This figure is withheld per section 34 of the National Historic Preservation Act and Title 36 of the Code of Federal Regulations Part 800.11(c).

II. Background, Setting, and Archaeological Potential

Summary of Previous Studies

GAI conducted a Phase Ia archaeological and geomorphological reconnaissance of approximately 760 acres (307.5 hectares) of potential project alternatives for green space/power plant development in June 2007 (GAI 2007). In January 2008, following selection of the preferred alternative, GAI performed Phase Ia investigations (archaeological and geomorphological reconnaissance and architectural survey) of an additional 511 acres (206.8 hectares) (Munford and Tuk 2008). In total, 1,271 acres (514.3 hectares) were investigated by Phase Ia survey.

Phase Ia background research identified 24 previously-recorded archaeological sites and five previously-recorded architectural resources within the project vicinity. Six of these sites (36LU15, 36LU16, 36LU48, 36LU49, 36LU50 and 36LU51) and one architectural resource (the North Branch Pennsylvania Canal/141573) were mapped within the Phase Ia project footprint. GAI's architectural survey recorded 52 architectural and historical resources within the proposed project viewshed. Ten of these surveyed resources were initially recommended eligible for NRHP listing. Phase Ia geomorphological and archaeological field reconnaissance, along with background research, defined localities of moderate to high archaeological potential (e.g., undisturbed, relatively level, well-drained areas), low archaeological potential (e.g., wetlands or slopes in excess of 15 percent) and disturbed/no potential within the project area. Systematic Phase Ib survey was recommended for areas of moderate to high potential. In a June 5, 2008, review of these studies (GAI 2007; Munford and Tuk 2008), the PHMC-BHP concurred with GAI's recommendations for additional Phase Ib archaeological fieldwork and requested further survey information for 22 of the 52 recorded architectural and historical resources.

GAI conducted Phase Ib archaeological survey of a 639-acre (259-hectare) project (West Alternative, Area 6, Area 7, Area 8, the Confers Lane Parcel, and the proposed Switchyard 2 Transmission Line Corridor) between May and July 2008 (Munford et al. 2008). This work resulted in the identification of 11 archaeological sites (Sites 36LU278, 36LU279, 36LU280, 36LU281, 36LU282, 36LU283, 36LU284, 36LU285, 36LU286, 36LU287 and 36LU288) and 25 Isolated Finds. Seven of the sites (Sites 36LU279, 36LU280, 36LU281, 36LU283, 36LU285, 36LU286, and 36LU288) were recommended as potentially-eligible for listing in the NRHP and avoidance or Phase II testing was recommended for these localities. Supplemental architectural and historical survey collected additional information and provided completed PHRS forms for 22 of the 52 resources recorded during the initial survey.

Supplemental Phase Ib survey of 263 acres (106 hectares) acres of new project localities bordering the initial Phase Ib project area was conducted by GAI between August and November 2008 (Munford 2008). No archaeological sites were identified during this work and no further work was recommended.

Based on the Phase Ib results and SHPO concurrence (PHMC/BHP review letter dated March 23, 2009) (see Appendix B), and at the request of UniStar, GAI performed Phase II National Register Evaluations of the seven potentially-eligible archaeological sites (Sites 36LU279, 36LU280, 36LU281, 36LU283, 36LU285, 36LU286, and 36LU288). Fieldwork was conducted between July and November 2009. The results of Phase Ib and Phase II investigations have been provided in a combined Phase I/II Technical Report (Munford et al. 2010) which was submitted to UniStar for review in June 2010. Based on the results of Phase II testing, all seven sites are recommended as Not Eligible to the NRHP and no further

investigations are recommended. Three architectural resources have been determined NRHP eligible by the PHMC/BHP (North Branch Pennsylvania Canal/141673, Union Reformed and Lutheran Church/155049, and Woodcrest/155052) and four architectural resources are recommended as potentially eligible for listing in the NRHP (Stone Arch Bridge/155054, North Market Street Bridge/155055, Red Brick Studios/155064, and Wapwallopen Historic District/155070).

Project Setting

The BBNPP project area is located in Luzerne County, in the Susquehanna Lowland Section of the Ridge and Valley physiographic province (Sevon 2000). GAI's Phase I/II Technical Report (Munford et al. 2010) provides details regarding the overall project setting; the current document presents only a brief review.

The overall BBNPP project area is located on the inside edge of a large southwest curve in the North Branch Susquehanna River, referred to as Bell Bend (see Figure 1). US Route 11, which follows the curve of the river, crosses through the eastern and southern portions of the project area. The previously-surveyed 902-acre (365-hectare) Phase Ib project area encompassed upland settings west, south and east of the existing SSES facility, as well as more limited low terrace/floodplains along the west bank of the Susquehanna River. Beach Grove Road and North Market Street roughly mark the northern and western edges of the bulk of the previous study area.

The Second Supplemental Phase Ib (Power Block Relocation) project area encompasses new project localities within upland settings to the north, west and south of the previously-surveyed project area. It also includes one previously-surveyed locality (Rail Spur Corridor) which will be reevaluated due to redefinition of proposed project impacts and one previously-surveyed parcel (Switchyard 2) which was excluded from further investigations.

The project area occupies Late Illinoian to Wisconsin-aged, high glacial outwash terraces of the Susquehanna River (Bush 1981). These upland settings have no potential for deeply buried cultural resources. Any cultural resources in these areas are expected to be associated with the modern ground surface.

Current land use within the study area consists predominantly of woodlands, along with more limited areas of previously-cultivated fields, wetlands and residential use. Areas of disturbances associated with previous power plant construction were documented in the Rail Spur Corridor. Additional localized disturbances within the project area result from an existing transmission line corridor, roadway construction and ATV trails. At the time of GAI's Second Supplemental Phase Ib fieldwork, cultivated fields had been recently plowed and disked to provide good surface visibility.

