SUPPLEMENTAL STAGE IB CULTURAL RESOURCES SURVEY

SOUTH JERSEY GAS PIPELINE PROJECT

Mt. Pleasant ROV Site
Tax Lot 12, Block 350
Upper Township, Cape May County, New Jersey

Pinelands Development Application #2012-0056.001

June 2014

RGA
CULTURAL RESOURCE CONSULTANTS

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Principal Investigator:
Ilene Grossman-Bailey, Ph.D., RPA

Prepared by:
Richard Grubb & Associates, Inc.
259 Prospect Plains Road, Building D
Cranbury, New Jersey 08512

Prepared for:
Woodard & Curran
50 Millstone Road
Building 300, Suite 100
East Windsor, New Jersey 08520

Date:
June 2, 2014

SECTION I. ABSTRACT

A. Project Type, Location, and Size. The proposed Mount (Mt.) Pleasant Remotely Operated Valve (ROV) Site falls east of Mount Pleasant-Tuckahoe Road (County Route [CR] 664) in Upper Township, Cape May County. An interconnect station, including the installation of 560 linear feet of a new 24-inch diameter steel pipeline gas main and a 24-inch above ground valve, is proposed within a 200-foot by 200-foot (0.92-acre) permanent easement on Tax Lot 12, Block 350. The project is under the review jurisdiction of the Pinelands Commission. UTM Coordinates (center of project): Zone 18; East 521217, North 4348612. The overall South Jersey Gas pipeline project consists of the installation of a new 24-inch diameter steel pipeline in Maurice River Township in Cumberland County, Estell Manor City in Atlantic County, and Upper Township in Cape May County, New Jersey. The entire project extends for 21.7 linear miles. The portion of the project within the Pinelands Commission jurisdiction is approximately 14.85 linear miles, and is the subject of this report.

B. Field and Documentary Research Methods. The survey's primary goals were to identify the presence or absence of archaeological sites in the project area, and to make appropriate recommendations for further cultural resources survey(s) (i.e. Stage II), if warranted.

Documentary Research Methods: Documentary research methods included an examination of site files at the Pinelands Commission, the New Jersey State Museum (NJSM), and the New Jersey Historic Preservation Office (HPO), and were previously presented in the Stage IA cultural resources survey report completed for the South Jersey Gas Pipeline Project (Richard Grubb & Associates, Inc. [RGA] 2013a). Research files were updated in May 2014.

Fieldwork Methods: Supplemental Stage IB (identification-level) fieldwork in the project area was conducted on May 22, 2014 and consisted of the excavation of 16 shovel test pits (STPs) at 50-foot intervals within the project area.

C. Results. The Supplemental Stage IB cultural resources survey consisted of the excavation of 16 STPS that resulted in the recovery of 78 historic artifacts. The artifacts consisted of mixed nineteenth and twentieth century material likely resulting from secondary deposition. The artifacts were considered the result of secondary deposition from filling and grading.

D. Evaluations, Impacts, and Recommendations. The recovered artifacts are not considered a potentially significant archaeological resource. No further cultural resources survey is recommended.

E. Location of Report Copies. Pinelands Commission, South Jersey Gas, Woodard & Curran, Richard Grubb & Associates, Inc.

SECTION II. TABLE OF CONTENTS

SECTION III. LIST OF FIGURES AND PHOTO PLATES

FIGURES:

PHOTO PLATES:

SECTION IV. REGULATORY REQUIREMENTS

A. Applicable Federal Regulations. None

B. Applicable State Regulations. This Supplemental Stage IB cultural resources survey was initiated in compliance with N.J.A.C. 7:50-6.155 Evaluation of Development Proposals in Part XV - Historic, Archaeological, and Cultural Preservation of the Pinelands Management Plan which provides that a cultural resources survey shall be performed for any comprehensive applications for development in a Pinelands Town or Village, and for major development in other Pinelands Management Areas.

This report is designed to satisfy the revised Pinelands Guidelines for Cultural Resource Surveys, which were incorporated into the amended New Jersey Pinelands Comprehensive Management Plan for Historic Period Sites, adopted by the New Jersey Pinelands Commission on August 10, 1990, published April 1991, and updated October 2006.

