Previously Recorded Archaeological Sites within 1-Mile Radius of Project APE	6
Table 3. Summary of Previously Recorded Archaeological Sites in Project APE	8
Table 4. Previously Recorded Architectural Resources within 0.5-Mile Radius of Project APE	8
Table 5. Summary of Archaeological Potential by Test Area	16
Table 6. Summary of Surveyed Architectural and Historic Resources in Project APE.....	26
Table 7. Phase IA Summary by Test Area.....	62
Table 8. Preliminary Recommendations for Further Work by Test Area	63

List of Photographs

Photograph 1. Overview of Field on Low Terrace/Floodplain, Area 8, Facing Southwest.....	1
Photograph 2. Overview of Field on Low Terrace/Floodplain, Area 7, Facing Northeast	1
Photograph 3. Overview of Upland Field within Transmission Line Corridor, Area 6, Facing South	3
Photograph 4. Area 6: High to Moderate Potential Upland Corn Field, Facing East	18
Photograph 5. Area 6: High to Moderate Potential Frozen North Branch Pennsylvania Canal, Facing North.....	18
Photograph 6. Area 6: Low Potential Frozen Wetland on Low Terrace/Floodplain, Facing West	19
Photograph 7. Area 6: Disturbed/No Potential Fill Slope and Set Basin Adjacent to SSES Facility in Upland Section, Facing Southeast.....	19
Photograph 8. Area 6: Disturbed/No Potential Area Associated with SSES Facility West of US Route 11, Facing East.....	19
Photograph 9. Area 6: Fieldstone Wall in Upland Section, Facing Northwest	20
Photograph 10. Area 7: High to Moderate Potential Cultivated Field on Low Terrace/Floodplain, Facing North.....	20
Photograph 11. Area 7: High to Moderate Potential Woodland Clearing (Possible Archaeological Site Location), Facing Northwest	21

Photograph 12. Area 8: High to Moderate Potential Cultivated Field on Low Terrace/Floodplain, Facing North.....	22
Photograph 13. Area 8: High to Moderate Potential Woodland between Cultivated Field and Susquehanna River on Low Terrace/Floodplain, Facing North	22
Photograph 14. Area 8: Overview of Beach Grove Cemetery from Beach Grove Road, Facing Southeast	22
Photograph 15. Confers Lane Parcel: Wooded Upland at Rear (East) of Towers Club Building, Facing Northeast.....	23
Photograph 16. Confers Lane Parcel: Shortz House Site Adjacent to Lane in Southern Portion of Parcel, Facing North	24
Photograph 17. Beach Grove Cemetery—Overview, Facing Northeast	29
Photograph 18. Stone Wall, Facing Northwest.....	30
Photograph 19. Union Reformed Lutheran Church and Cemetery, Facing Northeast.....	30
Photograph 20. Woodcrest—Main House, Facing Southeast.....	31
Photograph 21. Woodcrest—Secondary Living Quarters, Facing Northeast	31
Photograph 22. Woodcrest—Barn and Garage, Facing North	32
Photograph 23. Hummel Farmstead—Main House, Facing Northwest	32
Photograph 24. Hummel Farmstead—Modern Outbuildings, Facing West	33
Photograph 25. Stone Arch Bridge, Facing Northeast	33
Photograph 26. Kiliti Farm—Overview, Facing South	34
Photograph 27. Heller Farm—Overview, Facing Northwest.....	34
Photograph 28. Stone Arch Bridge, Facing Northeast	35
Photograph 29. North Branch Pennsylvania Canal—Towpath and Basin, Facing North.....	36
Photograph 30. Canadian Pacific/Bloomsburg Division of the Delaware, Lackawanna, & Western Railway, Facing North	36
Photograph 31. Susquehanna and Tioga Turnpike, Facing Northeast	37
Photograph 32. House at 29 Bell Bend Road, Facing Northwest	38
Photograph 33. House at 49 Bell Bend Road, Facing Southwest.....	38
Photograph 34. House at 65 Bell Bend Road, Facing Southwest.....	39
Photograph 35. House at 155 Bell Bend Road, Facing Southwest.....	39
Photograph 36. House at 189 Bell Bend Road, Facing Southwest.....	40
Photograph 37. House at 193 Bell Bend Road, Facing West.....	41
Photograph 38. House at 1021 Salem Boulevard, Facing Northwest	41

Photograph 39. Valley View Farm—Main House, Facing Southeast	42
Photograph 40. Valley View Farm—Barn and Poultry Shelter, Facing East	42
Photograph 41. Bell Bend Efficiency Apartments, Facing Northwest.....	43
Photograph 42. House at 1047 Salem Boulevard, Facing North.....	44
Photograph 43. House at 1091 Salem Boulevard, Facing West	44
Photograph 44. House at 1069 Salem Boulevard, Facing Northwest	45
Photograph 45. Michaels Farm—Main House, Facing Northeast	45
Photograph 46. Michaels Farm—Overview, Facing South-Southwest	46
Photograph 47. House at 1405 Berwick-Hazleton Highway—Main House, Facing North	47
Photograph 48. House at 1405 Berwick-Hazleton Highway—Overview with Outbuildings, Facing Northeast.....	47
Photograph 49. House at 1405 Berwick-Hazleton Highway—Garages, Facing North	48
Photograph 50. Pennsylvania Railroad-Sunbury Line/Delaware and Hudson Railroad, Facing South	48
Photograph 51. Barn and Trailer at 998 Berwick-Hazleton Highway, Facing Southwest	49
Photograph 52. Farm at 950 Berwick-Hazleton Highway—Main House, Facing Northwest.....	50
Photograph 53. Farm at 950 Berwick-Hazleton Highway—House and Outbuildings, Facing Northwest	50
Photograph 54. House at 944 Berwick-Hazleton Highway, Facing Southwest	51
Photograph 55. House at 906 Berwick-Hazleton Highway, Facing Southeast.....	52
Photograph 56. House at 808 Berwick-Hazleton Highway, Facing East.....	52
Photograph 57. Farm at 783 Berwick-Hazleton Highway, Facing Northwest.....	53
Photograph 58. House at 175 East Cherry Road, Facing Southwest	54
Photograph 59. Farm at 212 East Cherry Road, Facing Northeast	55
Photograph 60. House at 454 South River Street, Facing South	56
Photograph 61. House at 458 South River Street, Facing South	56
Photograph 62. House at 476 South River Street, Facing Northeast.....	56
Photograph 63. House at 480 South River Street, Facing Northeast.....	57
Photograph 64. House at 598 River Road, Facing Northeast	57
Photograph 65. House at 546 River Road, Facing Northeast	58
Photograph 66. House at 520 River Road, Facing Northwest.....	58

Photograph 67. House at 510 River Road, Facing Northeast59

Photograph 68. Farm at 811 River Road—Main House, Facing Northwest.....59

Photograph 69. Farm at 811 River Road—Outbuildings, Facing North60

Photograph 70. Quarry along River Road, Facing Northeast.....61

Photograph 71. Bridge on North Market Street, Facing North.....61

I. Introduction and Project Description

Project Overview

The expanded Berwick NPP-1 project area is located west of the North Branch Susquehanna River, just north of the river's Bell Bend, in Salem Township, Luzerne County, Pennsylvania. It lies between the existing PPL Corporation Susquehanna Steam Electric Station (SSES) and the river, approximately 4.8 kilometers (3 miles) northeast of the town of Berwick and 1.6 kilometers (1 mile) north of the community of Beach Haven (Figure 1). Project impacts may result from UniStar Nuclear Development, LLC's (UniStar) proposed development of a new nuclear generating unit adjacent to the existing SSES facility.

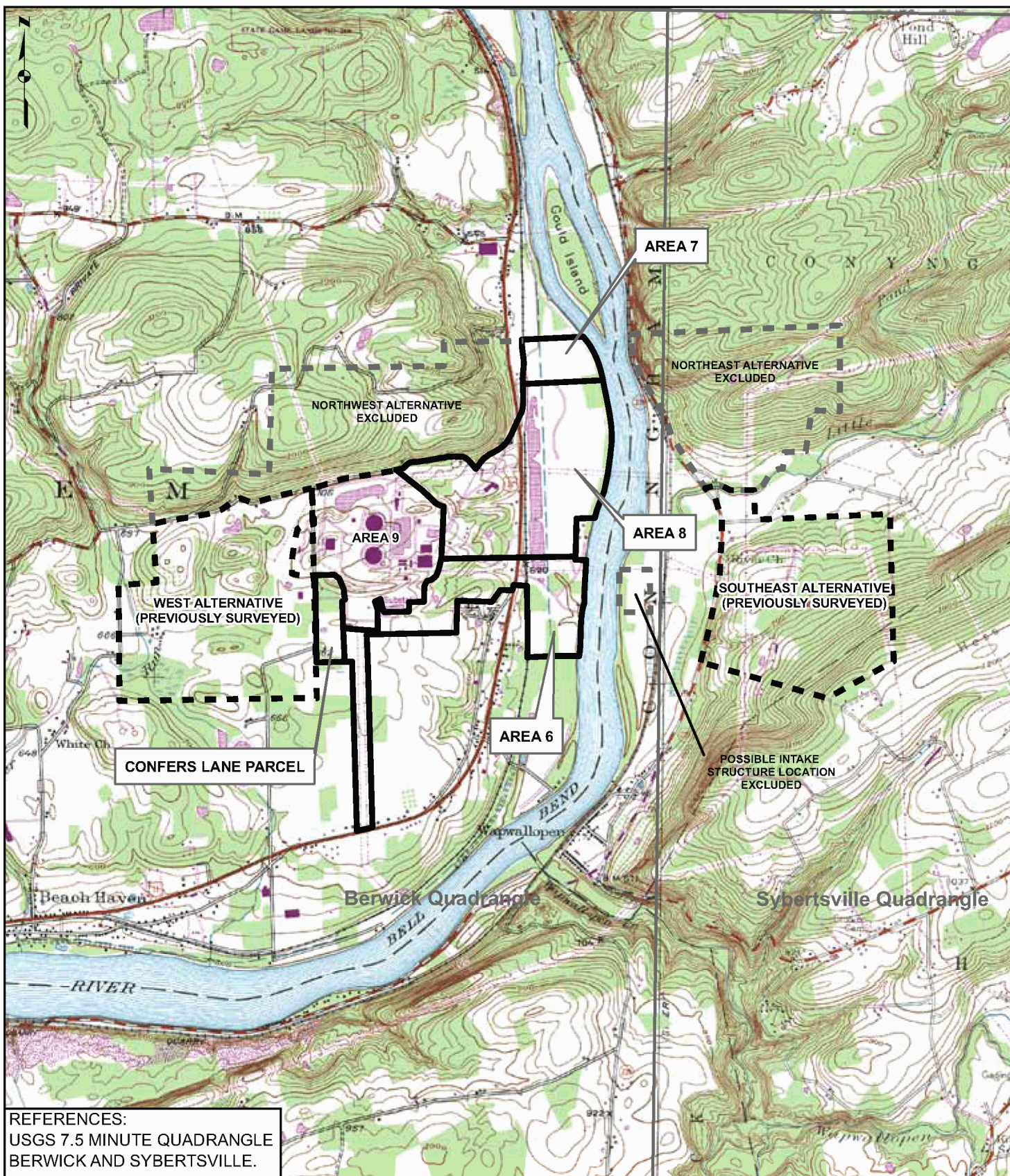
This study represents an expansion of GAI's previous Phase IA survey of two potential project alternatives (the West and Southeast Alternative) for green space/power plant development for this project (then termed Project Leo), totaling approximately 760 acres (GAI 2007). The West Alternative has since been selected as the preferred alternative. Located between the previously-surveyed West Alternative and the North Branch Susquehanna River, GAI's current Phase IA study area consists of four new, contiguous test locations (Area 6, Area 7, Area 8 and the Confers Lane Parcel), encompassing approximately 511 acres (see Figure 1). US Route 11, which parallels the river, bisects the project area and roughly separates upland settings to the west from low terraces/floodplain to the east (Photographs 1, 2 and 3). Area 6 (174 acres) stretches from uplands south and southeast of the existing SSES facility to floodplains at the river's edge. Area 7 (38 acres) encompasses low terraces/floodplains between US Route 11 and the river, at the northeast edge of the project area. Area 8 (272 acres), situated between Areas 6 and 7, extends eastward from the SSES facility to the river and includes both upland and low terrace/floodplain settings. Lying at the western limit of the current study area, the Confers Lane Parcel (27 acres) occupies uplands along Confers Lane, southwest of the existing facility.



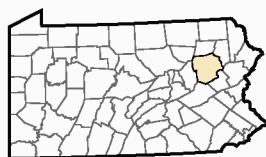
Photograph 1. Overview of Field on Low Terrace/Floodplain, Area 8, Facing Southwest



Photograph 2. Overview of Field on Low Terrace/Floodplain, Area 7, Facing Northeast



PROJECT LOCATION



LUZERNE COUNTY,
PENNSYLVANIA

LEGEND

- PROJECT AREA
- PREVIOUSLY SURVEYED AREA
- UNSERVED AREA
- QUADRANGLE BOUNDARY

ALL BOUNDARIES APPROXIMATE

0 1,500 3,000 6,000 Feet

FIGURE 1 PROJECT LOCATION

BERWICK, PA NPP-1
UNISTAR NUCLEAR
DEVELOPMENT, LLC.

DRAWN BY: TG
CHECKED:

DATE: 2/7/2008
APPROVED:



Photograph 3. Overview of Upland Field within Transmission Line Corridor, Area 6, Facing South

The goals of the Phase IA investigation were to 1) identify previously recorded cultural resources within the expanded project area; 2) characterize the project's potential to contain archaeological sites; and 3) document architectural and historic resources within the vicinity of the previously-surveyed West Alternative and the current project area and evaluate their eligibility for listing on the National Register of Historic Places (NRHP).

The results of this study will provide guidance for subsequent cultural resource investigations.

Phase IA tasks consisted of background research, a geomorphological and archaeological reconnaissance and an architectural survey (of the full project). This study was conducted in accordance with the standards and guidelines of the Pennsylvania Historical and Museum Commission—Bureau for Historic Preservation (PHMC-BHP 1991) (State Historic Preservation Office, SHPO).

Phase IA field studies were conducted between January 23 and 30, 2008. Frozen ground conditions existed throughout the majority of the project area during fieldwork.

Area of Potential Effect

Based on information and project mapping provided by Areva NP Inc. (Areva) and Unistar, as well as a teleconference with John Snooks (UniStar) (January 18, 2008), the Area of Potential Effect (APE) for GAI's Phase IA archaeological and geomorphological reconnaissance is defined as the mapped footprints of Areas 6, 7 and 8, and the Confers Lane Parcel. The project APE totals approximately 511 acres.

For architectural resources, the APE consists of the 511-acre footprint of the current study and the approximately 410-acre footprint of the previously-surveyed West Alternative, plus the surrounding viewshed. The viewshed is 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 preliminary 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 current study are defined as extending approximately 0.8-kilometers (0.5 miles) beyond the project footprint, although areas outside this radius were examined should changes to the definition of the limits occur. Changes or modifications to the proposed project design may result in a redefinition of the viewshed, possibly requiring additional architectural survey.

Project Staff and Acknowledgments

Benjamin Resnick, M.A., RPA. (Group Manager, Cultural Resources) served as Project Manager and Barbara A. Munford, M.A. (Lead Archaeologist) was the Principal Investigator and lead author of this report. Ms. Munford and Lisa M. Dugas (Senior Archaeologist) conducted archaeological reconnaissance of the project and the geomorphological reconnaissance was performed by David L. Cremeens, Ph. D., C.P.S.S. (Senior Staff Soil Scientist). Matthew G. Hyland, Ph. D. (Architectural Historian) conducted architectural field survey while Jared N. Tuk (Lead Architectural Historian) authored the report's architectural resources section. Report mapping was created by Timothy Grigas (Senior GIS Specialist) and Steve Sarver (Archaeologist).

Mark T. Hunter (UniStar) provided field support and facilitated Phase IA fieldwork.

II. Background Research

GAI conducted background research to identify previously recorded cultural resources in the project vicinity in order to 1) assess the project area's potential for unrecorded archaeological resources and 2) provide a context for evaluating resources identified within the project APE.

Background research included a review of the results of GAI's preliminary background research, conducted as part of the 2007 Phase IA study of the West and Southeast Alternatives. (This preliminary research was limited to examination of cultural resource files available through the PHMC-BHP's on-line Cultural Resources Geographic Information System (CRGIS) and cultural resource reports provided by UniStar). To confirm and refine preliminary research, GAI reviewed Pennsylvania Archaeological Site Survey (PASS) files, Pennsylvania Historic Resource Survey (PHRS) Forms, National Register files, and pertinent cultural resource studies on file at the PHMC-BHP in Harrisburg. GAI also examined historic maps of the project vicinity.

The study area for this background research effort encompassed both the current project APE and the previously-surveyed West Alternative. Accordingly, this data overlaps with results of the previous Phase IA study (GAI 2007, p. 6-10). GAI collected data on previously recorded archaeological sites and National Register properties identified within a 1.0-mile (1.6-kilometer) radius of the study area and on historic/architectural resources recorded within 0.5 miles (0.8 kilometers) of the study area. The following section summarizes the results of background research for the study area.

Previously Identified Cultural Resources

GAI's background research indicated that a total of 24 archaeological sites and 5 architectural resources have been previously recorded within the project vicinity, with six of these sites and one architectural resource occurring within the proposed project footprint (Figure 2, Table 1). These six sites (36LU0015, 36LU0016, 36LU0048, 36LU0049, 36LU0050, and 36LU0051) are all prehistoric occupations situated on the low terrace/floodplain west of the Susquehanna River. One of these sites (36LU0051) is mapped within Area 7 and the remaining five occur within Area 8. The single previously-identified architectural resource within 0.5 miles of the project area, the North Branch Pennsylvania Canal (141673), extends through Areas 6, 7 and 8.

Table 1. Summary of Previously Recorded Cultural Resources in Project Vicinity

Resource Type	Area 6	Area 7	Area 8	Confers Lane	Total in APE	Outside APE	Total Cultural Resources
Archaeological Sites	0	1	5	0	6	18	24
Architectural Resources	1*	1*	1*	0	1*	4	5
Total	1	2	6	0	7	22	29

*The single architectural resource extends through Areas 6, 7 and 8

An additional 18 archaeological sites are recorded within 1.6-kilometers (1.0-miles) of the project and four architectural resources are recorded within a 0.8 kilometer (0.5-mile) radius (see Figure 2, see Table 1). No previously-recorded National Register properties are mapped either within the project APE or within a 0.6-kilometer (1.0-mile) radius of the project.