Background Research Review

Based on a review of previously-conducted background research and the results of GAI's 2008 architectural survey of the initial BBNPP project area (provided in Munford and Tuk 2008 and Munford et al. 2010) the Second Supplemental Phase Ib APE contains one previously-recorded architectural resource (the Michaels Farm) and no previously-recorded archaeological sites. As presented in Table 2, the Michaels Farm (155063/GAI-25) was recommended as Not Eligible for listing in the NRHP. A description of this resource is provided in GAI's Phase Ia Technical Report (Munford and Tuk 2008) and Phase I/II Technical Report (Munford et al. 2010). In a March 17, 2010 review letter (see Appendix B), the PHMC/BHP concurred with GAI's recommendation and determined that the Michaels Farm is Not NRHP-eligible. No further investigation of this resource is required.

Table 2. Previously Recorded Architectural Resources within Project APE

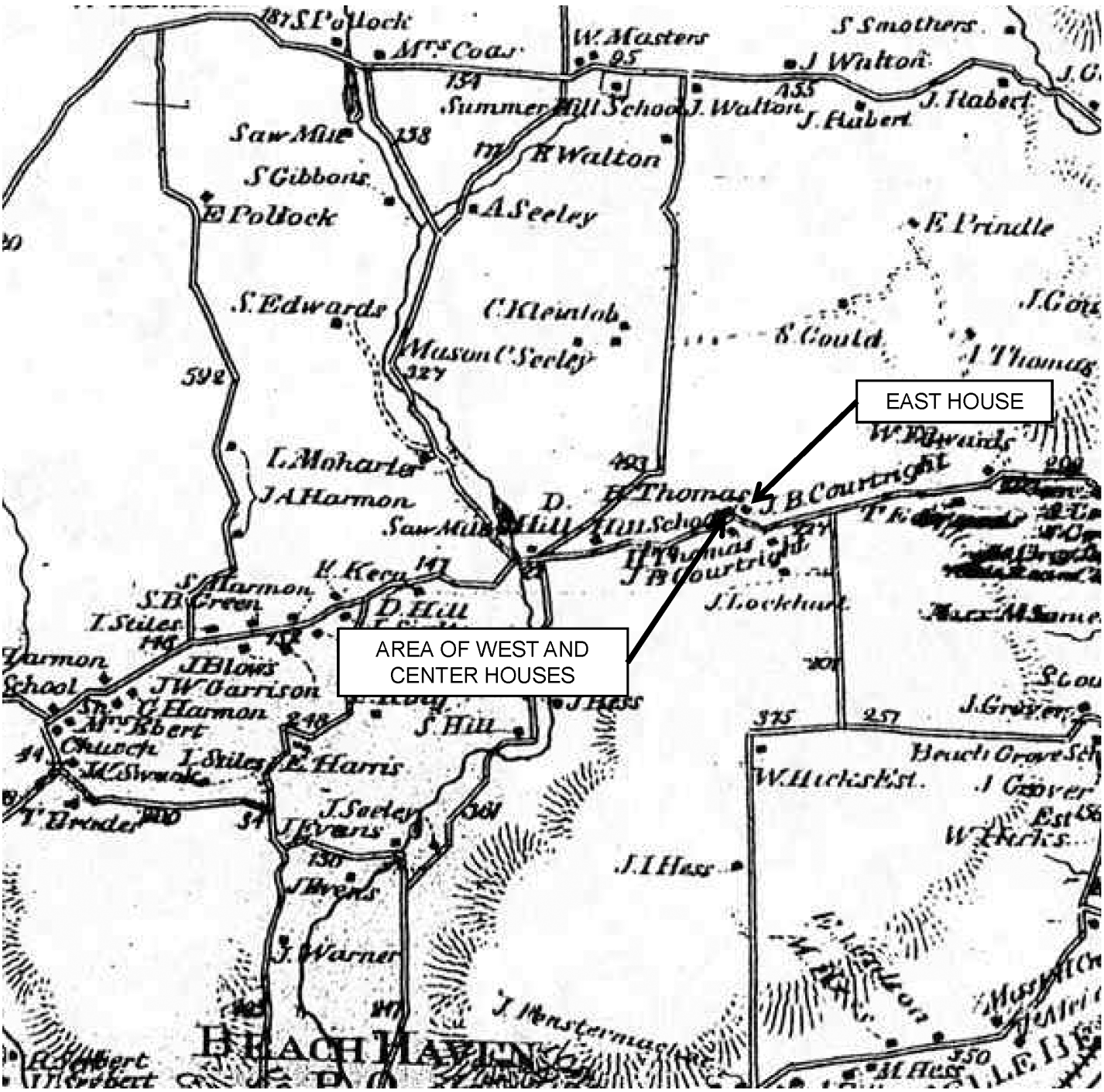
ID Number	Name	Address	Style and Type	Date	NRHP Eligibility	Location within APE
155063 (GAI-25)	Michaels Farm	4252 North Market Street, Salem Township	Frame Vernacular Farmstead	c.1880	Determined Not Eligible	Lot 41

A review of historic mapping documents the presence of former houses in the vicinity of Lot 6B and its surrounding area, along the north edge of Beach Grove Road, near a distinctive jog in the roadway associated with an intermittent drainage. In 1873 (Beers 1873), two to three structures are mapped in this locality—one east of the drainage (east house, labeled J.B Courtright) and one to two structures west of the drainage (labeled H. Thomas) (Figure 3). A 1939 aerial photograph of the area shows the two structures west of the drainage (west house and center house), but the east house is no longer standing. The west and center structures, both marked as houses, are also illustrated on the 1955 USGS Shickshinny Quadrangle (Figure 4). A 1959 aerial photograph depicts both structures, as well as a U-shaped band of trees surrounding the west structure (Figure 5). Although the imagery is less distinct, a 1969 aerial photograph of the area shows the tree boundary and also appears to include the westernmost structure. This data indicates structures in the vicinity of Lot 6B from 1873 through at least 1959, and likely through 1969. As discussed in Supplemental Phase Ib Results (below) Site 36LU302 was identified in the west house locality during the current study. The tree boundary shown in the 1959 and 1969 aerial photographs appears to represent a line of pine trees currently standing in this locality and spanning Lots 6B and Lot 6, Section 2 (see Figure 2).