The Pinelands Development Application Number for this project is #2012-0056.001. This work was completed under the direction of Ilene Grossman-Bailey (Principal Investigator) who meets the National Park Service's professional qualifications standards under 36 CFR 61 (Appendix A).

C. Applicable Local Regulations. None

SECTION V. NATURAL RESOURCE INFORMATION

A. Natural Resource Inventory

1. Soils. Soils within the project area are mapped as Hammonton loamy sand, 0 to 5 percent slopes (HbmB), moderately well-drained loamy sand found on flats and depressions (NRCS 2012).

2. Topography. Topographic relief in the project area is low and consists of an upland, level flat with an elevation of approximately 20 feet above mean sea level (Figure 1). See RGA (2013a) for more details.

3. Vegetation. The native vegetation found within the project area is composed mostly of pine and oak trees or Oak-Pine Forest Type (OP) (Markley 1977; McCormick and Jones 1973). Vegetation within the project area is manicured grass, athletic field, and secondary growth woodlands. See RGA (2013a) for more details.

4. Hydrology. The project area is drained by tributaries of the Tuckahoe River watershed (see Figure 1), which empties into the Great Egg Harbor Bay (see RGA 2013a for more details). Wetlands are located to the west of the project area across Mt. Pleasant-Tuckahoe Road (see RGA 2013a: Figure 8h).

B. The Environment of the Project Area The Mt. Pleasant ROV Site consists of an upland manicured lawn/athletic field and a wooded setting surrounded by recent and historic residential development in Tuckahoe (Figure 2). The Upper Township Recreational Department offices are located to the southwest of the project area.