Page redacted by the U.S. NRC

Archaeological Sites

The 24 archaeological sites recorded in the project vicinity all represent prehistoric occupations of the floodplains or low terraces adjacent to the North Branch Susquehanna River (see Figure 2, Table 2). Thirteen of these sites are situated west of the river and eleven lie to its east. The large majority of the west bank sites (n=10) are clustered between the existing SSES intake structure (located in Area 6 of the current project) and Gould Island, 2.1 kilometers (1.3 miles) to the north.

Table 2. Previously Recorded Archaeological Sites within 1-Mile Radius of Project APE

Site Number	Site Name	Landform	Site Type	Age	In APE?	Recommended NRHP Status
36LU0015	SES-3	Floodplain	Prehistoric Open	A, LA	Yes, Area 8	Listed or Eligible
36LU0016	SES-6	Floodplain	Prehistoric Open	A, LA, EW, MW, LW	Yes, Area 8	Listed or Eligible
36LU0017	SES-13	Floodplain	Prehistoric Open	LA, A, Tr, LW	No*	Undetermined
36LU0018	Yorkoski	Floodplain/Terrace	Prehistoric Open	A	No	Undetermined
36LU0019	Stone Crusher	Floodplain/Terrace	Prehistoric Open	A, EA, LA, Tr, W, EW, LW	No	Undetermined
36LU0020	--	Floodplain/Terrace	Prehistoric Open	A, Tr	No	Undetermined
36LU0021	S.Wapwallopen	Floodplain/Terrace	Prehistoric and Historic Open	A, W, EW, MW, LW, Hist	No	Undetermined
36LU0022	Bobby Peter	Floodplain/Terrace	Prehistoric Open	A, MA, LA, W, EW, LW	No	Undetermined
36LU0023	Smith	Floodplain/Terrace	Prehistoric Open H	A	No	Undetermined
36LU0024	Kibler	Floodplain/Terrace	Prehistoric Open	A (probable)	No	Undetermined
36LU0025	Heller	Terrace	Prehistoric Open	A	No	Undetermined
36LU0043	Knouse (Wapwallopen)	Floodplain	Prehistoric Burials, Historic	LW, Historic, Contact	No	Undetermined
36LU0048	SES-16	Floodplain	Prehistoric Open	Unknown Prehist	Yes, Area 8	Undetermined
36LU0049	SES-8	Floodplain	Prehistoric Open	A, LA, Tr, W, EW, LW	Yes, Area 8	Listed or Eligible
36LU0050	SES-10	Floodplain	Prehistoric Open	A, LA	Yes, Area 8	Not Eligible
36LU0051	SES-11	Floodplain	Prehistoric Open	W, LW	Yes, Area 7	Listed or Eligible
36LU0052	SES-14	Floodplain	Prehistoric Open	A, LA, Tr, EW	No	Undetermined
36LU0056	--	Floodplain	Prehistoric Open	Unknown Prehist	No	Undetermined
36LU0090	Sapphire	Floodplain/Terrace	Prehistoric Open Village (?)	LA, Tr, W, EW, MW, LW	No	Undetermined
36LU0105	Ruben	Floodplain/ Island	Prehistoric Open	LA, Tr, W, EW, MW, LW	No	Undetermined

Site Number	Site Name	Landform	Site Type	Age	In APE?	Recommended NRHP Status
36LU0183	Baluski	Terrace	Prehistoric Open Camp	A, EA	No	Not Eligible
36LU0188	Barn Field (B1)	Terrace	Prehistoric Open	A, EA, MA, LA, Tr, W, EW, LW	No	Undetermined
36LU0191	--	Terrace	Prehistoric Open Camp	LA, Tr	No	Rec. Eligible by PHMC-BHP
36LU0270	Beach Haven I	Terrace	Prehistoric Open Village (?)	MA, LA, Tr	No	Rec. Eligible by PHMC-BHP

A=Archaic; EA=Early Archaic; MA=Middle Archaic; LA=Late Archaic; Tr=Transitional; W=Woodland; EW=Early Woodland; MW=Middle Woodland; LW=Late Woodland;

*Site 36LU0017 is mapped immediately north of Area 7

The previously recorded sites are predominantly multicomponent sites, with components ranging in age from the Early Archaic to Late Woodland periods; two sites also contain historic or historic/contact components (see Table 2). Unspecified Archaic (n=16) Late Archaic (n=13), Late Woodland (n=11), Transitional (n=10), and Early Woodland (n=9) components are most common at these sites.

Recorded site types include two possible villages (36LU0090/Sapphire Site and 36LU0270/Beach Haven I), two camps (36LU0183 and 36LU0191), and one prehistoric cemetery (36LU0043/Knouse Site). The remaining sites are indicated as prehistoric open air habitations. The Beach Haven I village site (36LU0270) is located near Beach Haven, on a terrace along the river's Bell Bend, south of the current project area. Phase I and II investigations of this site in 2005 (C.S. & E. Inc. and Pan Cultural Associates, Inc. 2005) suggest that it represents a long term season occupation during Archaic and Transitional periods. The Sapphire Site (36LU0090), the other village site, is mapped east of the river on a floodplain/terrace opposite Gould Island. The Knouse Site (36LU0043) is located on the east bank floodplain opposite Area 6 (see Figure 2). Excavations of this Late Woodland/historic/contact period site in 1978 yielded 21 Native American burials and 14 features as well as associated artifacts including lithics, ceramics, bone, glass seed beads, and metal (McIntyre 1979).

Of the 24 previously recorded sites, four sites are NRHP-listed or -eligible, two have been recommended NRHP-eligible by the PHMC-BHP and two are recommended not eligible. The NRHP status of the 16 remaining sites is undetermined.

The six sites mapped within the project footprint (36LU0015, 36LU0016, 36LU0048, 36LU0049, 36LU0050 and 36LU0051) were all investigated as part of a 1980 survey of the Susquehanna SES floodplain (Hayes et al 1981, see below). In addition, Site 36LU0017, also investigated during this 1980 study, is mapped immediately north of the project APE (beyond the northern edge of Area 7) (see Figure 2). Table 3 presents a summary of these sites, based on a review of Hayes et al. 1981.

Of the six sites in the project APE, two sites represent Archaic/Late Archaic occupations, two represent multicomponent Late Archaic through Late Woodland occupations, one dates from the Woodland/Late Woodland period, and the age of one site is indeterminate. Four of the sites yielded artifacts from relatively shallow depths of 0.3 to 0.68 meters (1.0 to 2.2 feet) below surface. Importantly, two sites, 36LU0016 and 36LU0049, produced artifacts from depths of up to 1.55 and 2.1 meters (5.1 and 6.9 feet) below surface, respectively. Both of these sites also contained prehistoric cultural features: Site 36LU0016 at depths of 0.4 to 0.55 meters (1.3 to 1.8 feet) below surface, and Site 36LU0049 at 1.6 meters (5.2 feet) below surface. In addition, a backhoe trench (SST-8) excavated in the vicinity of Site 36LU0049 exposed a deeper cultural feature at 3.2 meters (10.5 feet) below surface that was documented in profile but apparently not excavated (Hayes et al. 1981, p 121 and 178). These six previously recorded sites represent extensive prehistoric Archaic through Woodland utilization of the Susquehanna River floodplain within the project APE and document the presence of both near-surface and deeply buried cultural deposits in this locality.

Table 3. Summary of Previously Recorded Archaeological Sites in Project APE

Site Number	Site Name	Location in APE	Landform	Age	Deepest Artifact Recovery (m bgs)	Features? (m bgs)	Recommended NRHP Status
36LU0015	SES-3	Area 8	Floodplain	A, LA	0.55 m	No	Listed or Eligible
36LU0016	SES-6	Area 8	Floodplain	A, LA, EW, MW, LW	1.55 m	Yes 0.40 - 0.55 m	Listed or Eligible
36LU0048	SES-16	Area 8	Floodplain	Unknown Prehist	0.34 m	No	Undetermined
36LU0049	SES-8	Area 8	Floodplain	A, LA, Tr, W, EW, LW	2.10 m	Yes 1.60 - 3.20 m	Listed or Eligible
36LU0050	SES-10	Area 8	Floodplain	A, LA	0.30 m	No	Not Eligible
36LU0051	SES-11	Area 7	Floodplain	W, LW	0.68 m	No	Listed or Eligible

A=Archaic; EA=Early Archaic; MA=Middle Archaic; LA=Late Archaic; Tr=Transitional; W=Woodland; EW=Early Woodland; MW=Middle Woodland; LW=Late Woodland

Architectural Resources

Background research identified five previously-recorded architectural resources within the project vicinity (see Figure 2). One of these, the North Branch Pennsylvania Canal (141673), is located, in part, within the project APE—Areas 6, 7 and 8. The four remaining resources are mapped within 0.8 kilometers (0.5-miles) of the project area and include the Union Reformed & Lutheran Church (known as the Old River Church) and three bridges (092644, 135820 and 135679) (Table 4). These resources are summarized below and are described further in the following Architectural Survey section.

Table 4. Previously Recorded Architectural Resources within 0.5-Mile Radius of Project APE

Resource Number	Name	Resource Type	Date	Township	Within APE?	Current NRHP Status
086527	Union Reformed & Lutheran Church (Old River Church)	Church	1833	Conyngham	Yes	Undetermined
092644	L.R. 40028 Bridge	Bridge	Unknown	Salem	No	Not Eligible
135679	SR 239 Bridge	Bridge	1940	Conyngham	No	Not Eligible
135820	SR 7228 Bridge	Bridge	1937	Salem	No	Not Eligible
141673	North Branch Canal; Wyoming Canal Co.; Pennsylvania Canal Co.	Canal and Locks	1828, 1831	Salem	Yes Areas 6, 7 and 8	Eligible

The North Branch Pennsylvania Canal (141673) is situated on the floodplain/low terrace of the Susquehanna River, east of US Route 11 and the railroad, and it parallels the river. This linear resource cuts through Areas 6, 7 and 8 and extends beyond the north and south limits of the current project. Built between 1828 and 1831, the canal is represented by the remains of the canal prism, towpath, locks, and associated features. A PHRS form prepared for a section of the canal and canal locks between Beach Haven and Berwick recommended that this resource is eligible for NRHP listing. Portions of the canal and towpath in the project area (Areas 6, 7 and 8) are encompassed within the PPL Susquehanna Riverlands Environmental Preserve, a public-use area located on the lowlands east

of US Route 11. This preserve includes a lake (Lake Took-A-While), picnic areas, walking trails, and interpretative materials. The section of the canal within Areas 6 and 8 contains water, while the canal prism in Area 7 is dry.

Two previously recorded bridges are located west of the river within 0.5-miles (0.8 kilometers) of the project APE (see Figure 2, see Table 4). SR 7228 Bridge (135820) is situated along North Market Street, 91 meters (300 feet) north of the project's West Alternative. This concrete structure was built in 1937. The LR 40028 Bridge (092644) is a stone arch bridge that spans Mingle Inn Creek, north of the project APE.

The two previously recorded architectural resources in the project vicinity east of the river include the Union Reformed & Lutheran Church (known as the Old River Church) and the SR 239 Bridge (135679) (see Figure 2, see Table 4). The Old River Church, built in 1833, is located along Route 239 south of Little Wapwallopen Creek, in the northwest corner of the previously-surveyed Southeast Alternative. This resource includes a frame church building and an associated cemetery. Its NRHP status is undetermined to date. The SR 239 Bridge (135679) carries Route 239 over Little Wapwallopen Creek, approximately 1,500 feet (457 meters) east of its confluence with the Susquehanna River. This structure was constructed in 1940 and is recommended Not Eligible for NRHP listing.

Prior Cultural Resources Investigations

Background research indicates that several cultural resource studies have been conducted within the vicinity project area within the past three decades. These include Phase I surveys as well as Phase II and III investigations.

Most significant for the present study is the Phase I survey of the SSES floodplain (ER# 81-0658-079-C) conducted by Commonwealth Associates Inc. in 1980 (Schuldenrein 1981; Hays et al. 1981). This project area is located immediately east of the existing SSES facility and includes Area 7 and portions of Areas 6 and 8. This investigation identified eight prehistoric sites on the floodplain/low terrace adjacent to the river including 36LU0015, 36LU0016, 36LU0017, 36LU0048, 36LU0049, 36LIU0050, 36LU0051, and 36LU0052. [As described above, six of these sites (36LU0015, 36LU0016, 36LU48, 36LU49, 36LIU50, and 36LU51) lie within the current project APE]. These sites range in age from Late Archaic through Late Woodland. The results of this study indicate that the floodplain/low terrace settings in the project vicinity have a high potential for both near-surface and deeply-buried prehistoric archaeological sites.

Phase I and II investigations of the proposed Salem Township sewage facilities in Berwick and Beach Haven (ER# 02-0287-079-G), south of the current project area, were performed by C.S & E. and Pan Cultural Associates, Inc., in 2005. This survey recorded the remains of a portion of the North Branch Canal, identified one prehistoric site (36LU0270), and tested previously recorded Site 36LU0191. All resources are located on low terraces along the North Branch Susquehanna River.

A Phase I survey of three lots on a terrace east of Beach Haven was conducted by Richard Grubb & Associates in 1994 (ER# 93-3764-079-C and F) (report not available at PHMC-BHP), also south of the project area. This study identified one small, undated, prehistoric site (possibly 36LU0191), and recommended additional Phase II investigations of the locality.

In 1995, AAR performed a Phase I survey of the Baluski Fill Area (ER# 89-0038-079-R) located on the west bank of the Susquehanna River opposite Gould Island, north of the current project area (Bohlin 1995). This study identified one prehistoric site, 36LU0183, which is recommended ineligible for NRHP listing.

A series of cultural resource investigations have been undertaken by BHE Environmental, Inc., in association with the Williams Gas Pipeline-Transco corridor located north of the current project area. Phase I survey (ER# 82-0648-042) of the proposed corridor identified two prehistoric sites, 36LU0090 and 36LU0105, located in proximity to its crossing of Gould Island (report not available at PHMC-BHP). Subsequent Phase II and III studies were conducted at these sites between 1985 and 1988. In 2005, BHE conducted a Phase I survey of the Williams-Transcontinental Gas Pipeline Corporation Leidy to

Long Island Expansion (ER# 06-0017-042-A) (report not available at PHMC-BHP). This investigation studied two proposed loops, one of which (the Berwick Loop) is located in an upland setting northeast of the present study area. Twenty-three cultural resources were identified within the Berwick Loop, including 18 stone wall remnants, two wells, a schoolhouse foundation, a cement wall foundation, and a bridge. Three of these resources (the schoolhouse foundation and the two wells) were recommended potentially eligible for NRHP listing.

In 1978, salvage excavations of Site 36LU0043 (the Knouse Site) were conducted in advance of Pennsylvania Power and Light's proposed development of a parcel on the east side of the Susquehanna River floodplain (McIntyre 1979). As described above, this site is located on the floodplain directly west of the Southeast Alternative and yielded burials, features, and associated artifacts.

Historic Map Research

The 1873 Beers *Atlas of Luzerne County, Pennsylvania, Salem Township* (Figure 3) depicts scattered development within the project vicinity on the uplands and low terrace/floodplain west of the North Branch Susquehanna River. Located at the edges of Salem Township, the towns of Berwick to the southwest and Shickshinny to the north are the largest in the area. The small community of Beach Haven, west of the river's Bell Bend, is marked by a crossroads and includes houses, a school, and a church. The Susquehanna and Tioga Turnpike, a roadway that largely follows the course of the current US Route 11, hugs the western edge of the river's low terrace/floodplain. To its east lies the single track of the Lackawanna and Bloomsburg Railroad (also known as the Bloomsburg Division of the DL&W Railway). The Wyoming Valley Canal, in turn, parallels the east edge of the railroad. These three linear resources extend through the project area and continue north and south along the river. Roadways also cross the uplands in much their current orientations, including Beach Grove Road, North Market Street, and Confers Lane, as well as additional roads to the north and west.

The Beers 1873 map (see Figure 3) illustrates scattered residential development along most of the roadways in the project vicinity. Approximately half a dozen structures are located along the Susquehanna and Tioga Turnpike within the project area. Houses are also depicted in the upland portion of the project area along Beach Grove Road, North Market Street, and Confers Lane. Two of these houses are located in the area of possible archaeological sites, identified by GAI's 2007 Phase IA reconnaissance. These include a structure (labeled "J. Hess") in the area of the possible Kisner Farmstead Site, and a structure (labeled "B. Thomas") in the location of the Johnson/Folk Barn Site. Additional structures are mapped at the bend in Confers Lane ("W. Hicks") and south of Beach Grove Road ["J.B. Courtright," "J. Lockhart" and "T. Edwards"(?)]. The Hill School and a saw mill are depicted on the north side of Beach Grove Road, immediately northwest of the project area. A single structure (labeled as "S.G", possibly S. Gould?) is illustrated on the low terrace/floodplain portion of the project area between the canal and the river, within the current Area 6.