Archaeological Potential

GAI evaluated archaeological potential within the Second Supplemental Phase Ib APE based on a review of project mapping, the results of previous background research, and observations and evaluations of adjacent parcels during previous field studies of the BBNPP project area (see Figure 2). Based on these data, undisturbed, relatively level, well-drained portions of the project area were considered to have a moderate to high potential for prehistoric and historic archaeological resources, requiring a Phase Ib archaeological survey to identify sites. Portions of the project area characterized by wetlands or slopes in excess of 15 percent were considered to have a low archaeological potential. These areas would not require systematic testing during Phase Ib investigations. Disturbed localities were determined to have no archaeological potential and were excluded from further investigation. Due to the upland setting of the project APE, archaeological sites were anticipated to be near-surface in nature. The project area has no potential for deeply buried sites.

GAI's March 30, 2010, scope of work estimated that the Upland Section of the Second Supplemental Phase Ib project area comprised approximately 215.3 acres (87 hectares) consisting of 110.4 acres (44.7 hectares) of moderate to high archaeological potential, 58.9 acres (23.8 hectares) of low potential, 7 acres (2.9 hectares) of disturbance/no potential, and 39 acres (15.8 hectares) excluded due to previous survey (Switchyard 2). Assessments of archaeological sensitivity were refined during the course of Phase Ib fieldwork based on detailed, on-the-ground field observations. Additionally, final calculations of lot sizes resulted in a slightly-reduced, 214.65-acre overall project area.



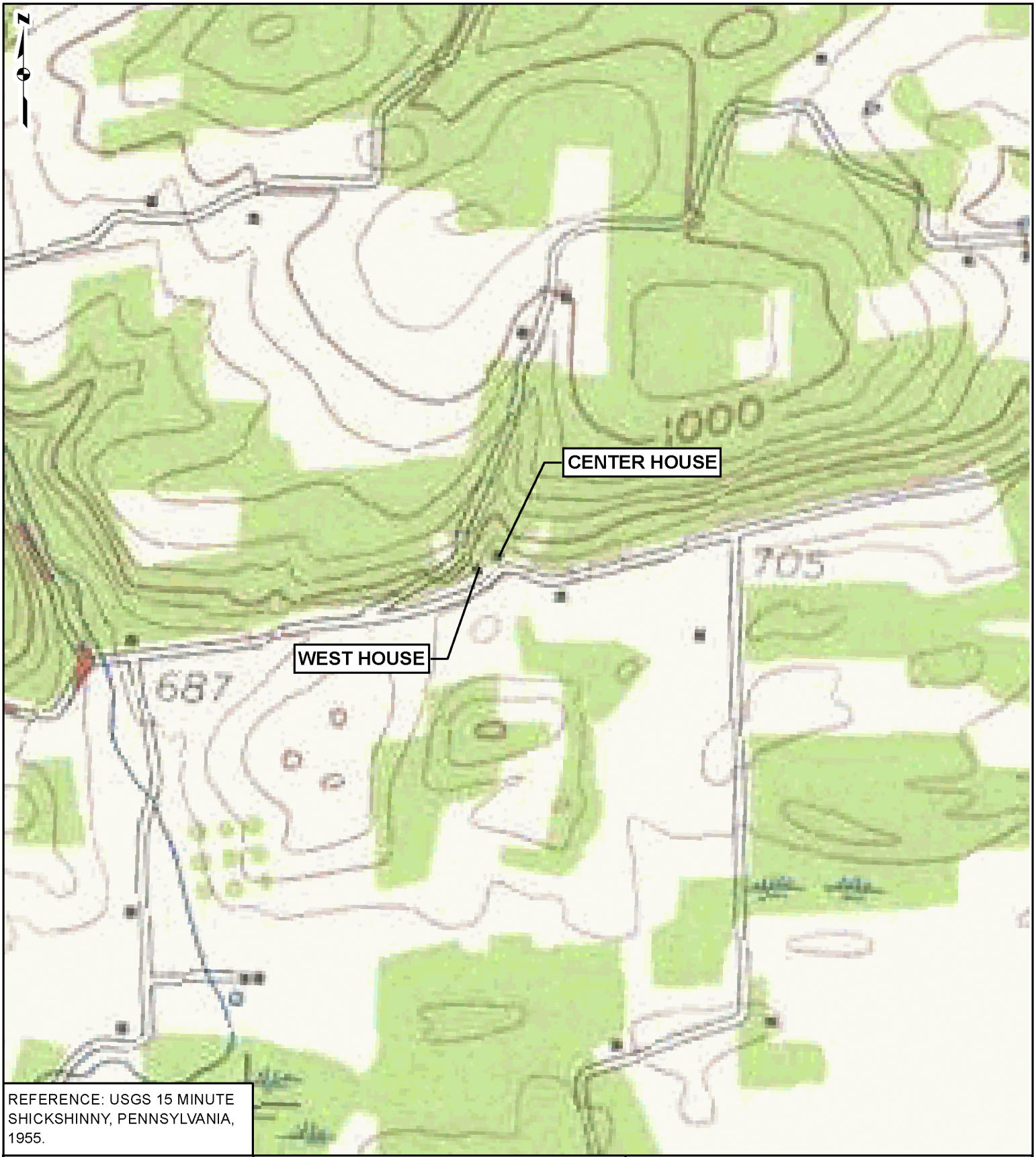
REFERENCE:
BEERS, 1873. PUBLISHED BY A. POMEROY, PHILADELPHIA.