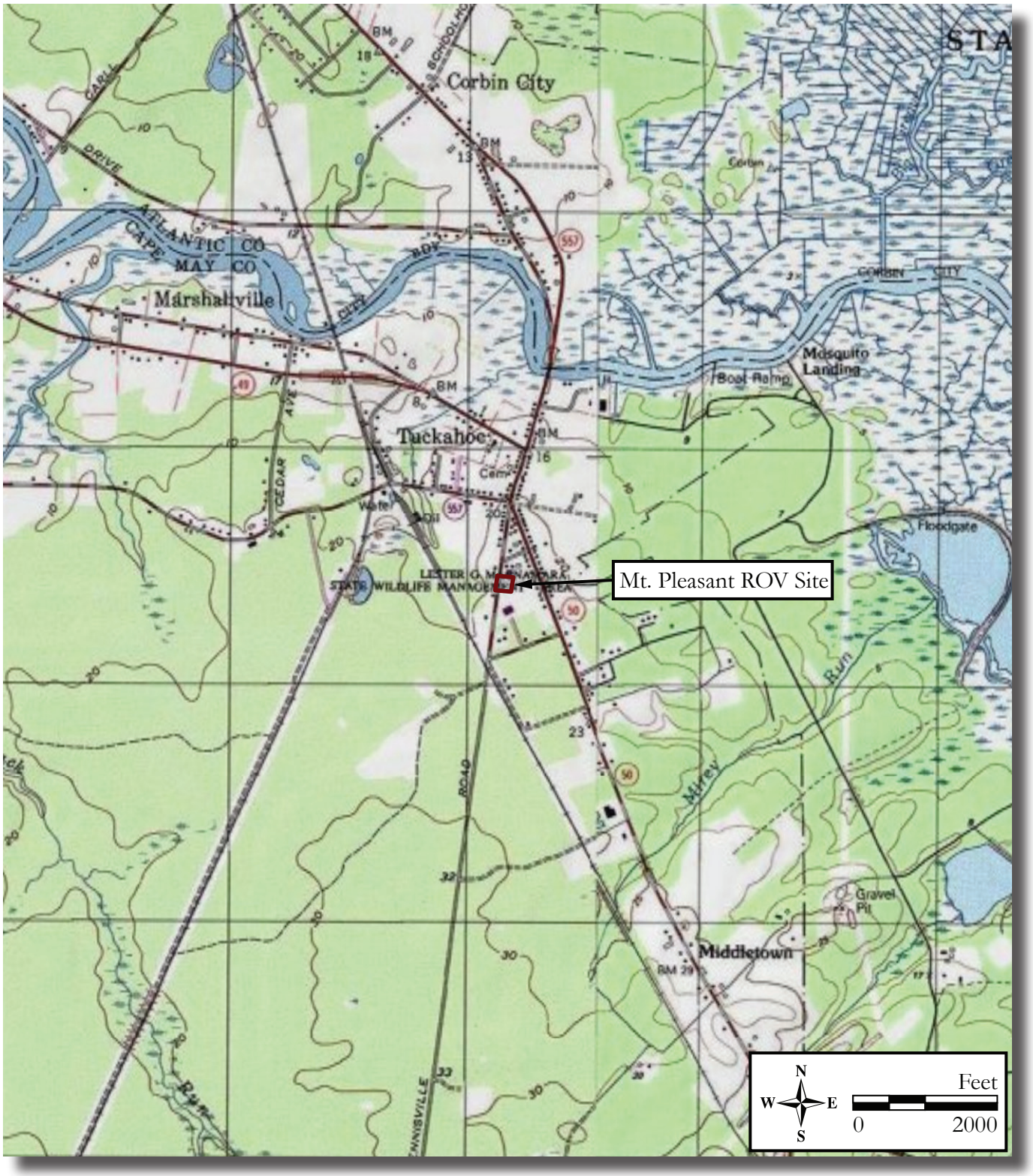

Figure 1: U.S.G.S. Map
(from 1995 U.S.G.S. 7.5' Quadrangle: Tuckahoe, NJ).