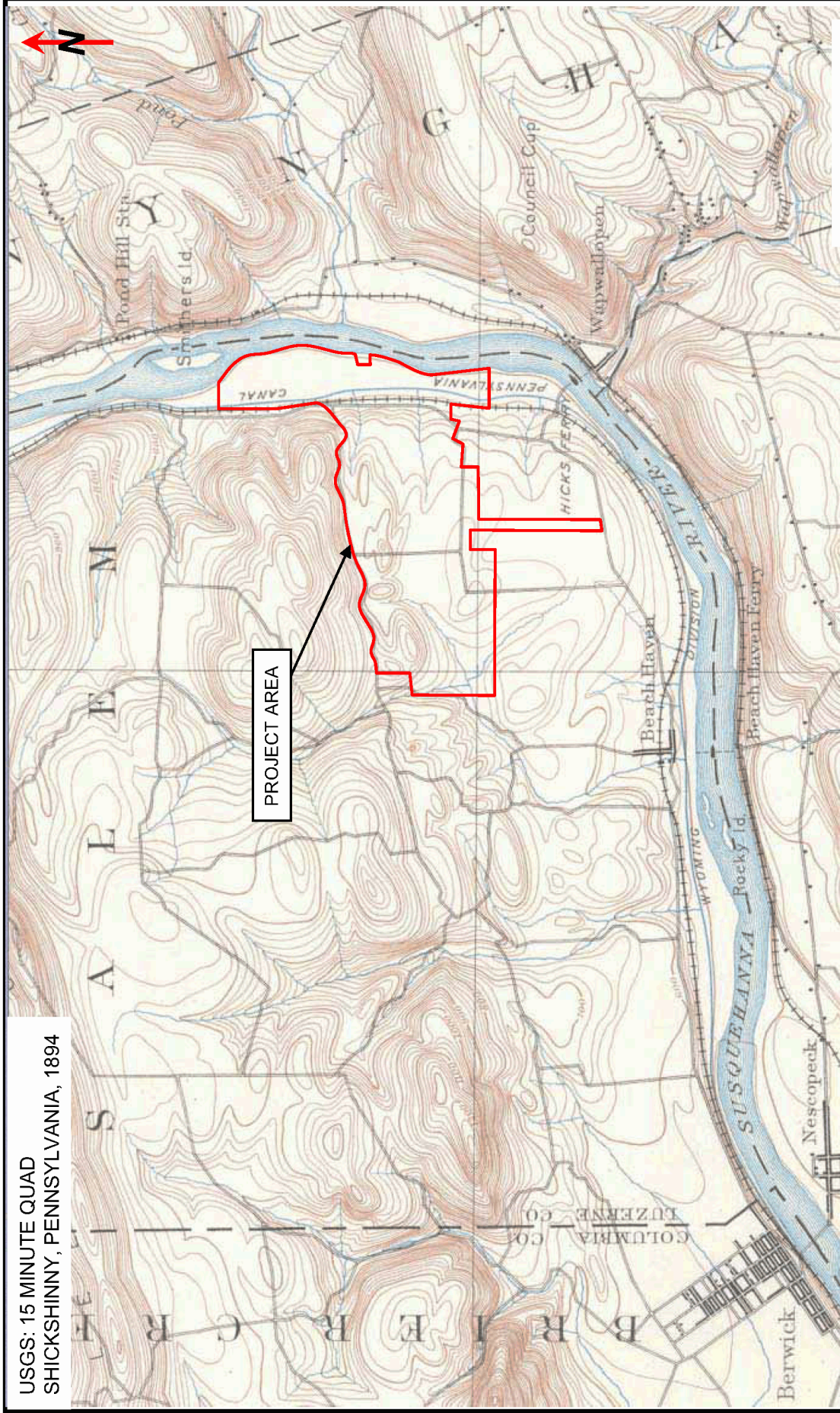
The 1894 Shickshinny, Pennsylvania 15-Minute Quadrangle (Figure 4) illustrates no structures within the project footprint. Berwick is represented by a grid of streets while the communities of Beach Haven, Shickshinny, and Wapwallopen (east of the river) are each shown as a crossroads. Two nearby ferries are depicted: the Hicks Ferry at Bell Bend, and the Beach Haven Ferry in the community of Beach Haven. The Susquehanna and Tioga Turnpike and upland roadways are illustrated in the same locations as on the Beers 1873 map. The Delaware Lackawanna and Western (DL&W) Bloomsburg Division Railroad and the Wyoming Division Pennsylvania Canal (formerly Wyoming Valley Canal) both follow the west side of the river, and extend through the current project area. The Sunbury Division Railroad lies on the east side of the river.

The 1955 Shickshinny, Pennsylvania 15-Minute Quadrangle (Figure 5) shows continued development along the river. Berwick is still the largest nearby town, followed in size by Shickshinny. The map also


depicts limited growth in Beach Haven and Wapwallopen, as well as the small communities of Dogtown and Mocanaqua to the north. US Route 11 (former Susquehanna and Tioga Turnpike) is identified in its current path and houses line this roadway throughout the project area, and further southwest into Beach Haven and Berwick. Just outside the southern edge of the project area, houses also line a remnant of the former Susquehanna and Tioga Turnpike. The DL&W Railroad borders the east side of US Route 11. Immediately to its east lies the now-abandoned canal. No structures are depicted on the low/terrace floodplain portion of the project area between the railroad and the river, a locality containing large open areas and more limited strips and patches of woodlands. Uplands within the project area include open areas, woodlands and orchards, as well as isolated structures along Confers Lane, North Market Street, and Beach Grove Road. Four of these structures occur in the location of possible archaeological resources identified during GAI's 2007 Phase IA reconnaissance (i.e. the Kisner Farmstead Site, the Johnson/Folk Barn Site, the Sink House Site and the Shortz House Site).

Based on a review of these maps, late nineteenth to mid twentieth century land use in the immediate project vicinity consisted primarily of scattered residences and farmsteads located in proximity to roads, railroads, and waterways.

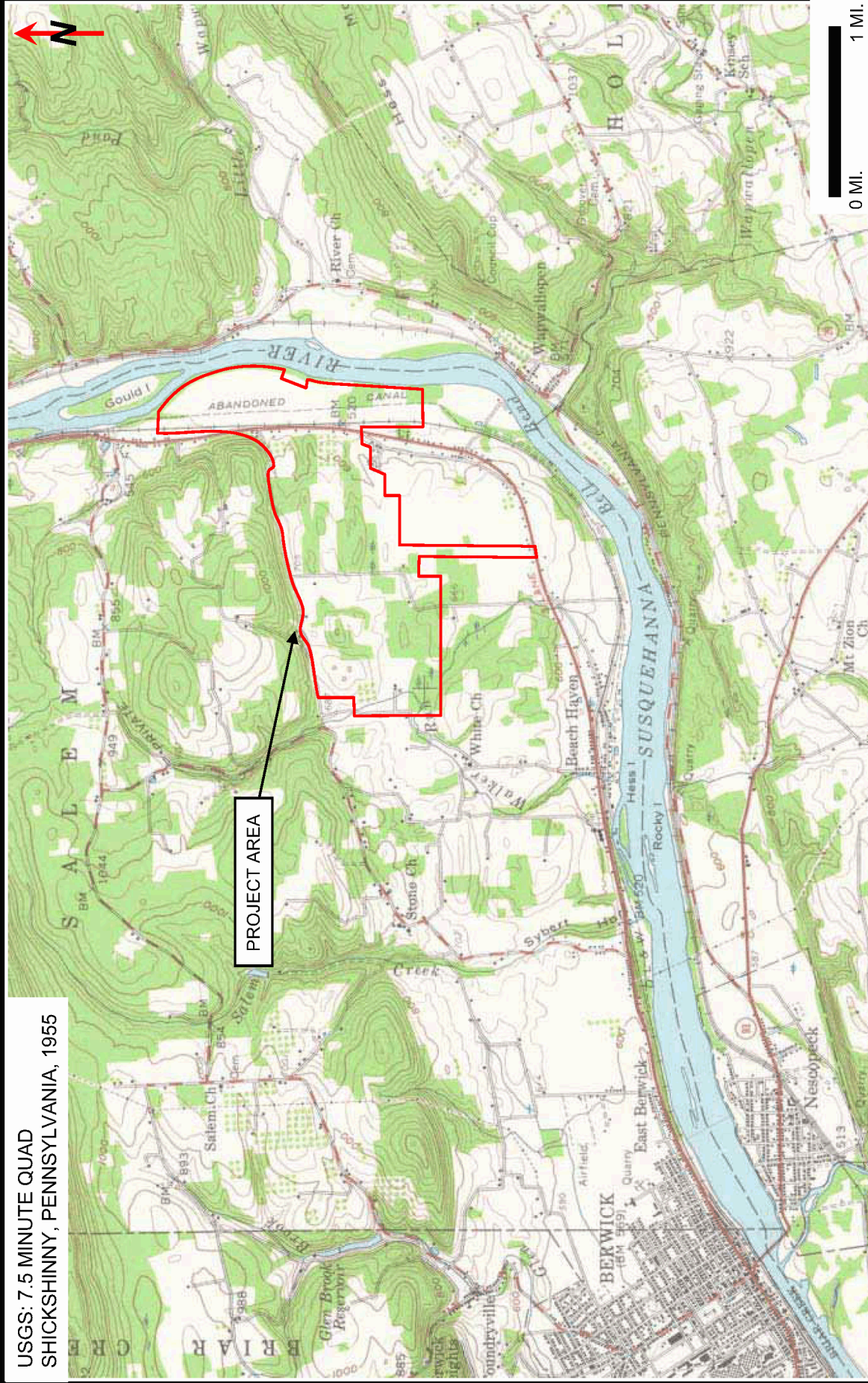
USGS: 15 MINUTE QUAD
SHICKSHINNY, PENNSYLVANIA, 1894



0 MI. 1 MI.

 gai consultants	DWN SJS	CHKD BAM	FIGURE 4. PROJECT AREA AND VICINITY, 1894	
	APPD.	DATE 2/14/08		
	SCALE As noted	DRAWING NUMBER CO80204.00	BERWICK NPP-1 UNISTAR NUCLEAR DEVELOPMENT, LLC.	

USGS: 7.5 MINUTE QUAD
SHICKSHINNY, PENNSYLVANIA, 1955



gai consultants

DWN SJS CHKD BAM

APPD. DATE 2/14/08

SCALE As noted

DRAWING NUMBER CO80204.00

FIGURE 5. PROJECT AREA AND VICINITY, 1955

BERWICK NPP-1 UNISTAR NUCLEAR DEVELOPMENT, LLC.

III. Geomorphological and Archaeological Reconnaissance

Field Methods

GAI conducted Phase IA geomorphological and archaeological field reconnaissance of the project area on January 23 and 24, 2008. GAI's in-house professional soil scientist and the project's principal investigator and archaeological field director performed this reconnaissance of the project APE in order to characterize its potential to contain unrecorded cultural resources. Specific goals of the geomorphological and archaeological reconnaissance were to:

- Evaluate surface disturbances and landform age;
- Assess the potential for deeply-buried archaeological sites; and
- Refine preliminary estimates of archaeological sensitivity derived from background research.

During the geomorphological reconnaissance, GAI's soil scientist performed a walk-over of the project area and observed and recorded geomorphic conditions and the extent of surface disturbances. Judgmentally-placed auger probes were excavated to evaluate soil profiles, as permitted by frozen ground conditions. Wetlands were identified based on preliminary wetland delineation maps provided by UniStar and by observations of wetland vegetation in the field. In conjunction with the geomorphological assessment, GAI's project archaeologists conducted an archaeological reconnaissance to ground-truth preliminary assessments of archaeological potential based on background research. Local ground conditions and topographic settings were assessed to further evaluate the project area's archaeological potential. Surface artifacts, structures, and possible cultural features or sites were observed and plotted on project maps.

Data collected from the geomorphological assessment and the archaeological reconnaissance was then combined with information from the background research to refine initial assessments of archaeological potential for the project.

Results of Geomorphological Reconnaissance

The project area is located in the Susquehanna Lowland Section of the Ridge and Valley physiographic province (Sevon 2000). This province contains low to moderately high, linear ridges and linear valleys, as well as the Susquehanna River valley. Relief in the area is low to moderate. All of Luzerne County has been glaciated. Uplands in the region are covered with the Wisconsin-aged Olean Till (Sevon and Braun 2000), while the Susquehanna River valley is mapped with stratified drift of Recent to Late Illinoian age.

The Luzerne County Soil Survey (Bush 1981) maps the upland portions of the project area, west of US Route 11, with glacial till and glacial outwash soils. Glacial till soils are found on the highest elevation knobs within the project area as well as on the highest uplands immediately to the project's north. The large majority of Areas 6 and 8 west of the highway are mapped with glacial outwash soils. These outwash soils occur on broad, gently sloping areas that represent the highest outwash terraces of the Susquehanna River. These terraces are Late Illinoian to Wisconsin in age. The wetlands that have developed on these terraces are also formed in glacial outwash. The upland portions of the project APE have no potential for deeply buried cultural resources. Cultural resources identified in these areas are expected to be associated with the modern ground surface. The ground surface has been disturbed to varying extent due to construction and agriculture.

The portions of the project area east of US Route 11 consist of landforms formed in Holocene to recent alluvial sediments. The landforms represent the Late Holocene to recent low terraces and floodplain of the Susquehanna River. Two soil types are mapped in this portion of the project area: the well-drained Pope soils and the poorly-drained Holly soils (Bush 1981). Holly soils probably represent low and former channel locations on the floodplain. The Pope soils represent higher terrace and natural levee landforms. The eastern portions of Areas 6 and 8 and all of Area 7 occur on the low terraces and floodplain of the Susquehanna River. These areas, particularly the well-drained low terraces and

natural levee landforms have a potential for deeply buried cultural resources. As described in the above Background Research section, Hayes et al. (1981) performed an archaeological investigation of the Susquehanna flood plain east of the SSES. In addition to a shallow (0.5-1.0 m deep) buried cultural bearing soil horizon with features, deep testing in a transect across the central portion of the floodplain exposed a “carbonized horizon” at a depth of 3.2 m in one of the backhoe trenches (SST-8) in the area of Site 36LU0049 (Hayes et al. 1981, pp178). Another trench (SST-9), located approximately 12 m further west, revealed a cultural feature at 1.3 m below surface and artifacts to a depth of approximately 2.15 m below surface. This work documents the presence of deeply buried cultural deposits in the project area. Accordingly, this area requires deep testing to fully evaluate the potential for cultural resources.

Poorly-drained channel-like swales observed in areas mapped with Pope soils need to be evaluated for cultural resources. Particularly, the edge of wetlands bordered by natural levee landforms could have a high potential for cultural resources. Broader areas of the poorly-drained Holly soils are probably not conducive to having cultural resources and have a lower archaeological potential.

Results of Archaeological Reconnaissance

Based on the results of field reconnaissance and background research, GAI characterized the project APE in terms of its archaeological potential: high to moderate potential, low potential, and disturbed/no potential. Relatively undisturbed, well-drained, level to gently-sloping upland settings and floodplain/low terrace settings along the Susquehanna River were determined to have high to moderate archaeological potential. Steep slopes (slopes in excess of 15 percent), poorly-drained/wetland areas, and highly eroded fields were considered to have low archaeological potential. Areas disturbed by grading, landfill, and recent construction activities were determined to have no archaeological potential. Figure 6 depicts archaeological potential within the project and Table 5 summarizes archaeological potential by test area, using GIS-derived acreage. In total, nearly half (46 percent) of the project area is considered to have a high to moderate archaeological potential, 15 percent has low potential and 39 percent is disturbed/no potential (see Table 5).

Table 5. Summary of Archaeological Potential by Test Area

Area	Total Acres	High-Moderate Potential acres (% total)	Low Potential acres (% total)	Disturbed/ No Potential acres (% total)	Possible Cultural Resources	Previously Recorded Cultural Resources
Area 6	174	87.9 (37%)	37.4 (48%)	48.3 (25%)	1	1*
Area 7	38	34.1 (14%)	0.2 (0.3%)	3.2 (2%)	1	2*
Area 8	272	103.1 (44%)	34.1 (44%)	135.2 (69%)	1	6*
Confers Lane	27	10.9 (5%)	6.6 (8%)	9.9 (5%)	1	0
Total	511	236.0 (46%)	78.3 (15%)	196.6 (39%)	4	7*

*one resource (North Branch Pennsylvania Canal) extends through Areas 6, 7 and 8

Area 6

Area 6 is an approximately 174-acre parcel located south and southeast of the existing SSES facility and encompassing uplands as well as floodplain/low terraces along the Susquehanna River (see Figures 1 and 6). It is bounded by the Confers Lane Parcel to the west and the river to the east. The western portion of Area 6 includes a finger-like projection that follows an existing transmission line corridor southward from the SSES facility to US Route 11. An unnamed tributary of the North Branch Susquehanna River extends through the central portion of Area 6; wetlands flank this tributary. US Route 11, which curves to follow the river’s Bell Bend, bisects this parcel to the east of the existing plant, roughly separating uplands to the west from floodplain/low terraces to the east. The CSX line (former DL&W Railway) and the North Branch Pennsylvania Canal (141763) also cut through Area 6, east of US Route 11. The lowland section of Area 6 encompasses a portion of the Susquehanna

Page redacted by the U.S. NRC

Riverlands Environmental Preserve (Wetland Nature Area), as well as the existing SSES intake facility, situated on the riverbank.

Land use with Area 6 is variable, including cultivated fields, fallow fields, and woodlands, as well as open areas of disturbance (e.g. parking lots, fill slopes, roadways and buildings), largely associated with the SSES facility. Transmission line corridors traverse its western and central portions. Elevations range from 500 feet on floodplains along the river to approximately 660 feet on upland settings in the western portion of Area 6.

Based on the results of Phase IA archaeological reconnaissance, Area 6 includes 87.9 acres of high to moderate archaeological potential, 37.4 acres of low archaeological potential and 48.3 acres that are disturbed and have no potential for archaeological resources (see Table 5). This locality represents over one-third (37 percent) of the project's total high to moderate potential acreage.

Areas of high to moderate potential in Area 6 consist largely of cultivated fields and bordering woodlands in its western, upland portion (approximately 57 acres) (Photograph 4) as well as fields and woodlands on lowlands in its eastern portion (approximately 31 acres) (see Figure 6). One field located adjacent to the river in the southeast corner of Area 6 is mapped as high to moderate potential although topography suggests that it may include areas of fill. Because frozen ground conditions

prohibited conclusive auger probing of this field during Phase IA reconnaissance, it will require further assessment during subsequent investigations. Also considered to have high to moderate potential is the previously-recorded North Branch Pennsylvania Canal (Photograph 5).



Photograph 4. Area 6: High to Moderate Potential Upland Corn Field, Facing East



Photograph 5. Area 6: High to Moderate Potential Frozen North Branch Pennsylvania Canal, Facing North

Wetlands, located in both upland and low terrace/floodplain settings, and steep upland slopes flanking the stream valley in the central portion of Area 6, are considered to have a low archaeological potential (see Figure 6). The large wetland observed in its eastern portion contains several ponded areas (Photograph 6).



Photograph 6. Area 6: Low Potential Frozen Wetland on Low Terrace/Floodplain, Facing West

The 48.3 acres of disturbance in Area 6 largely represent localities impacted by the development of the existing SSES facility (i.e. cut and fill, buildings, parking lots, access roads, intake facility) (see Figure 6, Photographs 7 and 8). Additional disturbances have resulted from roadway and railroad construction and development of the Susquehanna Riverlands Environmental Preserve.