FIGURE 3
PROJECT AREA AND VICINITY IN 1873 SHOWING STRUCTURES IN LOT 6B VICINITY

gai consultants

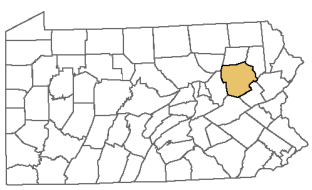
BELL BEND NUCLEAR POWER PLANT UNISTAR NUCLEAR ENERGY, LLC.

DRWN: AJW DATE: 07/07/2010
CHECKED: BAM APPROVED: BAM



REFERENCE: USGS 15 MINUTE SHICKSHINNY, PENNSYLVANIA, 1955.

PROJECT LOCATION



LUZERNE COUNTY, PENNSYLVANIA

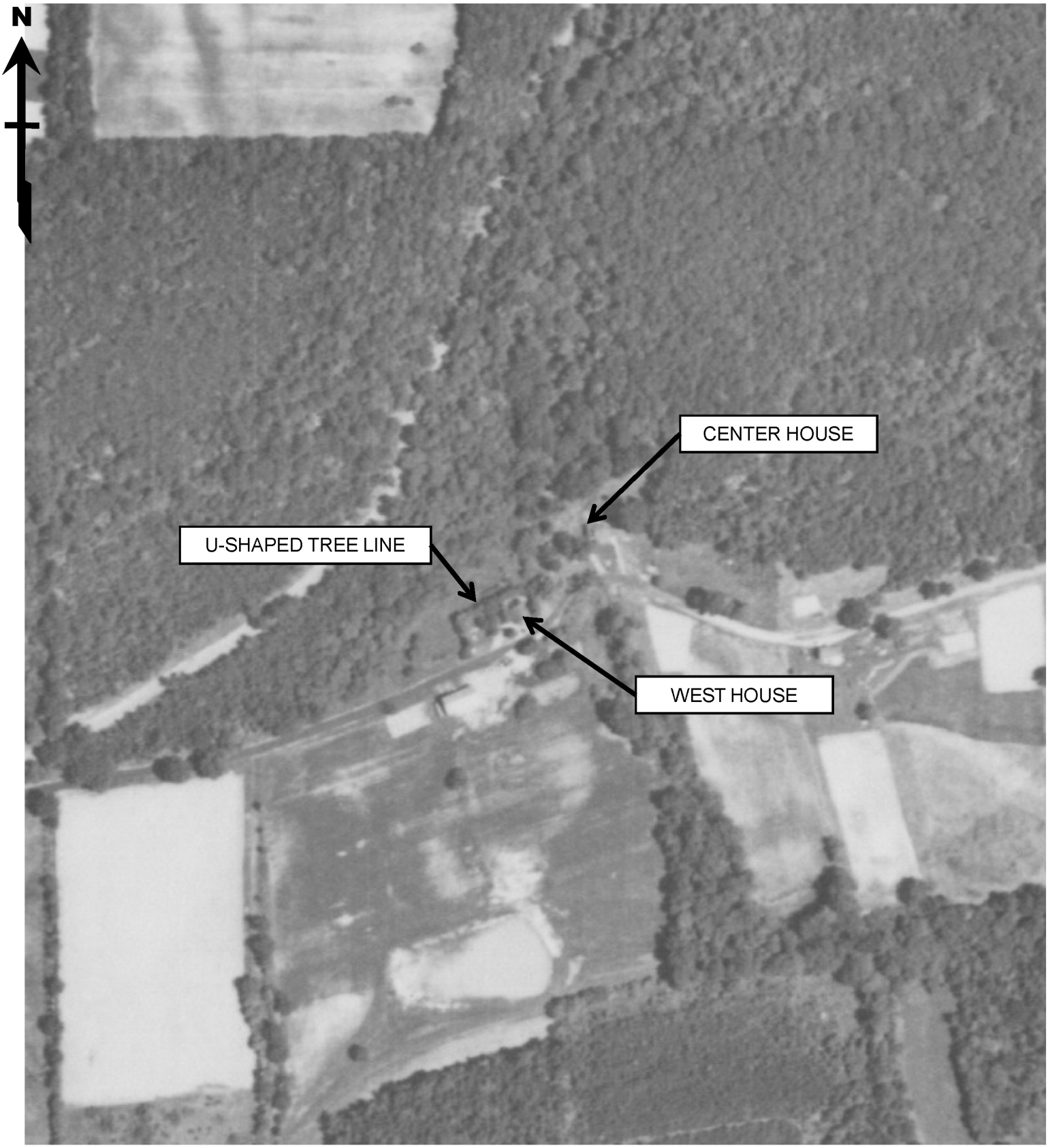
0 1,000 2,000 Feet

FIGURE 4
LOT 6B AND VICINITY IN 1955

BELL BEND NUCLEAR POWER PLANT
UNISTAR NUCLEAR ENERGY, LLC.

gai consultants

DRAWN BY: RBD DATE: 07/06/2010
CHECKED: BAM APPROVED: BAM



REFERENCE:
AERIAL PHOTO, 1959.

FIGURE 5
LOT 6B AND VICINITY IN 1959

gai consultants

BELL BEND NUCLEAR POWER PLANT UNISTAR NUCLEAR ENERGY, LLC.