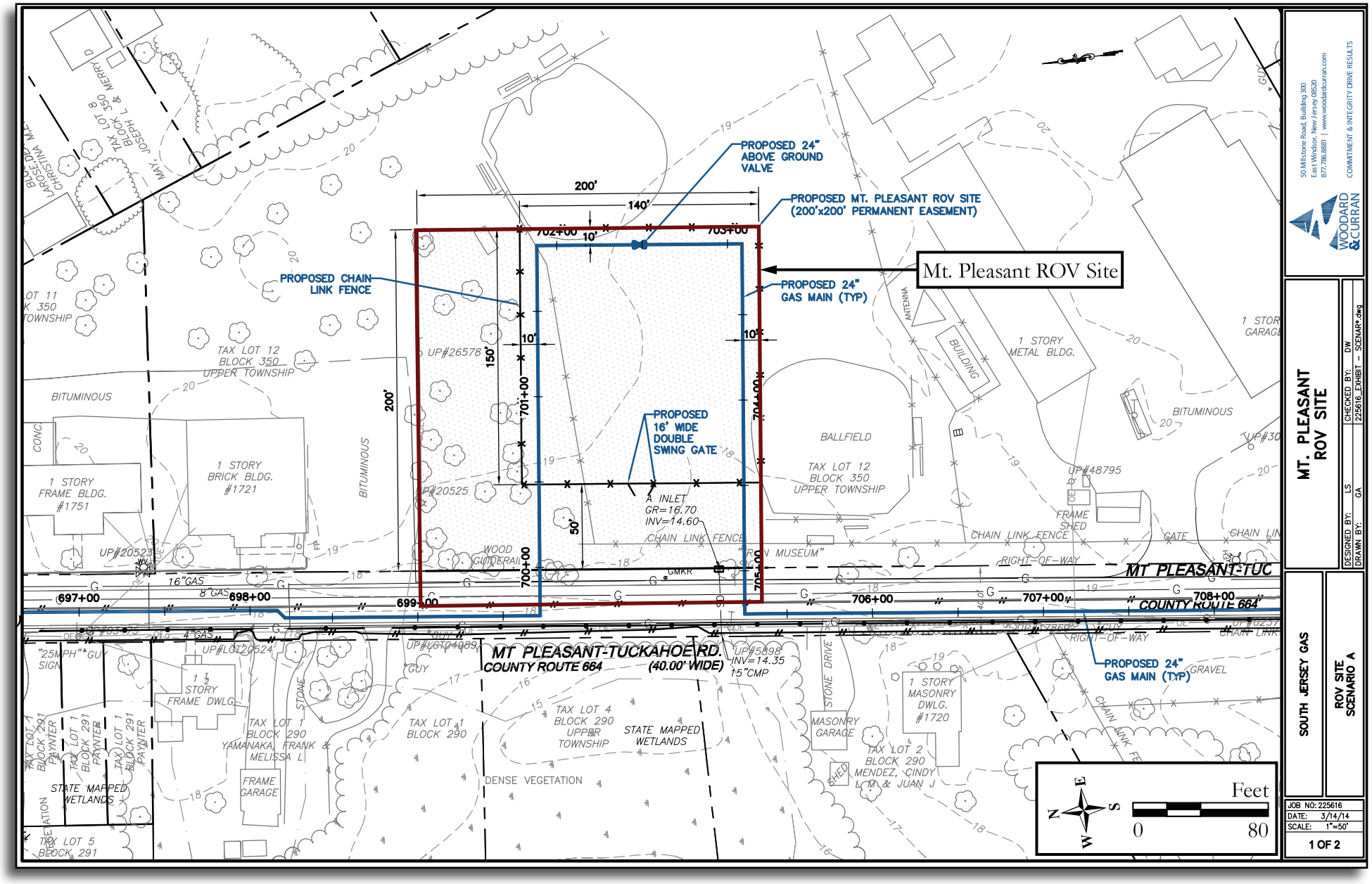

Figure 2: South Jersey Gas Mt. Pleasant ROV Site (Woodard & Curran, 2014).

SECTION VI. RESULTS OF BACKGROUND DOCUMENTARY RESEARCH

A. Documentary Research into Prehistory

1. List of sources consulted. Presented in the Stage IA report; see RGA (2013a) for more details.

2. Summary of all known sites within a one-mile radius of the project area. Presented in the Stage IA report; see RGA (2013a: Table 2) for more details. No registered prehistoric sites are located within the Mt. Pleasant ROV Site. Five prehistoric sites are located within a mile. The closest site is 28CM34, which encompasses a large area along the Tuckahoe River approximately 3,000 feet to the north of the Mt. Pleasant ROV Site (Skinner and Schrabisch 1913). Site 28CM34 may incorporate Pinelands Site #979 and NJSM Site 28CM54, which are mapped nearby. The National Register of Historic Places (NRHP)-eligible Late Archaic to Late Woodland period Mosquito Landing Site (28CM56) is located adjacent to the Tuckahoe River, approximately 3,000 feet to the north of the Mt. Pleasant ROV Site. The prehistoric site types and temporal designations for the recorded sites are generally unknown, but nearly all are located within 400 feet of a perennial water source (see RGA 2013a: Table 2).

3. Summary of Research Results. See RGA (2013a)

B. Documentary Research into the Historic Period

1. List of sources consulted. Sources consulted are listed in the Stage IA report; see RGA (2013a) for more details.

2. Summary of all known sites within a one-mile radius of the project area. The project area is adjacent to the State and NRHP-listed South Tuckahoe Historic District (SHPO Opinion: 8/28/1996; SR: 1/8/1997; NR: 3/7/1997) and east of the NRHP- and State Register-eligible Atlantic City Railroad Cape May Division Historic District (SHPO Opinion: 7/2/2004; DOE: 6/23/2005). The eighteenth-nineteenth century town of Tuckahoe is listed on the Pinelands Commission Historic Inventory (No. 1495).

No registered historic archaeological sites are located within the Mt. Pleasant ROV Site. One historic site, the Williams-Shoemaker House Site (28CM41), an eighteenth-twentieth century house and possible apothecary, is located approximately 2,000 feet to the north of the project area (see RGA 2013a: Table 4; URS Greiner, Inc. 1999).