Photograph 7. Area 6: Disturbed/No Potential Fill Slope and Set Basin Adjacent to SSES Facility in Upland Section, Facing Southeast



Photograph 8. Area 6: Disturbed/No Potential Area Associated with SSES Facility West of US Route 11, Facing East

Archaeological reconnaissance identified one architectural/historical resource within Area 6. It is represented by two parallel field stone walls located in woodlands at the edge of an open field, in the central portion of Area 6 (see Figure 6, Photograph 9). Based on the brief field view, these stone walls are set approximately 5 to 10 meters (15 to 30 feet) apart and extend well over 50 meters (150 feet). Probable modern specimens—including fragments of machinery, a rusted car door, and

part of a swing set—were located adjacent to, and in some instances, atop the walls. Historic map review identified no structures in this locality, however nearby residences are currently located along a

roadway south of the open field. These stone walls may represent the remains an historic road or field walls associated with a nearby residence.



Photograph 9. Area 6: Fieldstone Wall in Upland Section, Facing Northwest

It is expected that archaeological resources in the western, upland portion of Area 6 will be near-surface in nature. Low terrace/floodplain settings in its eastern portion may contain both near-surface and deeply buried archaeological resources.

Area 7

Area 7 is an approximately 38-acre parcel located entirely on the Susquehanna floodplain/low terrace at the northern edge of

the project area (see Figures 1 and 6). It is bounded by US Route 11 to the west, the river to the east, and Area 8 to the south. The CSX line (former Bloomsburg Division of the DL&W Railway) and the North Branch Pennsylvania Canal extend in a north/south orientation through the western edge of this parcel. The section of the canal bed located in Area 7 is currently dry.

Land use within Area 7 is predominantly cultivated fields. Narrow woodlands border the riverbank and the canal and a small, sparse woodland lies between the canal and the railroad tracks. In addition, the northern tip of the Susquehanna Riverlands Environmental Preserve extends into the southwest corner of this parcel. Area 7 lies at an elevation of approximately 152 to 158 meters (500 to 520 feet).

Area 7 consists overwhelmingly of high to moderate archaeological potential acreage (34.1 acres), with only small areas of low archaeological potential (0.2 acres) and disturbance/no potential (3.2 acres) (see Figure 6, see Table 5). Fourteen percent of the project area's total high to moderate potential acreage is found in Area 7.

Localities of high to moderate potential in Area 7 consist of the large fields and adjacent wooded strips along the river (see Figure 6, Photograph 10). These areas have a potential for both near-surface and deeply buried archaeological sites. The previously-recorded NRHP-eligible North Branch Pennsylvania Canal is also mapped as having high to moderate archaeological potential.



Photograph 10. Area 7: High to Moderate Potential Cultivated Field on Low Terrace/Floodplain, Facing North

The single area of low archaeological potential in Area 7 is a small section of wooded wetland associated with a former stream channel, near the southeast corner of the parcel (see Figure 6).

Disturbances within Area 7 include a borrow pit observed in the woods along the riverbank, a narrow man-made berm lining the edge of a field, and construction disturbances associated with the Susquehanna Riverlands Environmental Preserve (see Figure 6). Disturbed localities have no potential for archaeological sites.

GAI identified one possible historic archaeological site during Phase IA reconnaissance. Located in the southwest portion of Area 7, between the canal and the railroad, this possible site area is represented by a woodland clearing and several large evergreen trees (see Figure 6, Photograph 11). This clearing may represent the location of a former house. Historic map review identified no structures in this area.



Photograph 11. Area 7: High to Moderate Potential Woodland Clearing (Possible Archaeological Site Location), Facing Northwest

Due to its low terrace/floodplain setting, Area 7 has a potential for both near-surface and deeply buried archaeological resources.

Area 8

Area 8, the largest of the four areas investigated, encompasses approximately 272 acres of uplands and low terraces/floodplain between the existing SSES facility and the Susquehanna River (see Figures 1 and 6). It is bounded by the SSES facility to the west, the river to the east, and Areas 6 and 7 to the south and north, respectively. US Route 11 bisects Area 8 and effectively divides uplands to the west from lowlands to the east. Like Areas 6 and 7, Area 8 is also bisected by the CSX line and the North Branch Pennsylvania Canal. In addition, this test area encompasses a large section of the Susquehanna Riverlands Environmental Preserve, including most of Lake Took-A-While, which spans its entire length. The western, upland portion of Area 8 lies within the SSES facility.

Land use in the lowland, eastern portion of Area 8 consists predominantly of expansive cultivated fields and disturbed parkland (e.g. lake and grassy areas). Woodlands flank the field edges. The upland, western portion of Area 8 is largely an open, disturbed locality with small, remnant woodlands covering some of its steeper slopes. Elevations range from 500 feet on floodplains along the river to approximately 660 feet on the western uplands.

Based on the results of Phase IA archaeological reconnaissance, Area 8 includes 103.1 acres of high to moderate archaeological potential, 34.1 acres of low archaeological potential and 135.2 acres that are disturbed and have no potential for archaeological resources (see Figure 6, see Table 5). As illustrated in Table 5, Area 8 contains nearly half (44 percent) of the project's total high to moderate potential acreage and over two-thirds (69 percent) of the total project disturbances.

Area 8's high to moderate to potential localities consist overwhelmingly (approximately 90 percent) of the cultivated fields and bordering woodlands on low terrace/floodplain settings along the river (see Figure 6, Photographs 12 and 13). The previously-recorded North Branch Pennsylvania Canal is also mapped as high to moderate archaeological potential. In the western, upland portion of Area 8, isolated areas of high to moderate archaeological potential (totaling only approximately 10 acres) are mapped in a remnant woodland and along a cleared transmission corridor.



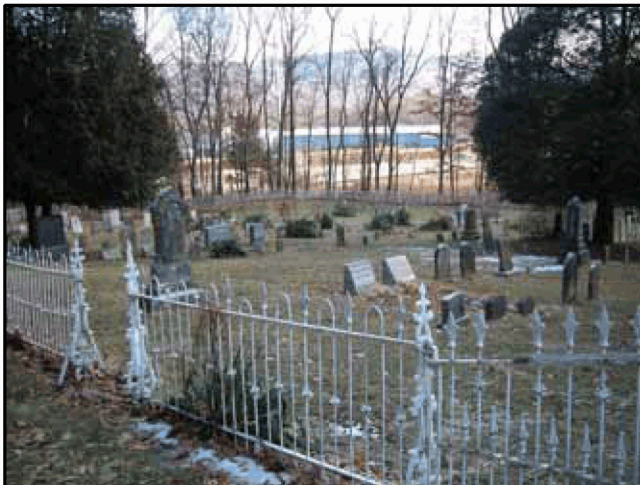
Photograph 12. Area 8: High to Moderate Potential Cultivated Field on Low Terrace/Floodplain, Facing North



Photograph 13. Area 8: High to Moderate Potential Woodland between Cultivated Field and Susquehanna River on Low Terrace/Floodplain, Facing North

Low potential localities in Area 8 include steep upland slopes in its western portion as well as linear wetlands, representing former stream channels, on the floodplain (see Figure 6).

As noted above, Area 8 contains extensive areas of disturbance/no potential associated with the existing SSES facility (e.g., cut and fill, buildings and parking lots) in its western, upland portion and with development of the Susquehanna Riverlands Environmental Preserve on the low terrace/floodplain in its eastern section (see Figure 6). Roadway and railroad construction have resulted in additional disturbance.



Archaeological reconnaissance of Area 8 confirmed the presence one unrecorded architectural/historical resource, the Beach Grove Cemetery, observed during GAI's architectural review in 2007 (GAI 2007). This fenced cemetery, located along Beach Grove Road, at the northern edge of Area 8, consists of interments, some of which date from the nineteenth century (Photograph 14). This resource is described further in the following Architectural Resources section.

Photograph 14. Area 8: Overview of Beach Grove Cemetery from Beach Grove Road, Facing Southeast

High to moderate archaeological potential localities in Area 8 consist predominantly of low terrace/floodplain settings with a potential for both near-surface and deeply buried cultural deposits. Archaeological resources in the western, upland areas are expected to be near-surface in nature.

Confers Lane Parcel

The Confers Lane Parcel is an approximately 27-acre upland area located east of Confers Lane, at the southwest edge of the existing SSES facility (see Figures 1 and 6). It lies between Area 6 and the SSES facility to the east, and the previously-surveyed West Alternative to the west. The Towers Club, a one-story building currently owned by PPL and serving various business and recreational functions, is situated in the northern portion of this area. A paved entry road, leading from Confers Lane into the plant, lies south of this building.

Land use within the Confers Lane Parcel is primarily woodlands. A disturbed open area surrounds the Towers Club. An area of sparse trees and brush covers its central portion while a pond lies at its southern edge. Elevations range from approximately 670 feet throughout the majority of the area to 740 feet at the top of a fill slope in its northeast corner.

Archaeological reconnaissance indicates that the Confers Lane Parcel includes 10.9 acres of high to moderate archaeological potential, 6.6 acres of low archaeological potential, and 9.9 acres that are

disturbed and have no potential for archaeological resources (see Figure 6, see Table 5). This small parcel contains approximately 5 percent of the project's total high to moderate potential acreage as well as 5 percent of the total disturbances.

Areas of high to moderate potential are mapped in two separate wooded localities—one in its northern portion adjacent to the Towers Club building and another at its southern end (see Figure 6, Photograph 15).



Photograph 15. Confers Lane Parcel: Wooded Upland at Rear (East) of Towers Club Building, Facing Northeast

Low potential areas include a steep slope in its northeast corner and wooded wetlands identified in both the center and southern edge of the parcel (see Figure 6).

Disturbed/no potential areas are associated primarily with development of the SSES facility. Disturbances include fill areas in the central portion and northeast corner of this parcel and building construction (i.e. Towers Club and surrounding parking area) in its northern portion (see Figure 6).

Archaeological reconnaissance confirmed the presence of one possible archaeological site, the Shortz House Site, which was initially identified by PPL representatives during GAI's 2007 Phase IA study of the West Alternative (see Figure 6). No surface remains were observed in this locality during the previous reconnaissance (likely due to dense vegetation cover at the time). The current Phase IA reconnaissance identified a depression, possibly representing a cellar hole or foundation, adjacent to a lane in the southern edge of this parcel (Photograph 16). A bottle and small stacks of architectural debris were also observed on the ground surface nearby. This site may represent the location of the former Shortz House.



Photograph 16. Confers Lane Parcel: Shortz House Site Adjacent to Lane in Southern Portion of Parcel, Facing North

Due to its upland setting, it is expected that archaeological resources in the Confers Lane Parcel will be near-surface in nature. This locality has no potential for deeply buried archaeological sites.

IV. Architectural Survey

Methods of Architectural Survey

The architectural and historical survey component of the Phase IA survey was conducted by GAI Senior Architectural Historian Matthew G. Hyland, Ph.D., according to guidelines set forth in *Archeology and Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44716-44742); *National Register Bulletin 15—How to Apply the National Register Criteria for Evaluation* (National Park Service 1998); and *National Register Bulletin 21—Defining Boundaries for National Register Properties* (National Park Service 1997), as well as the guidelines of the PHMC-BHP for survey projects (revised January 2001).

The architectural survey for the proposed Berwick, PA NPP-1 project consisted of four phases: 1) definition of an APE that accounts for potential visual effects to NRHP-eligible or listed resources; 2) brief literature and background research to identify previously surveyed resources and significant historic themes of the region; 3) field survey; and 4) evaluation of surveyed architectural and historical resources.

As noted previously, the project's APE for architectural resources is defined as the footprint of the current study area and the West Alternative, plus the surrounding viewshed (extending approximately 0.8 kilometers/0.5 miles beyond the project footprint).

GAI's Architectural Historian conducted a reconnaissance-level field survey between January 28 and 30, 2008, to identify architectural resources in the project APE. GAI compiled digital photographs of resources greater than 50 years of age located within the APE, plus additional resources within a clear line of sight of the project area as determined during field survey. These resources were preliminarily evaluated for NRHP eligibility according to NRHP criteria for significance and standards of integrity. Pennsylvania Historic Resource Survey (PHRS) forms will be completed for each resource and submitted under separate cover.

Boundary delineation for the resources recommended NRHP eligible will need to be conducted as part of subsequent architectural studies of the project. This work will be done according to National Register Bulletin 21 (National Park Service 1997). All of the resources recommended NRHP eligible as part of this study are located within the viewshed of existing facilities at the Berwick NPP, which include two cooling towers reaching 570 feet in height. Accordingly, 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 resources identified in the survey is received from PHMC-BHP.

Page redacted by the U.S. NRC

Results of Architectural Survey

GAI identified 52 architectural and historical resources within the project APE (Figure 7). Ten of these resources are recommended eligible for NRHP listing. Table 6 presents a summary of these resources. Of the 52 identified architectural and historical resources, five (fieldstone walls, the Beach Grove Cemetery, the Canadian Pacific/Bloomsburg Division of the Delaware, Lackawanna, & Western Railway, the Susquehanna and Tioga Turnpike [US Route 11], and the previously-recorded North Branch Pennsylvania Canal [141673]), are located in the current project footprint.

The property types identified in the survey range from industrial and transportation-related resources to residential and ecclesiastical building types. Additionally, there are a number of small-scale farmsteads dating from the late 19th and early 20th centuries found throughout the survey area. Residences are the primary feature of the potential Wapwallopen Historic District, but this district also includes contributing resources of varying types outside the APE (further study to delineate full extent of district is recommended). The 52 identified resources include two active rail lines, three bridges, a previously identified historic canal (North Branch Pennsylvania Canal), and newly identified resources located in Salem, Conyngham, and Nescopeck Townships. Descriptions of each of these resources are presented below.

Table 6. Summary of Surveyed Architectural and Historic Resources in Project APE

ID No.	Name	Address	Style and Type	Date	Preliminary Eligibility Recommendation
GAI-01	Beach Grove Cemetery	Beach Grove Road, Salem Twp	Vernacular Cemetery	c1850-c2004	Not Eligible
GAI-02	Stone Walls	Bell Bend Road at US Rt. 11, Salem Twp	Vernacular Walls	c1810-c1850?	Undetermined. Further research recommended.
GAI-03 (086572)	Union Reformed and Lutheran Church (Old River Church and Burying Ground)	3200 SR 239, Conyngham Twp	Greek Revival Church and Cemetery	1833 (Church), 1805 (Cemetery)	Eligible, Criteria A and C Further research recommended to determine Criterion B eligibility.
GAI-04	Woodcrest	3209 SR 239, Conyngham Twp	Federal, Vernacular Farmstead	1805, 1822	Eligible, Criteria A and C
GAI-05	Hummel Farmstead	371 Beach Grove Road, Salem Twp	Frame Vernacular Farmstead	c1890	Not Eligible
GAI-06	Stone Arch Bridge	Beach Grove Road at Stone Church Road, Salem Twp	Vernacular Stone Arch Bridge	c1935	Eligible, Criterion C
GAI-07	Kiliti Farm	62 Kiliti Road, Salem Twp	American Foursquare, Vernacular Farmstead	c1925	Not Eligible
GAI-08	Heller Farm	4210 North Market Street, Salem Twp	Frame Vernacular Farmstead	c1930	Undetermined. Further research recommended following property access.
GAI-09	North Market Street Bridge	North Market Street, Salem Twp	Vernacular Stone Arch Bridge	c1935	Eligible, Criterion C
GAI-10 (141673)	North Branch Pennsylvania Canal	Along Susquehanna River, US Rt. 11 Vicinity, Salem Twp	Vernacular Canal	1828	Eligible, Criteria A and C
GAI-11	Canadian	Along Susquehanna River, US Rt. 11	Vernacular	1858	Eligible, Criterion A

ID No.	Name	Address	Style and Type	Date	Preliminary Eligibility Recommendation
	Pacific/Bloomsburg Division of the Delaware, Lackawanna & Western Railway	Vicinity, Salem Twp	Railroad		
GAI-12	Susquehanna and Tioga Turnpike	US Rt. 11, Salem Twp	Vernacular Highway	1807-1810	Eligible, Criterion A
GAI-13	House	29 Bell Bend Road, Salem Twp	Bungalow Residence	c1925	Not Eligible
GAI-14	House	49 Bell Bend Road, Salem Twp	Frame Vernacular, Georgian Residence	c1875	Not Eligible
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-20	Valley View Farm	1022 Salem Boulevard, Salem Twp	Frame Vernacular Farmstead	c1900	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-25	Michaels Farm	4252 N. Market Street, Salem Twp	Frame Vernacular Farmstead	c1880	Not Eligible
GAI-26	House (Red Brick Studios)	1405 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Masonry Vernacular, Gothic Revival Residence	c1880	Eligible, Criterion C
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
GAI-28	Barn and Trailer	998 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Vernacular Former Farmstead	c1900-c1990	Not Eligible

ID No.	Name	Address	Style and Type	Date	Preliminary Eligibility Recommendation
GAI-29	Farm	950 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Greek Revival Farmstead	c1870-c1960	Not Eligible
GAI-30	House	944 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Masonry Vernacular, Georgian Residence	c1870	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-33	Farm	783 Berwick-Hazleton Highway (SR 93), Nescopeck Twp	Masonry Vernacular, Greek Revival Farmstead	c1880	Not Eligible
GAI-34	House	175 East Cherry Road (T379), Nescopeck Twp	Frame Vernacular Residence	c1930	Not Eligible
GAI-35	Farm	212 East Cherry Road (T379), Nescopeck Twp	Frame Vernacular Farmstead	c1890	Not Eligible
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 Further study recommended to determine all contributing resources and district boundary.
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-50	Farm	811 River Road (SR 3036), Nescopeck Twp	Vernacular, Georgian Farmstead	c1880-c2000	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

GAI-01

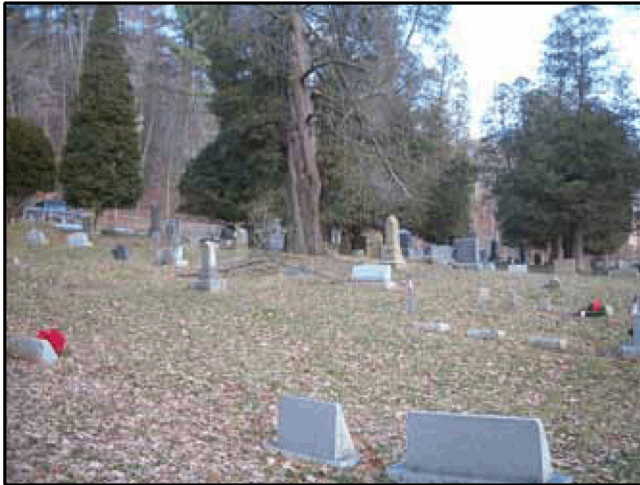
Beach Grove Cemetery

Beach Grove Road

Salem Township

Located along Beach Grove Road and near a railroad spur line to the Berwick NPP, the Beach Grove Cemetery dates from circa 1850 and contains approximately 900 burials laid out in a rectilinear grid pattern. The limits of the cemetery are designated by a decorative wrought iron fence, with gates for ingress/egress. The interior of the cemetery is well-maintained and is planted with mature trees and yucca plants. There are no designed landscape features within the cemetery. The headstones throughout the cemetery are typical examples of late 19th- and early 20th-century slab-form grave markers, with a few

examples of urns, obelisks, and carvings. None of these is distinctive in its design. The burial population includes members of the Seeley, Gary, Titus, Lockhart, Case, Kisner, Hicks, and Banks families, among others. The most recent noted burial dates from 2004.