DRWN: AJW DATE: 07/07/2010
CHECKED: BAM APPROVED: BAM

III. Objectives and Methods

Objectives

The goals of GAI's Second Supplemental Phase Ib survey were to identify, delineate and evaluate the potential National Register eligibility of previously unrecorded historic and prehistoric sites in new portions of the project APE.

Field Methods

Supplemental Phase Ib archaeological fieldwork of the proposed power block relocation area was conducted between April 27 and May 23, 2010. As noted above, GAI's Second Supplemental Phase Ib Scope of Work (March 30, 2010) assumed a 215.3-acre (87-hectare) overall project area, encompassing the 39-acre (15.8-hectares) previously-surveyed Switchyard 2 parcel which would be excluded from further investigation. Of the remaining 176.3 acres (71 hectares), approximately 110.4 acres (44.7 hectares) were assumed to possess a moderate to high archaeological potential and would require systematic Phase Ib survey. GAI estimated that 29.4 acres of cultivated fields with good ground surface visibility would be evaluated by pedestrian ground survey and 81.0 acres of poor ground surface visibility (e.g., woodlands) would require shovel testing. Based on slight refinements in assessments of archaeological sensitivity and calculations of project size, GAI's Supplemental Phase Ib survey investigated 109.05 acres (44.1 hectares) of moderate to high archaeological potential within a 214.65-acre (87-hectare) overall project area. The identification of additional areas of poor ground surface visibility (i.e., fallow fields and lawn in Lot 3) reduced the area of pedestrian ground survey to 14.95 acres and increased the area of systematic shovel testing to 94.1 acres. Figure 2 presents the final assessments of archaeological sensitivity within the project APE.

The Second Supplemental Phase Ib APE consisted of 13 lots defined by AREVA: Lots 54, 6, 6A, 6B, 7, 8, 31, 23, 0, 3, 41, 93D, and the Rail Spur Corridor (see Figure 2). These lots varied from large wooded lots (e.g., Lots 93D and 31) to cultivated fields (e.g., Lot 41) and residential parcels (e.g., Lot 3, Section 2). The previously-surveyed 39-acre (15.8-hectare) Switchyard 2 parcel (excluded from further investigation) spanned portions of five lots (Lots 7, 8, 31, 23 and 0). The entire project APE was subject to a walkover survey to verify assessments of archaeological potential. GAI conducted systematic Phase Ib testing (pedestrian ground survey or subsurface shovel testing) within portions of nine of these lots (Lots 54, 6, 6A, 6B, 7, 31, 3, 41, and 93D; no testing was required in Lots 8, 23, 0 and the Rail Spur Corridor. Test Sections were numbered sequentially within each lot (i.e., Lot 41: Sections 1-2; Lot 93D: Sections 1-2) (see Figure 2).

Previously cultivated fields within the project APE (Lot 41, Section 1 only; n=14.95 acres) were plowed and disked prior to the start of archaeological fieldwork to provide good ground surface visibility. Phase Ib investigations within cultivated fields consisted of pedestrian ground survey. Archaeologists systematically walked the fields along transects spaced at 5-meter (16-foot) intervals. Prehistoric and historic artifacts observed on the ground surface were plotted on project maps and, due to their low-density, were point provenienced (rather than being collected within surface collection blocks). Judgmental shovel tests were excavated in select localities within the plowed and disked fields to document soil stratigraphy and assess the presence of subplowzone cultural deposits.

Due to poor ground surface visibility, Phase Ib survey within the remainder of the project's moderate to high archaeological potential localities (n=94.1 acres) consisted of systematic shovel testing. Systematic shovel test pits (STPs) were generally excavated at 15-meter (49

foot) intervals within transects spaced 15 meters (49 feet) apart. GAI archaeologists used a compass and tapes to establish transects and shovel test locations within each test section. Judgmental STPs were excavated in select areas to confirm the presence of cultural artifacts or disturbed soils. When a shovel test yielded artifacts, radial STPs were excavated at 5-meter (16-foot) intervals around the initial positive findspot to further investigate the locality. In areas of possible former structure locations, identified by cartographic research (i.e. Lot 6B and Lot 6A), shovel tests were excavated at 5-meter (16-foot) intervals. GAI excavated 1,358 STPs during supplemental Phase I fieldwork.

STPs measured 50 cm (20 in) in diameter and were hand-excavated in natural strata to at least 10 cm (4 in) into the subsoil and 10 cm (4 in) below the deepest artifact recovery. Excavated soils were screened through 0.6 cm (0.25-in) wire mesh for systematic artifact recovery. Recovered artifacts were bagged and labeled with appropriate provenience information. GAI archaeologists recorded results of individual STPs on standardized field forms, noting depths of soil horizons, soil texture and Munsell color, and the presence of artifacts. STP locations were recorded on project maps and were backfilled upon completion.

Identified archaeological resources were recorded on standardized forms, plotted on maps, and documented with photographs.

Laboratory Methods

Laboratory Processing

Cultural materials collected during the Second Supplemental Phase Ib survey were transported to GAI's Archaeological Laboratory in Homestead, Pennsylvania, for processing and analysis. These materials were processed in accordance with the *Curation Guidelines* of the Pennsylvania Historical and Museum Commission (2005).

The initial processing stage consisted of checking artifact bags against the field-generated Field Specimen Log to confirm that all collected materials were present. Artifacts were temporarily placed in numerical order according to Field Specimen Number (FS#), providing a basis for processing, analysis, and curation. Artifacts were then cleaned, generally with water and a soft brush. Metal artifacts and perishable items were cleaned by dry-brushing. Non-cultural materials (i.e. pebbles) included in the artifact samples were recorded and discarded during this stage of processing or in later stages, as they were recognized. Cultural materials were placed on artifact-drying racks to air dry.