Photograph 17. Beach Grove Cemetery—
Overview, Facing Northeast

No documentary evidence could be located to connect this cemetery with any significant events in the history of Salem Township. Therefore, it is recommended not eligible for NRHP listing under Criterion A. Research did not reveal any

significant individuals among the burial population of the Beach Grove Cemetery. As such, the cemetery is recommended not eligible for NRHP listing under Criterion B. Since the cemetery does not contain unique or distinctive funerary architecture, and since it does not utilize a specialized plan or design, it does not stand out among other cemeteries in the region and is therefore recommended not eligible for NRHP listing under Criterion C. Since this cemetery does not contain the burial(s) of a person of outstanding or transcendent importance, it also does not qualify for NRHP listing under Criteria Consideration C. However, the cemetery should be considered *potentially* eligible under Criterion D and Criteria Consideration D, for the information it may contain about burial practices, culture, and diet of the local population in the late 1800s and early 1900s.

GAI-02

Stone Walls

Bell Bend Road at US Route 11

Salem Township

This resource consists of two parallel stone walls that run in a general east-west direction for several hundred feet, through a wooded area just west of existing US Route 11. At their tallest, these walls are several feet high. They are constructed of dry-laid fieldstone placed in semi-regular courses. Currently, the area is littered with late 20th-century debris, including discarded recreational equipment and auto parts. These walls may have at one time delineated the extent of a former roadway in this area, possibly as early as the early 19th century, but further research is necessary to verify this possible use and date.



Further directed historical research is necessary to determine the nature of historical associations of this resource. No NRHP eligibility recommendations can be made at this time.

Photograph 18. Stone Wall, Facing Northwest

GAI-03
(086572)
*Union Reformed and Lutheran Church
(Old River Church and Burying Ground)*
3200 SR 239
Conyngham Township

Built in 1833, this Greek Revival church building stands two stories tall on a stone foundation. The exterior of this building is clad in weatherboard, and the gable roof is topped by V-crimp metal sheathing. The roofline is marked by a plain frieze with ornately carved corbels and brackets with drop pendants, and the gable ends have plain rakeboards with cornice returns. The building features detailed wood molding throughout, including cornerboards, window surrounds, and ornate door surrounds on the east, west, and south elevations. The fenestration consists of 15/15, 15/10, and 30/25 double-hung wood sash windows, trimmed by shutters on the first story. Additionally, decorative gable end attic story windows are present on the east and west elevations, and each entrance is marked by elaborate transom windows. Stone steps mark the entrances, with a modern wood access ramp on the south elevation. According to a historical marker at the site, the church building was restored in 1952.

Associated with the church is a cemetery, which is located to the south of the building. This cemetery is generally rectilinear and is surrounded by a wrought iron decorative fence. The cemetery contains several hundred burials, with the earliest noted date being 1805. It likely contains the burials of some of the earliest settlers in the Wapwallopen area, including some of its more prominent residents. Further historical research on the burial population is warranted to definitively determine the roles of the burial population in local history.



Photograph 19. Union Reformed Lutheran Church and Cemetery, Facing Northeast

This resource clearly demonstrates an association with early 19th-century rural life, as the church building served as the focal point of the community's activities. The surviving church building (and its associated cemetery) clearly reflects the ongoing theme of religious and cultural values of the surrounding community, and therefore is recommended eligible for NRHP listing under Criterion A.

Although further directed historical research should be conducted to definitively identify significant members of the burial population and significant individuals in the history of the church, this resource is likely to be NRHP eligible under Criterion B, as it is associated with early settlers and settlement in this area. The church building has been restored, but comparisons with historical photographs show that the restoration was carried out to preserve and retain the significant architectural features of the building. Additionally, since the exquisite hand-carved woodwork executed by Master Carpenter Daniel Walp (with assistance from Michael Weiss and William Hess) survives on this church building, it is recommended NRHP eligible under Criterion C.

GAI-04

Woodcrest

3209 SR 239

Conyngham Township

Originally dating from 1805, Woodcrest is a farmstead anchored by a 2-story, brick, Federal style house which was constructed 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-19th 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. Woodcrest—Main House, 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. A second brick outbuilding is located to the south and east of the main house. Constructed on a smaller scale, this building also is built of brick and has a gable roof, and may have been used as a summer kitchen during its history.



Photograph 21. Woodcrest—Secondary Living Quarters, Facing Northeast

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 20th-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 22. Woodcrest—Barn and Garage, Facing North

This collection of residential and agricultural buildings combines to form a resource that clearly reflects the rural agrarian life and agricultural practices of Conyngham Township in the 19th and 20th centuries. This results in the resource being recommended eligible for NRHP listing under Criterion A. No evidence could be located to connect this resource with any significant individuals in local or regional history. Therefore, this resource is recommended not eligible for NRHP listing under Criterion B. Both the main house and its outbuildings maintain sufficient integrity to convey their architectural significance. Additionally, the main house reflects elements of several historical styles from throughout its existence. Therefore, this resource is recommended eligible for NRHP listing under Criterion C.

GAI-05

*Hummel Farmstead
371 Beach Grove Road
Salem Township*

Built circa 1890, this resource is a 2-story, gable-roofed, Victorian vernacular frame house built on a raised stone foundation. The exterior of the house is clad in asbestos shingles, and the gable roof is



clad in asphalt shingles. The gable ends of the house are marked by cornice returns. The full-width, hip-roofed front porch is supported by chamfered posts with decorative brackets. Modern lattice has been applied to the porch, as well as to the area along the raised basement. The fenestration includes both 2/4, double-hung, wood sash windows as well as modern 6/6 vinyl sashes. Additionally, the door opening is topped by a transom.

Photograph 23. Hummel Farmstead—Main House, Facing Northwest

There are several outbuildings associated with this house. First, a small wood-framed spring house/shed is located nearly adjacent to the porch. Like the main house, this gable-roofed building is clad in asbestos shingles. To the north and northwest of the house stand an open, shed-roofed storage shed clad in vertical wood siding, a modern, metal-clad pole building and associated shed, and a modern gazebo and shed.



Photograph 24. Hummel Farmstead—Modern Outbuildings, Facing West

No information could be found to make a connection between this resource and any significant events, trends, or individuals in the area. Therefore, this resource is recommended not eligible for NRHP listing under Criteria A or B. Additionally, since the house has lost integrity through unsympathetic alterations, and since it and the outbuildings are unexceptional examples of common architectural types from the late 19th through 20th centuries, this resource is recommended not eligible for NRHP listing under Criterion C.

GAI-06

Stone Arch Bridge

Beach Grove Road at Stone Church Road

Salem Township

Built circa 1935, this stone arch bridge spans Walker Run. 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 main span is extended by short wing walls on each end, and the superstructure is capped by pre-cast concrete coping. The bridge carries a single, asphalt-paved traffic lane.

Photograph 25. Stone Arch Bridge, Facing Northeast

This bridge is not directly associated with any significant events or trends in local or regional history. As such, it is recommended not eligible for NRHP listing under Criterion A. 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. This bridge, however, is a rare and well-preserved example of a 20th-century stone arch bridge in the area. Therefore, it is recommended eligible for NRHP listing under Criterion C.

GAI-07

Kiliti Farm

62 Kiliti Road

Salem Township

Built circa 1925, the main house of the Kiliti Farm is a heavily-altered American Foursquare style house built on a stone and concrete foundation. This house is clad in aluminum siding, and the pyramidal roof is clad in asphalt shingles. Shed-roofed dormers project from two elevations of the roof. A modern shed-roofed porch spans the width of the façade, and it is marked by plain wood posts and a half wall.



A large shed-roofed ell has been added to the rear of the house. The windows throughout are modern metal-framed replacements, including 1/1 double-hung sash and picture windows.

Photograph 26. Kiliti Farm—Overview, Facing South

There are a number of wood framed agricultural outbuildings associated with this resource. In addition to the heavy timber-framed barn, which is clad in vertical wood

siding with a V-crimp metal roof, there are a number of later gable-roofed pole buildings and grain storage bins on this property. These are all in fair condition.

This resource does not demonstrate a clear and definitive association with any significant themes, events, or individuals in local or regional history. Therefore, it is recommended not eligible for NRHP listing under Criteria A or B. Additionally, the main house has undergone a number of unsympathetic alterations and additions, and the outbuildings are unexceptional examples of common 20th-century architectural types found throughout the region. As such, this resource is recommended not eligible for NRHP listing under Criterion C.

GAI-08

Heller Farm

4210 North Market Street

Salem Township

Although property access was not granted for this resource, it appears that it consists of a collection of early 20th-century wood framed residential and agricultural buildings. From the main road, it appears that the main house is a 1-story, gable-roofed vernacular style building built on an L plan. Three outbuildings are readily identifiable. They include a heavy timber-framed barn with a catslide roof built on a raised concrete block foundation, a long, gable-roofed animal building (possibly a chicken house or horse stable), and a wood-framed, gable-roofed outbuilding of unknown function.

Photograph 27. Heller Farm—Overview, Facing Northwest



Upon initial review, it appears that this small farm complex does not possess the historical significance or associations necessary for NRHP eligibility under Criterion A. Additionally, this resource is not associated with any significant individuals in local history and is therefore recommended not NRHP eligible under Criterion B. Once property access is granted, a more detailed evaluation of architectural (and historical) significance will be made; however, at this time, it appears that this resource does not possess the requisite architectural significance for NRHP eligibility under Criterion C.

GAI-09

North Market Street Bridge

North Market Street

Salem Township

Built circa 1935, this stone arch bridge spans 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 main span reached a pointed apex in the middle of the span and is extended by short wing walls on each end, and the superstructure is capped by pre-cast concrete coping. The bridge carries a single, asphalt-paved traffic lane.



Photograph 28. Stone Arch Bridge, Facing Northeast

This bridge is not directly associated with any significant events or trends in local or regional history. As such, it is recommended not eligible for NRHP listing under Criterion A. 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. This bridge, however, is a rare and well-preserved example of a 20th-century stone arch bridge in the area. Therefore, it is recommended eligible for NRHP listing under Criterion C.

GAI-10

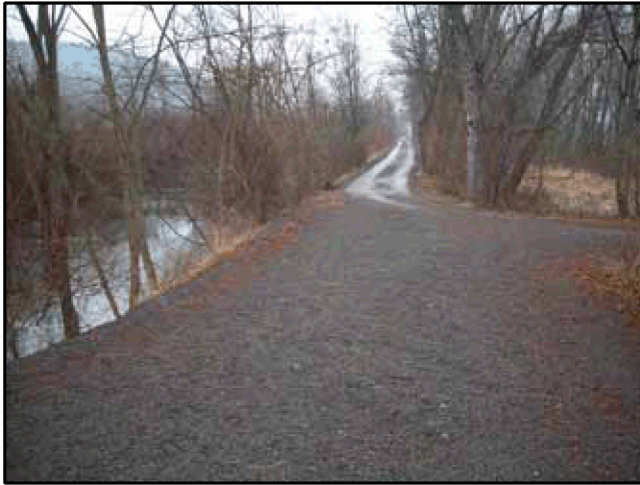
(141673)

North Branch Pennsylvania Canal

Along Susquehanna River, US Route 11 Vicinity

Salem Township

Built in 1828 as the North Branch Canal, this canal line was constructed to provide a connection between Northumberland and the New York state line. 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. Today, there are only a limited number of readily-identifiable sections of this canal remaining. Along the Susquehanna River, north of Beach Haven, an intact section of canal survives. This canal consists of a basin and towpath (the latter currently used as a vehicle trail), located on the floodplain between the existing CSX Railroad tracks and the river. There is a spillway in the vicinity of the project area that likely serves as flood control for the canal basin.



Photograph 29. North Branch Pennsylvania Canal—Towpath and Basin, Facing North

This section of the North Branch Pennsylvania Canal reflects a clear association with the 19th-century canal- building transportation movement throughout Pennsylvania. This section of the canal retains sufficient integrity to convey its historical associations and is therefore recommended eligible for NRHP listing under Criterion A. No information could

be located that connects the canal to a significant individual in local or regional history. Therefore, this resource is recommended not eligible for NRHP listing under Criterion B. The section of canal in the project vicinity retains sufficient integrity to convey the details of canal building technology in the early 19th century in eastern Pennsylvania. Therefore, it is recommended eligible for NRHP listing under Criterion C.

GAI-11

*Canadian Pacific/Bloomsburg Division of the Delaware, Lackawanna, & Western Railway
Along Susquehanna River, US Route 11 Vicinity
Salem Township*

This railroad line began as the Lackawanna and Bloomsburg Railroad, an 80-mile-long railroad that ran between Scranton and Northumberland. Incorporated in 1852, the railroad began operation in 1856 and was taken over by the Delaware, Lackawanna, and Western Railroad in 1873. The western end of the line, from Northumberland to Beach Haven, is still in operation as the short line North Shore Railroad. Construction of this line began in Scranton in 1854. The line reached Berwick in 1858, and was the first railroad to reach Bloomsburg, in the same year.



In the vicinity of the project area, the railroad line consists of a single set of steel tracks constructed on wooden ties within a stone-filled prism. There are a number of at-grade road crossings of this line throughout the area.

Photograph 30. Canadian Pacific/Bloomsburg Division of the Delaware, Lackawanna, & Western Railway, Facing North

Although this line was a relatively small spur of an overall larger system, it remains historically significant as being the first railroad line in this part of the Susquehanna valley and the first

railroad line to reach Bloomsburg. Therefore, this resource is recommended eligible for NRHP listing under Criterion A for its association with transportation and commerce in the region. No documentary evidence could be located to connect this resource with any significant individuals in local or regional history. As such, it is recommended not eligible for NRHP listing under Criterion B. This railroad does

not possess any unique or distinctive engineering features in the vicinity of the project area. Since this is only a small, single-track configuration with no architecturally significant associated structures or buildings (e.g., bridges, turntables, depots, etc.), it is recommended not eligible for NRHP listing under Criterion C.

GAI-12

Susquehanna and Tioga Turnpike

US Route 11

Salem Township

A Pennsylvania act signed March 28, 1806 authorized construction of turnpikes. In 1807, a company called the President, Managers, and Company of the Susquehanna and Tioga Turnpike Road incorporated to build a turnpike from Berwick to the Tioga River at Elmira, New York by the "best and nearest route." The resulting turnpike was in fact the shortest distance from Berwick to Elmira. Part of the road was located on 400 acres donated by the state and part on large land holdings of the corporation. Road construction started in Berwick and went north until completion in Elmira in 1825. As early as 1810, the Susquehanna and Tioga Turnpike was considered the first good wagon road in this part of the state. Today, the route of the Susquehanna and Tioga Turnpike roughly follows that of US Route 11 in the vicinity of the project area. It is generally a two-lane road with center turning lane, wide shoulders, and guard rails. Further historic

map research may determine that the route of the original road differed somewhat from the extant route of US 11.



Photograph 31. Susquehanna and Tioga Turnpike, Facing Northeast

This highway played a significant role in the development of the interior Susquehanna valley, bringing goods and people from outside the area. The highway was also regarded as one of the best of its time. Since this road played a significant role in the history of transportation and commerce in the region, it

is recommended eligible for NRHP listing under Criterion A. No evidence connecting this resource with any significant individuals in local or regional history could be identified. As such, it is recommended not eligible for NRHP listing under Criterion B. Currently, the road consists of a modern highway and appurtenances, and there is no extant engineering or design feature that was originally associated with the Susquehanna and Tioga Turnpike. Therefore, the resource is recommended not eligible for NRHP listing under Criterion C.

GAI-13

House

29 Bell Bend Road

Salem Township

Standing 1.5 stories tall, this circa-1925 gable-roofed Bungalow style residence is constructed on a concrete block foundation. Its exterior is composed of rusticated concrete block on the first story and wood shingles on the attic story. The roof is clad in asbestos and composition shingles and has gable-roofed dormers on the side elevations that extend to meet projecting bays on the first story. The full-width porch has a hipped roof that is supported by tapered wood posts on rusticated concrete block bases, with a rusticated concrete block half wall topped by concrete coping. Additionally, the porch is arcaded, with shingle-trimmed arches, and the steps to the porch are flanked by rusticated concrete block knee walls with concrete coping. An enclosed, shed-roofed, wood shingle-clad porch is located on the rear of the house. The fenestration throughout consists of 3/1 double-hung wood framed sashes

that are most often paired or grouped in threes. The first story windows have stone sills. An interior brick chimney rises from the pitched roof and has a corbelled cap.



Photograph 32. House at 29 Bell Bend Road,
Facing Northwest

No evidence could be located that connects this resource to any significant events, themes, or individuals in local history. As such, this resource is recommended not eligible for NRHP listing under Criteria A or B. Although the house is fairly well maintained with few alterations, better examples of the Bungalow style exist throughout the Berwick area and this house does not stand as a hallmark of the style. Therefore, it is recommended not eligible for NRHP listing under Criterion C.

GAI-14
House
49 Bell Bend Road
Salem Township

Built circa 1875, the house at 49 Bell Bend Road is a vernacular variant of the Georgian style. This 2-story, gable-roofed house is built on a stone foundation and is clad in Masonite shingles. The shingle-clad gable roof has cornice returns at the gable ends. The fenestration consists of 2/4 and 9/6 double-hung, wood sash windows on the first story and 6/6 double-hung wood sash windows on the second story. Additionally, the attic story has two arch-shaped fixed sash windows on the north gable end and a single arched window on the south gable end. Also on the south gable end is a 2-story projecting



polygonal bay and a small, 1-story, shed-roofed porch ell. The original hipped roof front porch has subsequently been removed. A brick interior chimney is located near the north gable end on the ridge.

Photograph 33. House at 49 Bell Bend Road,
Facing Southwest

No documentary evidence has been located that identifies a connection between this resource and any significant events, themes, or individuals in the area's history. Therefore, this resource is recommended not eligible for NRHP listing under Criteria A or B. This resource has experienced a number of alterations that have affected its architectural integrity, including the application of new siding, alterations to the roof, and the removal of the full-width front porch. Additionally, this resource does not stand as a hallmark of late 19th-century architecture in the area. Therefore, it is recommended not eligible for NRHP listing under Criterion C.

GAI-15
House
65 Bell Bend Road
Salem Township

Originally built circa 1880, this 2-story, gable-roofed, frame vernacular house appears to have been built in two distinct sections. Recently-applied vinyl siding partially obscures the foundation material, although it is likely a combination of stone and concrete block. The gable roof is clad in composition shingles, and a corbelled brick chimney rises from the gable end of the taller section of the house. The



windows throughout have recently been replaced and consist of 1/1 double-hung vinyl sashes and larger three-part windows. A shed-roofed porch runs the width of the house and is supported by plain posts. The porch deck is a poured concrete slab. A small, wood-framed shed of recent construction is located to the rear of the house.

Photograph 34. House at 65 Bell Bend Road, Facing Southwest

This resource does not exhibit any associations with significant events or trends, and is not associated with any significant

individuals in area history. Therefore, it is recommended not eligible for NRHP listing under Criteria A or B. This house has been heavily altered, including replacement of original materials and construction of a large addition. Since this house no longer maintains architectural integrity, it is recommended not eligible for NRHP listing under Criterion C.

GAI-16
House
155 Bell Bend Road
Salem Township

Standing 1.5 stories tall, this gable-roofed, wood-framed, Minimal Traditional/Cape Cod style home was built circa 1950. Built on a continuous concrete foundation, this house is clad in a combination of vinyl, aluminum, and asbestos siding. The steeply-pitched roof is clad in asphalt shingles, and two gable dormers project from the primary elevation. Additionally, a partially-enclosed, shed-roofed porch extends from the plane of the roof. The open section of the porch roof is supported by plain posts.



Extending from the north elevation of the house is a small gable-roofed vestibule that serves as a hyphen to the attached garage, which is built slightly below the grade of the house. The 2-bay garage has wood doors with four glass lights in each. The remaining fenestration of the house consists of 6/6 and 1/1 double-hung vinyl sash windows, most often trimmed with fixed shutters.

Photograph 35. House at 155 Bell Bend Road, Facing Southwest

This house does not maintain a connection with significant events or individuals in the history of the Berwick area. Therefore, it is recommended not eligible for NRHP listing under Criteria A or B. This house has experienced a number of alterations that have affected the integrity of the resource. Additionally, this resource is an unexceptional example of a common architectural type found throughout the region. Therefore, it is recommended ineligible for NRHP listing under Criterion C.

GAI-17

House

189 Bell Bend Road

Salem Township

This Colonial Revival style house, which was built circa 1925, stands 1.5 stories tall on a continuous concrete foundation. The gable-on-gambrel roof is clad with asphalt shingles, and the exterior is composed of a combination of clapboard and horizontal siding. The enclosed front porch is built from an extension of the main roof, which is supported by tapered wood posts on brick piers with a brick half wall. A second-story extension with a catslide roof originally rested above the incised rear porch, which has subsequently been enclosed. A side entrance is marked by a gable-roofed portico with a pent gable end. The windows throughout are modern 1/1 double-hung vinyl sash windows, and some are



trimmed with fixed shutters. Outbuildings associated with this house include a gable-roofed, wood-framed shed clad in vertical wood, as well as a modern metal carport.

Photograph 36. House at 189 Bell Bend Road, Facing Southwest

No evidence could be located that establishes a connection between this resource and significant events or individuals in the history of Salem Township. Therefore, this resource is recommended not eligible under Criteria A or B. This resource has experience a number of alterations that have affected its architectural

integrity, and it stands as a typical example of early 20th-century Colonial Revival architecture in the region. Its loss of integrity, coupled with its status as an unexceptional example of its type, results in the recommendation that this resource is not eligible for NRHP listing under Criterion C.

GAI-18

House

193 Bell Bend Road

Salem Township

Constructed circa 1950, this 1.5-story, gable-roofed house is built in the Minimal Traditional style. The house, which is constructed on a modified L plan, rests on a concrete block foundation. The exterior is clad in asbestos shingles and vinyl siding, and the gable roof is clad in asphalt shingles. The porch's shed roof is formed as an extension of the main roof and is supported by modern metal posts with a decorative metal balustrade. Near the porch, a shouldered brick exterior chimney is located on the gable end of the house. A 1-story frame ell addition is located at the rear of the house. The fenestration throughout consists of 1/1, 6/6, and 9/9 double-hung, vinyl sash windows. To the rear of the house stands a circa-1980, gable-roofed, concrete block garage. This building has an open gable end.



Photograph 37. House at 193 Bell Bend Road,
Facing West

This house does not possess any connections with significant events, themes, or individuals in local or regional history. As such, it is recommended not eligible for NRHP listing under Criteria A or B. This house stands as an altered and unexceptional example of a common mid-20th-century architectural type found throughout the region. Therefore, it is recommended not eligible for NRHP listing under Criterion C.

*GAI-19
House
1021 Salem Boulevard
Salem Township*

Constructed circa 1950, this gable-roofed frame vernacular house stands on a brick foundation and is clad in brick veneer and vinyl siding. The multi-plane roof is clad in asphalt shingles. Built generally on an L plan, a large shed dormer extends from the rear plane of the roof. Elsewhere, the gable ends of the roof are marked by cornice returns. The front porch is incised under a shed roof, which is supported by paired and grouped posts. The fenestration consists of 1/1 double-hung vinyl sash windows, with a large fixed sash window with pop-in muntins on the façade. An interior corbelled brick chimney projects from the plane of the roof. Associated with this house is a gable-roofed, wood-framed, 1-bay garage or recent construction. This vinyl-clad building is located to the north of the house and has a shed-roofed extension on its south elevation.



Photograph 38. House at 1021 Salem
Boulevard, Facing Northwest

This house does not possess any associations with significant events or individuals in local or regional history, and as a result, is recommended not eligible for NRHP listing under Criteria A or B. This altered house stands as a typical example of mid-20th-century vernacular construction in the region that has lost integrity. For these reasons, this resource is recommended not eligible for NRHP listing under Criterion C.

GAI-20

Valley View Farm

1022 Salem Boulevard

Salem Township

Dating from circa 1900, the main house at Valley View Farm is a 2-story, gable-roofed, frame vernacular house built on a stone foundation. The exterior of the house is clad in weatherboard, and the gable roof is covered with asphalt shingles. The front porch is 3 bays wide and is topped by a shed roof supported by turned wood posts with decorative brackets. The original porch deck has been replaced by modern wood decking.



Additionally, a small hip-roofed portico extends from the north elevation of the house to function as a side porch. Also on the north gable end of the house stands a brick exterior chimney. The original windows of this house have been replaced with modern 1/1 double-hung vinyl sash windows, which are trimmed by decorative fixed shutters on the façade.

Photograph 39. Valley View Farm—Main House, Facing Southeast

There are two other surviving buildings on the property of Valley View Farm. The first is a heavy timber-framed bank barn, which is built on a stone foundation. The exterior of this barn is clad in board and batten siding, and the gable roof is topped by modern V-crimp sheathing. The entrance doors have been recently replaced. Several window openings on the barn are marked by louvered vents, and basement-level fenestration includes 6-light windows. A small, concrete block, shed-roofed addition extends from the rear of the barn. Separating the barn from the house is a small, 1-story, gable-roofed, wood-framed poultry shelter.



This building is built on a concrete foundation and is clad in horizontal siding and shingles. The gable roof is divided into two sections; the first with asphalt shingles and the second topped by rolled asphalt. The shallower pitched roof section also has exposed rafter tails. Windows in this building include 6/1 double-hung sash and awning windows.

Photograph 40. Valley View Farm—Barn and Poultry Shelter, Facing East

The few remaining buildings at the Valley View Farm do not clearly reflect the nature and extent of agricultural practices of Salem Township or the Berwick area in the early 20th century. Many other area farms retain more and better representative examples of agricultural outbuildings from the time period. Therefore, this resource is recommended not eligible for NRHP listing under Criterion A. No evidence could be located that connects Valley View Farm to any significant individuals in local history. As such,

this resource is recommended not eligible for NRHP listing under Criterion B. The main house of Valley View Farm has been altered and stands as a typical example of a commonly-found architectural form in the region. The remaining agricultural outbuildings do not possess the requisite architectural significance for listing and were not constructed using any specialized techniques. Therefore, this resource is collectively recommended not eligible for NRHP listing under Criterion C.

GAI-21

Bell Bend Efficiency Apartments

1043 Salem Boulevard

Salem Township

This 2-story, gable-roofed, frame vernacular apartment building was constructed circa 1940. It is built on a concrete foundation, is clad in drop siding, and has a gable roof clad in V-crimp metal with exposed rafter tails. A shed-roofed, 2-story porch projects from the façade of the building and housed an enclosed and partially-enclosed porch, with steps leading to the second-story entrance. Modern vinyl 1/1 double-hung sash windows are located throughout the building, with most being flanked by fixed decorative shutters. It appears that originally, two garage bays were located on opposite sides of the central entrance. These have subsequently been enclosed to allow for additional living space.



Photograph 41. Bell Bend Efficiency
Apartments, Facing Northwest

This building does not exhibit any connections with significant events, themes, or individuals in local or regional history. Therefore, it is recommended not eligible for NRHP listing under Criteria A or B. This unexceptional example of multi-unit frame vernacular residential architecture has been compromised by a number of unsympathetic alterations that

have resulted in a loss of architectural integrity. As such, this resource is recommended not eligible for NRHP listing under Criterion C.

GAI-22

House

1047 Salem Boulevard

Salem Township

Constructed circa 1910, this 1.5-story, gable-roofed, frame vernacular house sits on a concrete foundation exterior is clad in weatherboards trimmed with cornerboards, and the gable front roof is clad in asphalt shingles. A shed-roofed porch supported by thick wood posts is located on the gable end, and the entrance is flanked by paired 1/1 double-hung vinyl sash windows, which are also consistent throughout the house. A shed-roofed carport is attached to the west elevation of the house.

Although a former apple orchard is located within 1000 feet of this residence, no definitive connection could be made between this resource and the agricultural operations of the early 20th century. No other historical associations could be identified for this resource. Therefore, this resource is recommended ineligible for NRHP listing under Criterion A. Likewise, no information could be located that connects this residence to any significant individuals in local or regional history. As such, this resource is recommended not eligible for NRHP listing under Criterion B. This house stands as a common and altered example of early 20th-century frame vernacular architecture in the region. This, coupled with a number of alterations that have resulted in a loss of integrity, leads to a recommendation of ineligibility for NRHP listing under Criterion C.



Photograph 42. House at 1047 Salem Boulevard, Facing North

GAI-23

House

1091 Salem Boulevard

Salem Township

This circa-1910, gable-roofed, 2-story, frame vernacular style house is constructed on an L plan. Built on a continuous concrete foundation, this house is clad in vinyl siding, and its roof is covered with asphalt shingles. A shed-roofed porch supported by wood Doric columns extends the width of the



façade. A rear shed-roofed porch is supported by a single turned wood post. The fenestration throughout consists of modern 1/1 double-hung, vinyl sash windows. Additionally, a modern concrete block chimney is located on the west gable end of the house. Associated with this house is a 1-story, hip-roofed, concrete block garage. The asbestos shingle-clad roof is marked by a projecting hipped roof dormer.

Photograph 43. House at 1091 Salem Boulevard, Facing West

This resource does not possess any connections with important events, trends, or themes in local history. Therefore, it is recommended not eligible for NRHP listing under Criterion A. Likewise, no connection to a significant individual in local history could be made, and as a result, the resource is recommended not eligible for NRHP listing under Criterion B. This heavily-altered house is a common example of typical frame vernacular architecture found throughout the region. As such, this resource is recommended ineligible for NRHP listing under Criterion C.

GAI-24

House

1069 Salem Boulevard

Salem Township

Constructed in the American Foursquare style, this circa-1925, hip-roofed, 2-story house stands on a rusticated concrete block foundation. The exterior of the house is clad in vinyl siding, and the roof is clad in asphalt shingles. Hip-roofed dormers project from the east, south, and west elevations of the roof. The full-width, hip-roofed porch is partially enclosed, and its roof is supported by tapered posts on brick piers. The fenestration is primarily 3/1 double-hung wood sash windows, with some examples of 1/1 present. The windows are mostly trimmed with fixed modern shutters. The main entrance is flanked by sidelights. On the rear of the house, a large modern deck has been added to connect the house to a pool in the back yard.

Associated with the house are two outbuildings. The first is a 1-story, 2-bay frame garage that dates from circa 1925. This building is clad in wood siding trimmed with cornerboards, and its pyramidal roof

is clad in asphalt shingles. Its doors are three-part wood panel doors, which have four lights per segment. The second outbuilding associated with the house is a circa-1980, gambrel-roofed, frame garage/shed. The exterior of this building is clad in T1-11 siding, and the roof is covered in asphalt shingles. There is a man door and a small awning window on the south elevation.



Photograph 44. House at 1069 Salem Boulevard, Facing Northwest

This resource does not maintain any connections to significant historical events or themes in local or regional history and is therefore recommended not eligible for NRHP listing under Criterion A. Likewise, this resource does not have any readily-identifiable associations with significant individuals in local history. As such, it is recommended not eligible for NRHP listing under Criterion B. This altered house has lost integrity through unsympathetic alterations and additions. Additionally, there are a number of better-preserved examples of the American Foursquare style throughout the region. Therefore, this resource is recommended not eligible for NRHP listing under Criterion C.

GAI-25

Michaels Farm

4252 North Market Street

Salem Township

Constructed circa 1880, the main house of the Michaels Farm appears to have originally been a duplex. This 2-story, gable-roofed, frame vernacular house stands on a stone and concrete foundation, is clad in weatherboard trimmed with cornerboards, and has an asphalt shingle-clad gable roof.



Photograph 45. Michaels Farm—Main House, Facing Northeast

The full-width, shed-roofed porch is a replacement of the original porch, and is supported by plain wood posts. The roofline is marked by a molded frieze and rakeboards, and a modern concrete block chimney stands against the gable end of the house. The fenestration consists of 2/4 and 6/6 double-hung wood sash windows; most of which also have modern 1/1 double-hung vinyl sash storm windows on the outside. A 1-story, shed-roofed ell has been appended to the rear of the house.

There are a handful of small-scale agricultural and domestic outbuildings associated with the house. Located opposite the house stands a circa-1965 shed-roofed concrete block storage building/barn and silo. An earthen embankment leads to the sliding wood door at the entrance, and 4-light windows comprise this building's fenestration. Located to the southwest of the house is a gable-roofed, 2-bay, concrete block garage. This building has modern hinged doors, 4-light windows, and exposed rafter tails. Located immediately to the rear of the house are another concrete block garage and a small building that may serve as a smokehouse. The garage behind the house is a 1-bay replica of the 2-bay garage located to the southwest of the house, and has the same features and design. This building, as with the 2-bay garage, was likely constructed in the 1960s. The small frame smokehouse building is clad in drop siding and has a small flue piercing the roof. Further to the west of the house stands a circa-1965 concrete block equipment storage shed. This gable roofed building has three closed bays, as well as an open shed roofed extension. Near this outbuilding stands a wood-framed, shed-roofed storage building also dating from the late 20th century.



Photograph 46. Michaels Farm—Overview,
Facing South-Southwest

While the main house on this property dates from the 19th century, the remaining outbuildings were constructed in the late 20th century. As a result, these buildings do not collectively demonstrate an association with significant farming practices of the 19th and early 20th centuries. Therefore, this resource is recommended not eligible for NRHP listing under Criterion A. No information could be located that connects this resource to a significant individual in local or regional history. As such, this resource is recommended not eligible for NRHP listing under Criterion B. While the main house in this complex maintains elements of its architectural integrity, it does not stand as a hallmark of late 19th-century vernacular architecture in the area. Additionally, the outbuildings are of recent construction and do not possess the requisite architectural significance for NRHP listing. Therefore, this resource is collectively recommended ineligible for NRHP listing under Criterion C.

GAI-26

House (Red Brick Studios)

1405 Berwick-Hazleton Highway (SR 93)

Nescopeck Township

Constructed circa 1880, this resource is a 2-story, gable-roofed, vernacular brick house with elements of the Gothic Revival style, built on a modified T plan. This house 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 47. House at 1405 Berwick-Hazleton Highway—Main House, 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. 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. Located to the east of the house and opposite the modern garage is an early 20th-century wood framed garage. 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.



Photograph 48. House at 1405 Berwick-Hazleton Highway—Overview with Outbuildings, Facing Northeast

The extant collection of buildings at this property do not definitively convey the history of farming practices at this location in the late 19th and early 20th 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 19th 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.



Photograph 49. House at 1405 Berwick-Hazleton Highway—Garages, Facing North

GAI-27

*Pennsylvania Railroad-Sunbury Line/Delaware & Hudson Railroad
Along Susquehanna River in Vicinity of River Road and SR 239
Nescopeck Township*

Originally a Pennsylvania Railroad route constructed following the Civil War as part of a series of short routes in the region to interchange with the Reading Company, Delaware Lackawanna & Western, and other northeastern anthracite-hauling roads, the Sunbury Line historically ran from Sunbury to Wilkes-Barre. This line was operated by the Pennsylvania Railroad until 1968, when the PRR was merged with the New York Central to form the Penn Central. Following Penn Central's bankruptcy, Congress decided to grant trackage rights to the Delaware & Hudson Railroad. This move extended the Delaware & Hudson's southern terminus from Wilkes-Barre to Sunbury, stretching as far north as Albany and Montreal. Congress believed that new trackage rights would strengthen the Delaware & Hudson's position as a bridge route carrier. In 1976, most trackage in the northeast was conveyed to the Consolidated Rail Corporation. Trackage rights were gained on three major routes as a result.