When dry, the artifacts within each provenience were sorted into basic artifact classes (i.e., glass, ceramics, metal) and were re-bagged accordingly in clean, perforated, 4-mil polyethylene bags. Bags were labeled with provenience information using a permanent ink marker. An acid-free paper tag with complete provenience information was also placed inside each artifact bag.

Specimens large enough in size were then labeled with the site number and the appropriate field specimen number (FS#). Labels were written in permanent ink and coated with PVA. After washing and labeling, artifacts were subject to the appropriate laboratory analysis.

Methods of Historic/Modern Artifact Analysis

Historic/modern artifacts recovered during the Second Supplemental Phase Ib survey were subjected to identification and analysis using GAI's Historic Coding scheme. This multivariate classification system codes for significant attributes of various artifact classes. Artifact analysis was focused on the creation of an inventory of artifact classes and types to examine issues of chronology and function for each site containing historic/modern components. A variety of

analytical techniques was employed to synthesize artifact data including standard classification typologies developed by South (1977).

Once washed, artifacts were sorted into major material classes including ceramics, glass, and metal. The materials were then subjected to a preliminary analysis, which included a basic description of artifacts by material class, functional group, and relevant attributes. Included among the recorded attributes, as applicable, are type, beginning and end dates of production, form, motif/decoration, color, manufacturing technique, functional group, base, finish, embossment, maker's mark/manufacturer, material, bore diameter, and pattern class and subclass (South 1977:95-96). Artifact dating was based on the identification of maker's marks, diagnostic-manufacturing methods, such as bottle mold seams, bottle pontil marks, ceramic bodies and glazes, and known dates of production.

Coded data, using unique codes for each artifact description, were entered into the Access database. This database was subsequently converted into the Excel computer program for purposes of data manipulation and table generation.

Historic ceramic analysis focused on identifying ware and type categories, decorative attributes, and maker's marks, in order to interpret site chronology. Whenever possible, each provenience was assigned dates based on a Mean Ceramic Dates (MCD) and Terminus Post Quem (TPQ) date. Attributes recorded during the ceramic analysis include count, ware, type, form, motif, colors, percent complete, and functional group for each artifact or group of artifacts. Maker's marks were described in detail and dated, when possible.

Glass artifacts, much like ceramics, were tabulated according to major groups (e.g., bottle glass, window glass, lamp glass, tableware, tumblers) and then separated into functional categories whenever possible. Dating information was based on the identification of diagnostic technological attributes (e.g., mold seams and evidence of snap-case manufacture) in addition to identifiable bottle embossments. Attributes recorded for glass artifacts include manufacturing technique, decoration, finish type, base type, color, and functional group. The beginning and end dates for datable attributes were determined. Maker's marks and embossments were described and dated, when possible.

Other historic/modern artifact classes include architectural debris (e.g., bricks, nails, window glass, etc.), clothing (type and materials identified when possible) and miscellaneous small finds. Where appropriate, attributes such as character, wear, decoration, and material were recorded for these artifacts.

Methods of Prehistoric Lithic Analysis

The analytical approach for stone tools and debris employed here can be described as techno-morphological; that is, lithic artifact classes and types were based on key morphological attributes, which are linked to or indicative of particular stone tool production (reduction) strategies.

Following initial artifact processing, GAI's Lithic Analyst divided lithic artifacts from each provenience into general classes (i.e., debitage, bifaces, unifaces, cores, cobble tools, groundstone, FCR) and then subdivided them into specific artifact types (i.e., early-stage biface, late-stage biface, projectile point) for that particular class. Artifacts were then examined and appropriate attributes were recorded. The surfaces and edges of artifacts were examined with the unaided eye and with a 10x hand lens, where appropriate, to discern evidence of retouch and/or utilization.

Lithic raw material type was recorded for all artifacts. These lithic raw material types were defined on the basis of macroscopic characteristics, including color, texture, hardness, and inclusions

(Luedtke 1992). Where possible using conservative standards and based on the above macroscopic criteria, nonlocal (i.e. excluding cobble quartz and quartzite) lithic raw material types were attributed to known geological sources based on published sources (e.g., Stewart 1984) and by reference to GAI's lithic reference collection.

All lithic tools were examined at a detailed analysis level that recorded temporal/stylistic, functional, and technological variables as well as lithic raw material type. These variables included artifact class, artifact type, condition of specimen, presence/type of cortex, weight, and metric dimensions (when complete). Further artifact-specific observations (e.g., heat damage, refit, unique characteristics) were noted where appropriate. Diagnostic projectile points, important in assessing the age of prehistoric components, were to be identified though a comparison with standard typologies established for the eastern United States (Justice 1987; Broyles 1971; Coe 1964). Additional variables of point type and temporal affiliation were to be recorded for diagnostic points.

Lithic debitage was classified using a typology designed to detect differences in lithic reduction practices and early vs. late-stage reduction (e.g., decortication flake, bipolar reduction flake, early reduction flake, biface thinning flake). Other attributes recorded on debitage included raw material, presence and type of cortex (as indicators of primary or secondary geologic source), weight and size grade.

Information recorded during lithic analysis was entered on analysis sheets as a series of codes, unique to each variable. The codes were then entered into Access, a relational database. For the purposes of data analysis and manipulation, this database was subsequently converted to the Excel computer program for data manipulation and table generation.

IV. Supplemental Phase Ib Results

GAI's Phase Ib survey of the supplemental BBNPP project area involved the excavation of 1,358 STPs and pedestrian ground survey (surface collection) of 14.95 acres (6.05 hectares) of previously cultivated fields. These investigations identified two archaeological sites (prehistoric Site 36LU301 and historic-period Site 36LU302) and one prehistoric Isolated Find (IF 28), as well as the recovery of a scatter of non-site historic specimens found almost exclusively on the surface of cultivated fields. A total of 261 artifacts were recovered, including 15 prehistoric lithics and 246 historic artifacts. Table 3 presents a summary of Supplemental Phase Ib survey results by testing location. A brief description of testing results within each lot is provided below.