In the vicinity of the project area, this railroad line generally runs along the floodplain on the east bank of the Susquehanna River, often paralleling River Road and SR 239, in the vicinity of Nescopeck and Wapwallopen. Currently, the railroad consists of a single set of steel rails on wood ties, constructed on

a stone ballast. There are several at-grade highway crossings in the project vicinity. No ancillary features, such as depots or yards, were identified within the study area.



Photograph 50. Pennsylvania Railroad-Sunbury Line/Delaware and Hudson Railroad, Facing South

This railroad is significant for its role in the development and growth of the Pennsylvania Anthracite region. While only a small connector line, this railroad brought together important shipping centers such as Sunbury, Wilkes-Barre, and larger cities further away on

major connecting routes from these local shipping centers. Because of this historical association, this resource is recommended eligible for NRHP listing under Criterion A. No information could be located that identifies a connection between this resource and a significant individual in local or regional

history. As such, this resource is recommended not eligible for NRHP listing under Criterion B. This railroad does not possess any unique or distinctive engineering features in the vicinity of the project area. Since this is only a small, single-track configuration with no architecturally significant associated structures or buildings (e.g., bridges, yards, depots, etc.), it is recommended not eligible for NRHP listing under Criterion C.

GAI-28

Barn and Trailer

998 Berwick-Hazleton Highway (SR 93)

Nescopeck Township

This property currently contains a modern mobile home and a modern pole building, but it also contains a circa-1900 heavy timber-framed barn and a circa-1900, wood-framed outbuilding of unknown function. The barn, which is built in the vernacular Three Gable style, is constructed on a modified T plan. It is built on a stone foundation and is clad in vertical wood siding. The roof is clad in V-crimp metal. There are two small additions on the barn; the first is a shed-roofed open equipment storage bay built on its south elevation, and the second is a small, one-room, gable-roofed addition that serves as a



connector to the attached, metal-clad grain silo. This yurt-roofed silo also dates from the early 20th century. In addition to this barn, there is a small, wood-framed, hip-roofed outbuilding located near the current mobile home site. This building is clad in drop siding and has an asphalt shingle roof. Its historical function is uncertain.

Photograph 51. Barn and Trailer at 998
Berwick-Hazleton Highway, Facing Southwest

The main house historically associated with this property is no longer extant. Additionally, a number of other domestic and agricultural

outbuildings that were likely associated with this property have also been demolished. Based on this loss of integrity, the property does not convey an association with significant agricultural practices of the area, and is therefore recommended not eligible for NRHP listing under Criterion A. No information could be located that connects this property to a significant individual in local or regional history. As such, this resource is recommended not eligible for NRHP listing under Criterion B. The extant buildings greater than 50 years of age are unexceptional examples of commonly-found vernacular architecture from the early 20th century. Therefore, it is recommended that this resource does not possess the requisite significance for NRHP listing under Criterion C.

GAI-29

Farm

950 Berwick-Hazleton Highway (SR 93)

Nescopeck Township

Built circa 1870, the main house of this property is a 2-story, gable-roofed brick house built in the Greek Revival style. The foundation and exterior walls are common bond brick, and the gable roof is clad in composition shingles and is trimmed with a molded cornice, frieze, rakeboards, and cornice returns. Two brick chimneys constructed during different period are located on either gable end. The front porch dates from the early 20th century, and consists of a hipped roof supported by tapered posts on brick piers, with a shingle-clad half wall. The fenestration consists of modern 1/1 double-hung vinyl sash windows, with triangular attic-story lights on the gable ends. The windows have cut stone lintels and sills. A 2-story, shed-roofed addition is currently under construction. It is appended to the 2-story rear

ell, which is constructed in the same style and materials as the main block of the house. Additionally, a previous 2-story addition was placed at the rear of the ell, likely within the last 20 years.

Associated with this property are several outbuildings. Immediately to the rear of the main house stands a 2-story, gambrel-roofed barn constructed with a concrete base and a shingle-clad second story. This building has gabled wall dormers on either side, and its entrance is located on the east elevation. Further to the north stands a modern metal-shell pole building. This gable-roofed building has two open bays on the east elevation and fixed windows on its side elevations. Beyond the pole building stands a larger dairy barn, which is constructed in two distinct sections. The western section is constructed of concrete block and is adjoined by a circa-1950 metal-skin silo, and the eastern section is constructed with a wood frame and is clad in horizontal wood siding. A 1.5-story, shed-roofed addition

is located on the north elevation of the western end, opposite an open shed-roofed storage area, and a small gable-roofed addition is located on the eastern elevation of this barn. Further to the north stands a circa-1960, gable-roofed storage building.



Photograph 52. Farm at 950 Berwick-Hazleton Highway—Main House, Facing Northwest



Photograph 53. Farm at 950 Berwick-Hazleton Highway—House and Outbuildings, Facing Northwest

The collection of buildings at this property does not clearly convey a sense of the historical role of this farm. Dating from various time periods, the buildings do not exhibit a clearly-defined role for this farmstead. Additionally, no documentary evidence could be located to establish a connection with significant events or themes in local history. Therefore, this resource is recommended not eligible for NRHP listing under Criterion A. Likewise, no information connecting this property to significant individual could be located. Therefore, this resource is recommended not eligible for NRHP listing under Criterion B. The main house of this property exhibits some characteristics of the Greek Revival style. However, recent large-scale additions have compromised its architectural integrity. Additionally, the vernacular domestic and agricultural outbuildings have lost integrity and are not exceptional examples of their types in the region. Therefore, this property is recommended not eligible for NRHP listing under Criterion C.

GAI-30

House

944 Berwick-Hazleton Highway (SR 93)

Nescopeck Township

Built circa 1870, this 2-story, gable-roofed brick house is a vernacular variant of the Georgian style. The foundation and exterior of this L-shaped house are constructed of common bond brick, and a 2-story, shed-roofed addition to the rear ell is clad in weatherboard. The gable roof is clad in asphalt shingles and is marked by a molded cornice with gable end returns. The fenestration throughout consists of modern 1/1 double-hung vinyl sash windows, with the exception of 4-light attic story windows. The window openings are marked by cut stone lintels and sills. A small gable-roofed portico on the west elevation of the house marks the location of a side entry. A modern wood ramp leads to the open front



porch, which has no roof. Located to the rear of the house is a small brick gable-roofed outbuilding of unknown function. This building is partially obscured by a privacy fence built to surround the back yard.

Photograph 54. House at 944 Berwick-Hazleton Highway, Facing Southwest

This resource does not maintain any connections to significant historical events or themes in local or regional history and is therefore recommended not eligible for NRHP listing under Criterion A. Likewise, this resource does not possess any associations

with significant individuals in local history. As such, it is recommended not eligible for NRHP listing under Criterion B. This house has lost integrity through unsympathetic alterations and additions, namely the addition of a frame section to the rear ell and the replacement of original windows. Additionally, there are a number of better-preserved examples of late-19th-century masonry vernacular architecture throughout the area. Therefore, this resource is recommended not eligible for NRHP listing under Criterion C.

GAI-31

House

906 Berwick-Hazleton Highway (SR 93)

Nescopeck Township

This circa-1900, 2-story, gable-roofed, frame vernacular residence is built on a concrete foundation, is clad in weatherboard siding, and has an asphalt shingle-clad roof. Based on form and massing, this building may have at one time served as a multiple-unit dwelling, although no documentary evidence could be located to confirm its role as such. The façade of this building is marked by a modern shed-roofed portico supported by decorative metal posts. The fenestration throughout consists of modern 1/1 double-hung vinyl sash windows, with the exception of a small, 1-story rear addition that has modern 6/1 windows. Additionally, the gable ends have triangular attic story lights. In addition to the small gable-roofed rear ell, there is a non-original 1-story wing on the side of this building. It is a modern, shed-roofed wing that dates from circa 1960. Exterior trim on the house includes a molded cornice and rakeboards, cornerboards, and a water table. A single gable end brick chimney passes through the overhanging eave.



Photograph 55. House at 906 Berwick-Hazleton Highway, Facing Southeast

No evidence could be located that establishes any connections between this resource and significant historical events or themes in local or regional history. Therefore, this resource is recommended not eligible for NRHP listing under Criterion A. Likewise, this resource does not possess any associations with significant individuals in local history. As such, it is recommended not eligible for NRHP listing under Criterion B. This house stands as an unexceptional example of a common regional building preference. Additionally, the building appears to have been modified to a single

dwelling from perhaps a multi-unit dwelling. These factors combine to result in a recommendation that this resource is not eligible for NRHP listing under Criterion C.

GAI-32

House

808 Berwick-Hazleton Highway (SR 93)

Nescopeck Township

Built circa 1910, this 2-story, gable-roofed frame vernacular house is built on a modified L plan. The house is built on a concrete block foundation, is clad in aluminum siding, and has an asphalt shingle roof. A modern porch stoop covered by an aluminum awning with metal posts marks the main entrance, and a shed-roofed porch with metal posts and rails leads to a side entrance at the ell. Fenestration includes 2/2 and 1/1 double-hung sash windows, many of which are modern replacements. Some windows are topped by aluminum awnings. A 1-story, shed-roofed addition is

located at the rear of the house. A modern concrete block exterior chimney is located on the west elevation of the house. Outbuildings include a gable-roofed, 3-bay concrete block garage that dates from circa 1950 and a small, shed-roofed, wood-framed privy.



Photograph 56. House at 808 Berwick-Hazleton Highway, Facing East

No information connecting this resource to any significant events, themes, or individuals in

local history could be located. As such, this resource is recommended not eligible for NRHP listing under Criteria A or B. This heavily-altered house and nondescript outbuildings do not possess the requisite architectural significance necessary for NRHP listing. Therefore, this resource is recommended not eligible for NRHP listing under Criterion C.

GAI-33

Farm

783 Berwick-Hazleton Highway (SR 93)

Nescopeck Township

Dating from circa 1880, the main house of this farm complex is a 2-story, gable-roofed, masonry vernacular residence with elements of the Greek Revival style built on an L plan. Constructed on a stone foundation, the exterior walls of the house are common bond brick, and the gable roof is clad in asphalt shingles. The roof is trimmed with a molded frieze and cornice returns. The recently-constructed full-width front porch has a shed roof supported by turned posts with decorative brackets and a lattice balustrade. The windows throughout are primarily replacement 1/1 double-hung sashes trimmed with lintels and sills, and the gable ends have triangular attic story windows. An exterior brick chimney is located on the east elevation of the house.

There are several outbuildings associated with this property. The first is a circa-1910, gambrel-roofed, timber-framed, Three Gable barn. This T-shaped barn is built on a stone foundation and is clad in vertical wood siding. Its metal-clad roof is punctuated by four cupola vents. Its fenestration includes 6/6 double-hung sash windows. A mid-20th-century silo stands adjacent to the barn, and a circa-1950 concrete block wing connects the barn to a circa-1930, gable-roofed stone outbuilding that may have once served as a milk processing building. This building has an asphalt shingle-clad roof with flared eaves and a gable roof vent. The gable ends are clad in vertical wood siding. To the north of the barn is a group of several modern structures including a shed-roofed, open bay, equipment shed with metal siding and several modern grain storage bins. Also in the complex is a modern metal-sided pole building, which is located to the northeast of the house, and a small wood-framed building that may have served as a spring house.



Photograph 57. Farm at 783 Berwick-Hazleton Highway, Facing Northwest

No evidence that conclusively ties this resource to any significant events in local history could be identified. Additionally, the collection of buildings at this farm has changed over time, as many of the original buildings have been replaced by modern domestic and agricultural buildings that serve in capacities not consistent with the farm's history. Also, there are a number of other farm complexes throughout the region that have a more intact assemblage of outbuildings and better reflect late 19th- and early 20th-century farming practices of the Susquehanna valley. For these reasons, this resource is recommended not eligible for NRHP listing under Criterion A. No evidence could be located that connects this resource to any significant individuals in local history. As such, this resource is recommended not eligible for NRHP listing under Criterion B. A number of better-preserved examples of late 19th-century masonry vernacular farm houses exist throughout the area. Likewise, while several of the outbuildings retain a modicum of integrity, they do not stand out as exceptional examples of vernacular agricultural architecture in the area. This, coupled with the loss of integrity through additions and alterations to the buildings, as well as construction of modern infill, results in this resource being recommended not eligible for NRHP listing under Criterion C.

GAI-34

House

175 East Cherry Road (TR 379)

Nescopeck Township

Dating from circa 1930, this 1-story, gable-roofed, frame vernacular house is constructed on an L plan. The house is built on a concrete block foundation, is clad in aluminum and T1-11 siding, and has an asphalt shingle roof. The original form of the house has been greatly altered by two large additions. The first is a gable front addition that expanded the width and height of the house, and the second was a smaller ell addition on the rear. Additionally, the shed-roofed front porch has been enclosed, the 1/1

double-hung vinyl sash windows are recent replacements, and a modern concrete block chimney has been added to the side of the house. Associated with this house is a small modern wood-framed shed. This wood-clad, gable-roofed outbuilding is located to the rear of the house.



Photograph 58. House at 175 East Cherry Road, Facing Southwest

This house does not maintain any associations with significant events, themes, or individuals in local history. As such, it is recommended not eligible for NRHP listing under Criteria A or B. This heavily-altered house does not possess the necessary architectural significance for NRHP listing and is therefore recommended not eligible under Criterion C.

GAI-35

Farm

212 East Cherry Road (TR 379)

Nescopeck Township

This small farmstead is anchored by a 2-story, circa-1890, frame vernacular residence built on a modified cross plan. Constructed on a stone and concrete foundation, the exterior of this house is clad in asbestos shingle and vinyl siding. The roof, which has both gable and jerkinhead forms, is clad in asphalt shingles with pent gable end returns. These gable ends are clad in wood shingles, and the façade features a projecting polygonal bay. The hipped roof of the porch is supported by plain wood posts with an asbestos shingle-clad half wall. The windows throughout are modern 1/1 double-hung vinyl sashes, and the entrance doors on the front porch are topped by transom windows. Associated with this house is a series of 20th-century outbuildings. Immediately to the rear of the house stand three long concrete block poultry shelters. These shed-roofed buildings date from circa 1960. Two of the three are constructed of concrete block, while the third is a wood-framed building on concrete block piers clad in vertical wood siding. Between these buildings and the house stands a small circa-1950 wood-framed shed. This gable-roofed building is clad in plywood and has a 5V-crimp metal roof. Further to the east of the main house stands a circa-1960, gable-roofed, wood-framed barn. This barn is built on a concrete foundation, is clad in vertical wood siding, and has a roof capped by V-crimp metal.

This small farmstead no longer maintains its ability to convey its historic function, as none of its original outbuildings survives. The extant mid-20th-century outbuildings do not possess associations with significant events or themes. As a result, this resource is recommended not eligible for NRHP listing under Criterion A. No evidence linking this property to any significant individuals in local history could



be identified. As such, this resource is recommended not eligible for NRHP listing under Criterion B. The buildings on this property do not have sufficient architectural significance or integrity to warrant NRHP listing. Therefore, this resource is recommended not eligible under Criterion C.

Photograph 59. Farm at 212 East Cherry Road, Facing Northeast

*GAI-36 through 45
Wapwallopen Historic District
454-480 South River Street
Wapwallopen*

The town of Wapwallopen developed in the mid-19th century on the eastern bank of the Susquehanna River, where the Wapwallopen Creek empties. The primary driving factors for settlement in this area were the burgeoning transportation routes, including the North Branch Pennsylvania Canal, and the development of the DuPont Powder Works. The latter was the driving economic force in the area until its closure in 1915. Subsequently, local residents turned to other local industry and transportation to sustain the local economy.

The extant collection of buildings in Wapwallopen range from commercial to residential, and many are very well preserved. For the purposes of the current study, ten resources located along South River Street were defined as within the APE for the project. While these resources were inventoried and photographed, there remain a number of additional resources located outside the current study area that would certainly 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 19th-century construction.

As stated above, the ten 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. 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 19th and early 20th centuries, the resources that comprise the potential Wapwallopen Historic District 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. Further study is recommended to fully delineate the potential historic district boundary and to accurately inventory the sum total of contributing resources.



Photograph 60. House at 454 South River Street, Facing South



Photograph 61. House at 458 South River Street, Facing South



Photograph 62. House at 476 South River Street, Facing Northeast



Photograph 63. House at 480 South River Street, Facing Northeast

GAI-46
House (Opossum Lodge)
598 River Road (SR 3036)
Nescopeck Township

This circa-1920 frame vernacular house stands 1 story tall on concrete block piers, along the bank of the Susquehanna River. The house is clad in drop siding trimmed with cornerboards, and its gable roof is clad in rolled asphalt. The porch is located within a shed-roofed extension of the main roof, facing the river. The windows are not visible, as they are enclosed by locked wood shutters. A small modern shed is located to the west of the house.



Photograph 64. House at 598 River Road, Facing Northeast

This resource does not possess any connections to significant events, themes, or individuals in local history. As such, it is recommended not eligible for NRHP listing under Criteria A or B. This house is a typical example of a commonly-found vernacular style

throughout the region. There are no unique or distinctive architectural features on this resource. Therefore, it is recommended not eligible for NRHP listing under Criterion C.

GAI-47
House
546 River Road (SR 3036)
Nescopeck Township

The 1-story, frame vernacular house located at 546 River Road was constructed circa 1920. This house is constructed on a raised concrete block foundation, is clad in vinyl siding, and has an asphalt shingle-clad, hip-on-hip roof that resembles a mansard roof. A flat-roofed dormer extends from the roof on the principal elevation. A 1-story, shed-roofed ell with an attached modern deck is located on the rear (river side) of the house. A shouldered exterior concrete chimney with stone veneer stands on the



west elevation of the house. The fenestration consists of 3/1 and 1/1 double-hung sash and awning windows, all with wood frames. Additionally, modern 1/1 double-hung sash vinyl storm windows have been added to the exterior. The principal entrance is marked by a concrete stoop covered by a gable-roofed hood trimmed with cornice returns, brackets, and saw tooth trim, and the porch deck is surrounded by a modern wood balustrade.

Photograph 65. House at 546 River Road,
Facing Northeast

This resource does not possess any connections to significant events, themes, or individuals in local history. Therefore, it is recommended not eligible for NRHP listing under Criteria A or B. This heavily-altered house is an unexceptional example of early 20th-century vernacular style in the area. Additionally, there are no unique or distinctive architectural features or construction methods associated with this resource. Therefore, it is recommended not eligible for NRHP listing under Criterion C.