Table 3. Summary of Second Supplemental Phase Ib Survey Results by Testing Location

Testing Location	# STPs	#Positive STPs	Pedestrian Survey	Sites	IFs
LOT 93D					
Section 1	445	--	--	--	--
Section 2	251	1*	--	--	--
Lot 93D Subtotal	**696**	**1**	**--**	**--**	**--**
NORTHERN SECTION					
Lot 54	80	--	--	--	--
Lot 6					
Section 1	87	--		--	
Section 2	23	3		36LU302	
Subtotal	**110**	**3**			
Lot 6A					
Section 1	11	--	--	--	--
Section 2	12	1*	--	--	--
Subtotal	**23**	**1**			
Lot 6B	29	9	--	36LU302	--
Lot 7	4	--	--	--	--
Lot 31					
Section 1	217	--	--	--	--
Section 2	57	--	--	--	--
Subtotal	**274**				
Lot 8	0	--	--	--	--
Lot 23	0	--	--	--	--
Lot 0	0	--	--	--	--
Northern Subtotal	**520**	**14**	**--**	**1 site**	**--**
WESTERN SECTION					
Lot 3					
Section 1	34	--	--	--	--
Section 2	75	1	--	--	**IF 28**
Subtotal	**109**	**1**	**--**	**--**	**1 IF**
Lot 41					
Section 1	12	1*	X	36LU301	--
Section 2	21	2*	--	36LU301	--
Subtotal	**33**	3	**--**	**1 site**	--
Western Subtotal	**142**	**4**	**1 lot**	**1 site**	**1 IF**
Rail Spur Corridor	**0**	**--**	**--**	**--**	**--**
TOTAL	**1,358**	**19**	**1 lot**	**2 sites**	**1 IF**

*non site historic artifact(s) from one STP

Northern Section (Lots 54, 6, 6A, 6B, 7, 8, 31, 23 and 0)

The Northern Section of the Second Supplemental project area is composed of a series of nine contiguous lots bordering the north edge of Beach Grove Road, opposite the previously-surveyed BBNPP West Alternative (see Figure 2). This portion of the project area includes the Switchyard 2 parcel, surveyed during BBNPP initial Phase Ib investigations in 2008 (Munford et al. 2008, Munford et al. 2010) and, accordingly, excluded from the current study.

Lot 54

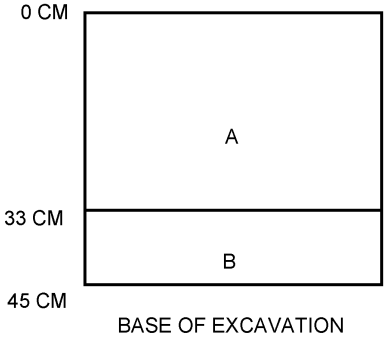
Lot 54, the westernmost parcel in the Northern Section, lies north of Beach Grove Road, above its intersection with Thomas Road (see Figure 1). An intermittent drainage (marked as a wetland area) flows southwesterly through its western portion. Lot 54 consists primarily of a steeply sloping wooded hillside, with a wooded upland flat occurring in its northern one-third (Photograph 3). The northern edge of the parcel is marked by a low, stone, boundary wall. Phase Ib shovel testing was conducted within the wooded upland flat at the northern edge of the lot (see Figure 2). The southern two-thirds of the lot were steeply sloping and were not subject to systematic subsurface shovel testing.

Photograph 3. Lot 54: Wooded Upland Flat in Northern Portion of Parcel, Facing West

Eighty STPs were excavated at 15-meter intervals in this locality. Shovel tests exposed an A-B soil horizon sequence (Figure 6). As described for STP F-3, the 33-cm-thick dark yellowish-brown A horizon superimposed a yellowish-brown silt loam B horizon. No cultural materials were produced during shovel testing. However, a single historic artifact (FS 24-fragment of a gray, salt-glazed stoneware jug) was recovered from the ground surface near STP A13 in the northeast corner of the lot. This stoneware fragment is not temporally diagnostic and no additional artifacts were observed in the vicinity. This artifact is considered a casual discard; it does not represent an historic period archaeological site.

LOT 54

STP F-3



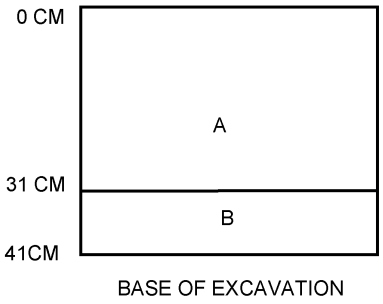
A –DARK YELLOWISH BROWN (10YR 3/4) SILT LOAM

B – YELLOWISH BROWN (10YR 5/6) SILT LOAM

LOT 6

(SECTION 1)

STP C-1



A –BROWN (10YR 4/3) SILT LOAM

B –LIGHT YELLOWISH BROWN (10YR 6/4) CLAY LOAM

FIGURE 6. LOT 54 AND LOT 6,
REPRESENTATIVE SHOVEL TEST PROFILES (STPs F-3 AND C-1)

SCALE

0 CM 25 CM 50 CM

1 INCH = 25 CM

BELL BEND NUCLEAR POWER PLANT
UNISTAR NUCLEAR ENERGY, LLC.

gai consultants

DRWN: LMD DATE: 06/30/2010

CHECKED: BAM APPROVED:BAM

Lot 6

Lot 6 consists of a wooded parcel bordering the north edge of Beach Grove Road, immediately east of Lot 54 (see Figure 1). Thomas Road extends northeast/southwest through Lot 6 and an intermittent drainage is located along its eastern edge. A low stone wall, continuing eastward from Lot 54, bounds the northern edge of this lot. As with Lot 54, the majority of this parcel consists of a steep hillside that was excluded from subsurface testing due to slopes in excess of 15 percent (see Figure 2). Systematic shovel testing was conducted in two sections (Sections 1 and 2) within Lot 6. Section 1 consists of an area of relatively level upland flat in the lot's northwest portion (Photograph 4). Section 2 is located adjacent to the east edge of Lot 6B, a small parcel situated within the southeast corner of Lot 6, bordering Beach Grove Road (see Lot 6B below). The area of Lot 6, Section 2 was investigated as part of Lot 6B during Phase Ib fieldwork. Site 36LU302 was identified in this area and Lot 6, Section 2 was defined as a separate section after mapping indicated that the site boundary extends east (outside) of the Lot 6B parcel boundary.

Photograph 4. Lot 6: Wooded Upland Flat in Northwest Portion of Parcel, Facing Northwest

GAI excavated 87 shovel tests in Lot 6, Section 1. Shovel testing revealed an A-B soil horizon sequence (see Figure 6). As documented for STP C-1, the profile consisted of a 31-cm-thick brown silt loam A horizon above a light yellowish-brown B horizon. No cultural materials were recovered.

Testing of Lot 6, Section 2 (initially included as part of Lot 6B) consisted of the excavation of 23 shovel tests at 5-meter intervals to investigate the mapped location of a former structure (see Lot 6B and Site 36LU302 descriptions below) (see Figures 3, 4 and 5). As noted above, Phase Ib investigations identified historic-period Site 36LU302 in this locality. Lot 6, Section 2 includes the western portion of a former yard area, bounded by a line of pine trees. Four of the 23 STPs excavated in this section produced historic artifacts. Additionally, Feature 1 (a flagstone patio located north of the line of pine trees) was identified near the Lot 6, Section 2/Lot 6B boundary.

Lot 6A

Lot 6A is a wooded parcel located north of Beach Grove Road, between Lots 6 and 7. This lot consists largely of steep hillsides that were excluded from subsurface testing (see Figure 1). Shovel testing was conducted in two small sections (Sections 1 and 2) (see Figure 2). Section 1 comprises a small portion of relatively-level upland flat, located in the northeast corner of the lot (Photograph 5). Section 2 represents the approximate location of a former house depicted on an 1873 map (see Figure 3, east house) near the southwest corner of the lot near Beach Grove Road, east of an intermittent drainage. This house does not appear on later historic mapping of

the area (see Figures 4 and 5). Due to slopes generally in excess of 15 percent, the Section 2 vicinity was assessed as having a low archaeological potential.

Section 1 was investigated by the excavation of 11 shovel test pits at 15-meter intervals across the wooded upland flat. Shovel tests exposed an A-B soil horizon sequence. Typically, the A horizon consisted of a 26-cm-thick brown silt loam and the B horizon was a yellowish-brown silt loam (Figure 5). No cultural materials were recovered.

Photograph 5. Lot 6A, Section 1: Shovel Testing on Wooded Upland Flat in Northeast Corner of Lot, Facing West

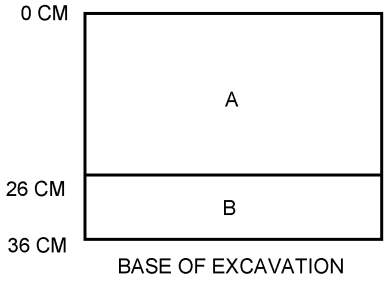
GAI's surface walkover of Section 2 revealed no evidence of a structure foundation or cellar hole in the mapped location of the former structure. A pile of pile of cobbles was observed on the surface of the wooded slope, approximately 38 meters (125 feet) north of Beach Grove Road and 60 meters (197 feet) east of the intermittent drainage (Photograph 6). These cobbles do not represent a foundation, although it is possible that they might be associated with removal/demolition of the former structure. GAI excavated 12 STPs at 5-meter intervals on the wooded slope in the vicinity of the former structure. Shovel testing encountered no evidence of structural foundations or other cultural features. Shovel test profiles consisted of an A-B soil horizon sequence. Of the 12 shovel tests excavated, one positive shovel test (STP A1) yielded seven artifacts from the A horizon. These artifacts include two amber beer bottle fragments, four clear container glass fragments, and one sherd of plain whiteware. These materials likely represent twentieth-century discards. No artifacts or structure foundations associated with a nineteenth century domestic occupation were identified in this locality.

Photograph 6. Lot 6A, Section 2: Cobble Pile on Wooded Hillslope, Facing South

LOT 6 A

(SECTION 1)

STP A-1

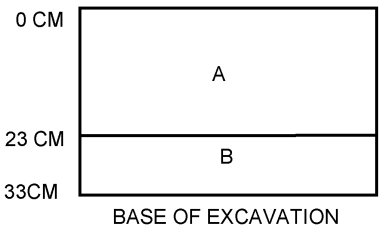


A –BROWN (10YR 4/3) SILT LOAM

B – YELLOWISH BROWN (10YR 5/6) SILT LOAM

LOT 7

STP A-2



A –DARK YELLOWISH BROWN (10YR 4/4) SILT LOAM

B –YELLOWISH BROWN (10YR 5/6) CLAY LOAM

FIGURE 7. LOT 6A AND LOT 7
REPRESENTATIVE SHOVEL TEST PROFILES (STPs A-1 AND A-2)

SCALE

0 CM 25 CM 50 CM

1 INCH = 25 CM

gai consultants

BELL BEND NUCLEAR POWER PLANT
UNISTAR NUCLEAR ENERGY, LLC.

DRWN: LMD DATE: 06/30/2010
CHECKED: BAM APPROVED:BAM