GAI-48

House

520 River Road (SR 3036)

Nescopeck Township

Built on a raised concrete block pier foundation, the house at 520 River Road is a circa-1920, gable-roofed, 1.5-story, frame vernacular residence. The exterior of this house is clad in drop siding trimmed with cornerboards, and the roof is clad in asphalt shingles. The enclosed front porch is situated under



a shed-roofed extension of the main roof and faces the river. Additionally, a hip-roofed wing is located on the west elevation of this house. The fenestration consists of 3/1 double-hung, wood sash windows, with metal-framed storm windows on the exterior. A brick interior chimney rises from the ridge of the roof.

Photograph 66. House at 520 River Road,
Facing Northwest

No information could be located that connects this resource to any significant events, themes, or individuals in local history. As such, it is recommended not eligible for NRHP listing under Criteria A or B. While generally maintaining its integrity, this house stands as an unexceptional example of a commonly-found variant of early 20th-century vernacular style in the area. Additionally, there are no unique or distinctive architectural features or construction methods associated with this resource. Therefore, it is recommended not eligible for NRHP listing under Criterion C.

GAI-49

House

510 River Road (SR 3036)

Nescopeck Township

The house at 510 River Road is a circa-1920, gable-roofed, 1.5-story, frame vernacular residence built on a raised concrete block pier foundation. The exterior of this house is clad in drop siding trimmed with cornerboards, and the roof is clad in asphalt shingles. The roof has exposed rafter tails. The enclosed front porch is situated under a shed-roofed extension of the main roof and faces the river. The fenestration consists of 3/1 double-hung, wood sash windows, with vinyl-framed storm windows on the exterior.



Photograph 67. House at 510 River Road, Facing Northeast

Information connecting this resource to significant events, themes, or individuals in local history could not be located for this resource, and as a result, it is recommended not eligible for NRHP listing under Criteria A or B. While generally maintaining its integrity, this house stands as an unexceptional example of a commonly-found variant of early 20th-century

vernacular style in the area. Additionally, there are no unique or distinctive architectural features or construction methods associated with this resource. Therefore, it is recommended not eligible for NRHP listing under Criterion C.

GAI-50

Farm

811 River Road (SR 3036)

Nescopeck Township

The circa-1880 main house of this farm complex is a vernacular variant of the Georgian style, standing 2 stories tall and built on an L plan. Built on a stone foundation, the house may be constructed of brick (given its form and stylistic features), but its original exterior material has been very recently covered by vinyl siding. The centered entrance is marked by a molded door surround with a transom and sidelights, which is typical of Georgian style residences. The roof is clad with recently-installed V-crimp roofing. An incised side porch on the rear ell is topped by a shed roof supported by turned wood posts



and has modern decking. The fenestration throughout consists of modern 8/8 double-hung, vinyl sash windows, with modern triangular attic story lights on the gable ends. An original corbelled brick chimney is located on the west elevation, and a modern brick chimney stands against the exterior of the house on its east gable end. A modern picnic pavilion built on a concrete pad sits just to the east of the house.

Photograph 68. Farm at 811 River Road—Main House, Facing Northwest

Associated with this house are several domestic and agricultural outbuildings. Located to the northwest of the main house and in close proximity is a circa-1920, gable-roofed, wood-framed garage/equipment storage building. This building is clad in weatherboard and has an asphalt shingle-clad roof. The main entrance is marked by a board and batten door on a rolling track. Further to the rear of the house stands a large, wood-framed, gable-roofed barn that dates from circa 1920. This barn was originally built in an L configuration, with an earthen ramp approach, but has subsequently been altered by a modern addition that nearly doubles the size of the original structure, resulting in a U shape. This barn is built on a concrete block foundation and is clad in wood siding. The roof of the original section of the barn is clad in V-crimp metal with four cupola vents, and the modern section of the barn is topped by asphalt shingles. Located to the southeast of the barn is a 1-story, gable-roofed, concrete block building that appears to function as a dairy. This building is partially obscured by a modern modular home located on the property.



Photograph 69. Farm at 811 River Road—
Outbuildings, Facing North

This property does not display a strong association with the historical farming practices of the region in the late 19th and early 20th centuries. The extant buildings on the property have been drastically altered and now

convey a sense of the *modern* farming practices of the area rather than those of its historical time period. Additionally, no documentary evidence connecting this property to any significant events could be located. Therefore, this resource is recommended not eligible for NRHP listing under Criterion A. Likewise, no information could be located that connects this property to any significant individuals in local history. Therefore, this resource is recommended not eligible for NRHP listing under Criterion B. While the buildings on this property are in excellent condition and are very well maintained, the extent of modern alterations has diminished their architectural integrity and their ability to convey historical and architectural significance. While this complex stands as one of the best maintained in the area, there are a number of other farmsteads in the area that, while in worse condition, better convey their original architectural significance. As a result, this resource is recommended ineligible for NRHP listing under Criterion C.

GAI-51

Quarry

River Road (SR 3036) Vicinity
Nescopeck Township

This quarry site, currently operated by Barletta Materials and Construction, Inc., dates from circa 1930. The operation focuses on providing stone and other materials used in construction. A handful of service buildings and heavy equipment is located on this site, most dating from circa 1970 to present. Dotting the property are a number of open quarry pits with connecting pathways to allow passage of hauling vehicles and machinery. No notable historic-era features were observed.

This quarry is one of the less prominent mineral extraction facilities in the region. No information could be located that ties this quarry to any significant events in local history. Since this site played only a minor role in the area's industry and economy (when compared to other extraction facilities such as the Powder Hole), it is recommended not eligible for NRHP listing under Criterion A. No connections to significant local individuals could be made for this resource. As a result, it is recommended not eligible for NRHP listing under Criterion B. The extant buildings and machinery at this site does not possess any unique or distinctive architectural or engineering features. These structures are examples of

commonly-found components of mineral extraction facilities found throughout the region. As such, this resource is recommended ineligible for NRHP listing under Criterion C.



Photograph 70. Quarry along River Road,
Facing Northeast

*GAI-52
(135820)
Bridge
North Market Street
Salem Township*

This small bridge, which is technically a culvert, dates from 1937. It consists of a simple concrete span which passes over Walker Run, north of Beach Haven. Poured concrete wing walls channel the water of Walker Run beneath a wide single lane of traffic on North Market Street. Low, poured concrete knee walls with metal pipe guard rails run along the edges of the right-of-way.



Photograph 71. Bridge on North Market Street,
Facing North

This small structure does not maintain any associations with significant events, themes, or individuals in local or regional history. This simple span culvert did not play a significant role in the area's transportation history. Therefore, this resource is recommended ineligible for NRHP listing under Criteria A or B. This structure does not possess any unique or distinctive architectural or engineering features. There are a number of better examples of 1930s-era concrete spans found throughout the state. As a result, it is recommended ineligible for NRHP listing under Criterion C.

V. Summary and Conclusions

GAI conducted a Phase IA cultural resources reconnaissance of an expanded project area (Areas 6, 7, 8 and the Confers Lane Parcel) for the proposed Berwick, PA NPP-1. This investigation represents GAI's second Phase IA study for the project, the first consisting of a Phase IA reconnaissance of the proposed West and Southeast Alternatives (GAI 2007). The current project APE consists of approximately 511-acres located between the previously-surveyed West Alternative and the North Branch Susquehanna River, as well as the project viewshed for architectural and historical resources. This Phase IA study included background research, an architectural and historical survey, and a geomorphological and archaeological field reconnaissance. Table 7 presents a summary of Phase IA results by test area.

Table 7. Phase IA Summary by Test Area

Test Area	Total Acres (approx)	High-Moderate Potential (acres/%)	Low Potential (acres/%)	Disturbed/ No Potential (acres/%)	Previously Recorded Cultural Resources	Possible Sites	Surveyed Architectural Resources
Area 6	174	87.9 (37%)	37.4 (48%)	48.3 (25%)	1*	--	4**
Area 7	38	34.1 (14%)	0.2 (0.3%)	3.2 (2%)	2*	0	3**
Area 8	272	103.1 (44%)	34.1 (44%)	135.2 (69%)	6*	1	4**
Confers Lane	27	10.9 (5%)	6.6 (8%)	9.9 (5%)	0	1	0
Total	511	236 (46%)	78 (15%)	197 (39%)	7	2	5

*North Branch PA Canal extends through Areas 6, 7 and 8; **three resources (North Branch PA Canal, Bloomsburg Division of the DL&W Railway and Susquehanna and Tioga Turnpike (US Route 11) extend through Areas 6, 7 and 8

Phase IA background research indicated that 24 prehistoric archaeological sites and five architectural/historical resources have been previously recorded within the project vicinity. Of these, six sites (36LU0015, 36LU0016, 36LU0048, 36LU0049, 36LU0050 and 36LU0051) and one architectural resource (the North Branch Pennsylvania Canal [141673]) are mapped within the project footprint (see Table 7). The six sites represent Late Archaic through Late Woodland prehistoric occupations located on the low terrace/floodplain adjacent to the Susquehanna River. One site (36LU0051) is mapped within Area 7 and the remaining five are situated in Area 8. Four of these sites are NRHP-listed or eligible. The North Branch Pennsylvania Canal (141673), also located on the low terrace/floodplain, extends through Areas 6, 7 and 8. A portion of this resource documented south of the project area has been recommended NRHP eligible.

Geomorphological assessment of the project area concluded that archaeological sites identified in upland locations, west of US Route 11, will be near-surface in nature. Low terraces and floodplain settings along the river, east of US Route 11, may contain both near-surface and deeply buried cultural resources.

Based on the results of geomorphological and archaeological reconnaissance the project area includes 236 acres (46 percent) of high to moderate archaeological potential, 78 acres (15 percent) of low archaeological potential and 197 acres (39 percent) of disturbance/no archaeological potential (see Table 7). As illustrated in Table 7, the bulk of the project area's high to moderate potential acreage (e.g. undisturbed, relatively level, well-drained soils) is found in Area 8 (103.1 acres/44 percent) and Area 6 (87.9 acres/37 percent). Importantly, approximately two-thirds (67 percent/158 acres) of the total high to moderate potential localities occur in low terrace/floodplain settings—Area 6 (31 acres), Area 7 (34 acres) and Area 8 (93 acres)—with the remainder (33 percent/78 acres) located in uplands. The more limited areas characterized as having low archaeological potential (e.g. wetlands and steep

slopes) are also found predominantly in Areas 6 and 8. Over two-thirds (69 percent/135 acres) of the area identified as disturbed/no archaeological potential lies within Area 8; these areas largely represent development of the existing SSES facility.

Phase IA archaeological reconnaissance identified two possible unrecorded historic archaeological sites within the project APE. These localities include a possible former house location in Area 7 and the Shortz House Site (surface depression and low-density artifact scatter) in the Confers Lane Parcel.

GAI's architectural survey of the project viewshed identified 52 architectural and historical resources over 50 years of age within the project viewshed, 10 of which are recommended NRHP-eligible. Five of these resources (fieldstone walls, Beach Grove Cemetery, and portions of the North Branch Pennsylvania Canal, Bloomsburg Division of the DL&W Railway, and The Susquehanna and Tioga Turnpike/US Route 11) are located within the project footprint.

In addition to these architectural resources, GAI identified one potential cultural property (Council Cup) within the project viewshed. This property, which represents a Native American meeting place and overlook, may require evaluation and documentation as a traditional cultural property (TCP) during subsequent archaeological investigations. [Note that this property was also noted in GAI's previous Phase IA letter report (GAI 2007).]

VI. Recommendations for Further Work

Archaeological Investigations

GAI recommends consultation with the PHMC-BHP to discuss the scope of further archaeological investigations within the project area. Based on the results of Phase IA studies, a general, preliminary workplan is presented here and summarized in Table 8.

GAI recommends systematic Phase IB subsurface archaeological investigations in portions of the project area assessed as having a high to moderate archaeological potential (236 acres/46 percent). It is expected that investigations of high to moderate potential upland localities (approximately 78 acres) will consist of systematic shovel testing (at 15-meter intervals) to identify near-surface archaeological resources. As illustrated in Table 8, all test localities except Area 7 contain upland areas subject to shovel testing. Because of the potential for deeply buried archaeological resources as well as near-surface sites on low terrace/floodplain settings adjacent to the river, subsurface investigations in these localities (approximately 158 acres) will incorporate both systematic shovel testing and a program of deep testing. Deep testing may consist of hand-excavated test units and/or backhoe trenching. Portions of Areas 6, 7 and 8 will require both shovel testing and deep testing, with the largest acreage (93 acres) occurring in Area 8 (see Table 8). Close-interval shovel testing (e.g. 3- to 5-meter intervals) may be required to investigate the two possible historic archaeological site locations identified during archaeological reconnaissance in Areas 7 and Confers Lane.

Table 8. Preliminary Recommendations for Further Work by Test Area

Test Area	Total Acres (approx)	High-Moderate Potential Acres (approx)	Shovel Testing Only (acres)	Shovel Testing and Deep Testing (acres)	Redefinition of Previously Recorded Sites	Close-interval Shovel Testing of Possible New Sites
Area 6	174	88	57	31	--	--
Area 7	38	34	--	34	1 site	1 site
Area 8	272	103	10	93	4 sites	--
Confers Lane	27	11	11	--	--	1 site
Total	511	236	78	158	5 sites	2 poss. sites

Phase IB survey will also redefine boundaries of the previously-recorded archaeological sites mapped within the project area (Areas 7 and 8). In the event that these sites cannot be avoided by proposed project construction, further archaeological investigations (i.e., Phase II) may also be required to evaluate their NRHP-eligibility.

Portions of the project area considered to have a low archaeological potential (78 acres/15 percent) will generally be excluded from systematic subsurface testing. Judgmental testing is recommended for select low potential areas, particularly along the edges of low-lying, former stream channels adjacent to the river (Areas 7 and 8).

Disturbed portions (197 acres/39 percent) of the project APE are considered to have no archaeological potential will be eliminated from further archaeological investigations.

It is recommended that Areva and UniStar discuss this approach with the PHMC-BHP prior to Phase IB investigations.

Architectural and Historical Investigations

For architectural and historical resources, GAI first recommends completion of PHRS forms and consultation with the PHMC-BHP to finalize the definition of the radial limits within which further study will be conducted. GAI recommends that further study be conducted to refine and conclusively recommend the NRHP eligibility status for the following resources located in the immediate vicinity of the project:

- GAI-02—Stone Walls
- GAI-03—Union Reformed and Lutheran Church
- GAI-08—Heller Farm (No property access available at the time of Phase IA survey)
- GAI-36 through GAI-45—Wapwallopen Historic District

Additionally, further work is recommended to conclusively define the recommended NRHP boundaries for the ten (10) resources recommended eligible for NRHP listing. Following concurrence on complete eligibility recommendations by the PHMC-BHP, GAI recommends preparing a Criteria of Effects Evaluation Report to assess potential project effects to the NRHP-eligible resources.

References

- Beers, D.G.
1873 *Atlas of Luzerne County, Pennsylvania, Salem Township.* A. Pomeroy & Co., Inc. Philadelphia.
- Bohlin, Jeffrey A.
1995 *Phase I Archaeological Survey for the Baluski Fill Area, Salem Township, Luzerne County, Pennsylvania.* Prepared for Ross Consulting Engineers by Appalachian Archaeological Research, Montoursville, Pennsylvania.
- Bush, R.D.
1981 *Soil Survey of Luzerne County, Pennsylvania.* USDA-Soil Conservation Service. Govt. Printing Office, Washington D.C.
- C.S & E and Pan Cultural Associates, Inc.
2005 *Phase I/II Archaeological Investigation of Sites 36LU191 and 36LU0270, Salem Township Act 537 Sewage Facilities Plan Update Revision, Salem Township, Luzerne County, Pennsylvania (ER# 02-0287-079-G).* Prepared for Salem Township by C.S. & E. Inc. and Pan Cultural Associates, Inc. .
- GAI Consultants, Inc. (GAI)
2007 *Final Letter Report, Phase IA Cultural Resources Reconnaissance of PPL Lands in the Vicinity of Susquehanna Steam Electric Station, Luzerne County, Pennsylvania.* Prepared for UniStar Nuclear Development, LLC by GAI Consultants, Inc., Homestead Pennsylvania.
- Hayes, D.R., D.C. Roper, J. Schuldenrein, and W.R. Stinson
1981 *Archaeological Investigations at the Susquehanna SES: The Susquehanna SES Floodplain.* Prepared for the Pennsylvania Power and Light Company by Commonwealth Associates Inc., Jackson, Michigan.
- McIntyre, Jamie
1979 *The Knouse Site: An Historical Site in Luzerne County, Pennsylvania.*
- National Park Service
1997 *National Register Bulletin 21-Defining Boundaries for National Register Properties.* U.S. Department of the Interior, Washington DC.
- 1998 *National Register Bulletin 15-How to Apply the National Register Criteria for Evaluation.* U.S. Department of the Interior, Washington DC.
- Pennsylvania Historical and Museum Commission-Bureau for Historic Preservation (PHMC-BHP)
1991 *Cultural Resource Management in Pennsylvania: Guidelines for Archaeological Investigations.* Harrisburg.
- PPL Susquehanna, LLC
2006 Appendix E: Applicant's Environmental Report—Operating License Renewal Stage, Susquehanna Steam Electric Station. Prepared for the U.S. Nuclear Regulatory Commission by PPL Susquehanna, LLC.

Schuldenrein, Joseph

1981 *Management Summary, Archaeological Investigations at the Susquehanna Steam Electric Station, The Susquehanna SES Floodplain*. Prepared for the Pennsylvania Power and Light Company by Commonwealth Associates Inc., Jackson, Michigan.

Sevon, W.D.

2000 *Physiographic Provinces of Pennsylvania, Map 13*. Commonwealth of Pennsylvania, Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey.

Sevon, W.D. and D.D. Braun

2000 *Glacial Deposits of Pennsylvania. Map 59*. Commonwealth of Pennsylvania, Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey.

United States Geological Survey

1894 *Shickshinny, Pennsylvania, 15-Minute Topographic Quadrangle (Photorevised 1969 and 1977)*.

1955 *Berwick, Pennsylvania, 15-Minute Topographic Quadrangle*.

1955 *Berwick, Pennsylvania, 7.5-Minute Topographic Quadrangle (Photorevised 1969 and 1976)*.