3. Historical Development in the Vicinity of the Project Area. The overall historical development was presented in the Stage IA report; see RGA (2013a). Historic maps (Beers 1872; see RGA 2013a: Figure 7) suggest that the portion of Mt. Pleasant-Tuckahoe Road near the location of the Mt. Pleasant ROV Site may not have been developed in the nineteenth century although structures are shown to the north and east. The project area is adjacent to the South Tuckahoe Historic District (SHPO Opinion: 8/28/1996; SR: 1/8/1997; NR: 3/7/1997). In 1931, the project area was forested (NETR 1931). By 1951, the athletic field portion was cleared and two small structures are shown adjacent to the wooded portion in the northwestern portion of the project area (NETR 1951). By 1970, the structures are gone and one baseball diamond is shown east of the project area (NETR 1956, 1963, 1970). The initial Upper Township recreational and maintenance complex structures were also built by 1970. The second baseball diamond south of the project area was laid out by 2002 (NETR 1987, 1995, 2002).

4. Effect of documentary research on field survey strategy. A surface inspection was completed to examine the Mt. Pleasant ROV Site for extant, undocumented foundational remains and

structures, and assess the amount of disturbance that may have affected such resources, if present. The sensitivity for prehistoric archaeological resources was considered high due to the proximity of wetlands and the presence of documented prehistoric sites within one-half mile of the project area. The project area was assessed as having moderate sensitivity for historic resources due to its position near an historic road and the South Tuckahoe Historic District (SHPO Opinion: 8/28/1996; SR: 1/8/1997; NR: 3/7/1997). All portions of the project area were tested.

SECTION VII. DESCRIPTION OF FIELD SURVEY

A. Method of Surface Inspection

1. Conditions affecting surface inspection. The Mt. Pleasant ROV Site consists of a manicured lawn/athletic field used for Little League baseball to the south and a wooded area to the north (Figure 3; Plates 1 and 2).

2. Delineation of any areas not inspected and justification. None

3. Results of surface inspection. Obvious surface disturbances in the Mt. Pleasant ROV Site were minimal and consisted of the installation of fencing, bleachers, and baseball field markers.

B. Description of Subsurface Testing

1. Controls. The Supplemental Stage IB cultural resources survey consisted of the excavation of 16 STPs (see Figure 3). The STPs were plotted using survey benchmarks, fencelines, structures, and other landmarks as shown on project plans. The Mt. Pleasant ROV Site was tested on a grid at 50-foot intervals. All STPs were given numeric designations (i.e. 1, 2, 3) (see Appendix B).

The STPs measured approximately 1.5 feet in diameter. Round-nosed shovels and trowels were used for excavation. The STPs were excavated in natural strata or fill levels into subsoil (B). Shovel test pits were extended to an average depth of 2.3 feet below the ground surface or to a maximum depth of 3.5 feet. All planned STPs were excavated.

Soil characteristics and stratum designations were recorded on standardized field forms (see Appendix B). Standardized Munsell color charts were used to record soil color for each stratum.

Excavated soil from each STP was screened through one quarter-inch wire mesh in order to facilitate artifact recovery. Each soil stratum or fill was excavated and screened separately. Recovered artifacts were placed in re-sealable 4-mil polyethylene bags with tags indicating their provenience, including STP designation, level, depth, and stratum. All collected artifacts were logged and removed to an off-site laboratory for cleaning, sorting, cataloging, and analysis. Modern and/or non-diagnostic artifacts (e.g. plastic, modern beer bottle glass, a steel pipe fragment, automotive glass, asphalt, asbestos tile, and coal) were noted on the STP forms but were not retained. These materials are noted in the STP log (see Appendix B). All excavations were backfilled and the ground was restored to its original contours upon completion of the testing. Photographs of field activities and general site views were taken.

2. Size and description of field crew. Ilene Grossman-Bailey, Ph.D., RPA, was the Principal Investigator for this project (see Appendix A) and was assisted by Sean McHugh, MA, RPA. Both consultants have more than 10 years of archaeological experience and are graduates of Temple and Monmouth Universities, respectively.

3. Test pattern and justification. Archaeological fieldwork was conducted on May 22, 2014. The Supplemental Stage IB archaeological fieldwork consisted of the excavation of 16 STPs at 50-foot intervals (see Figure 3). This testing strategy was considered sufficient to locate archaeological resources, if present.

C. Description of Architectural Recording.

Not Applicable

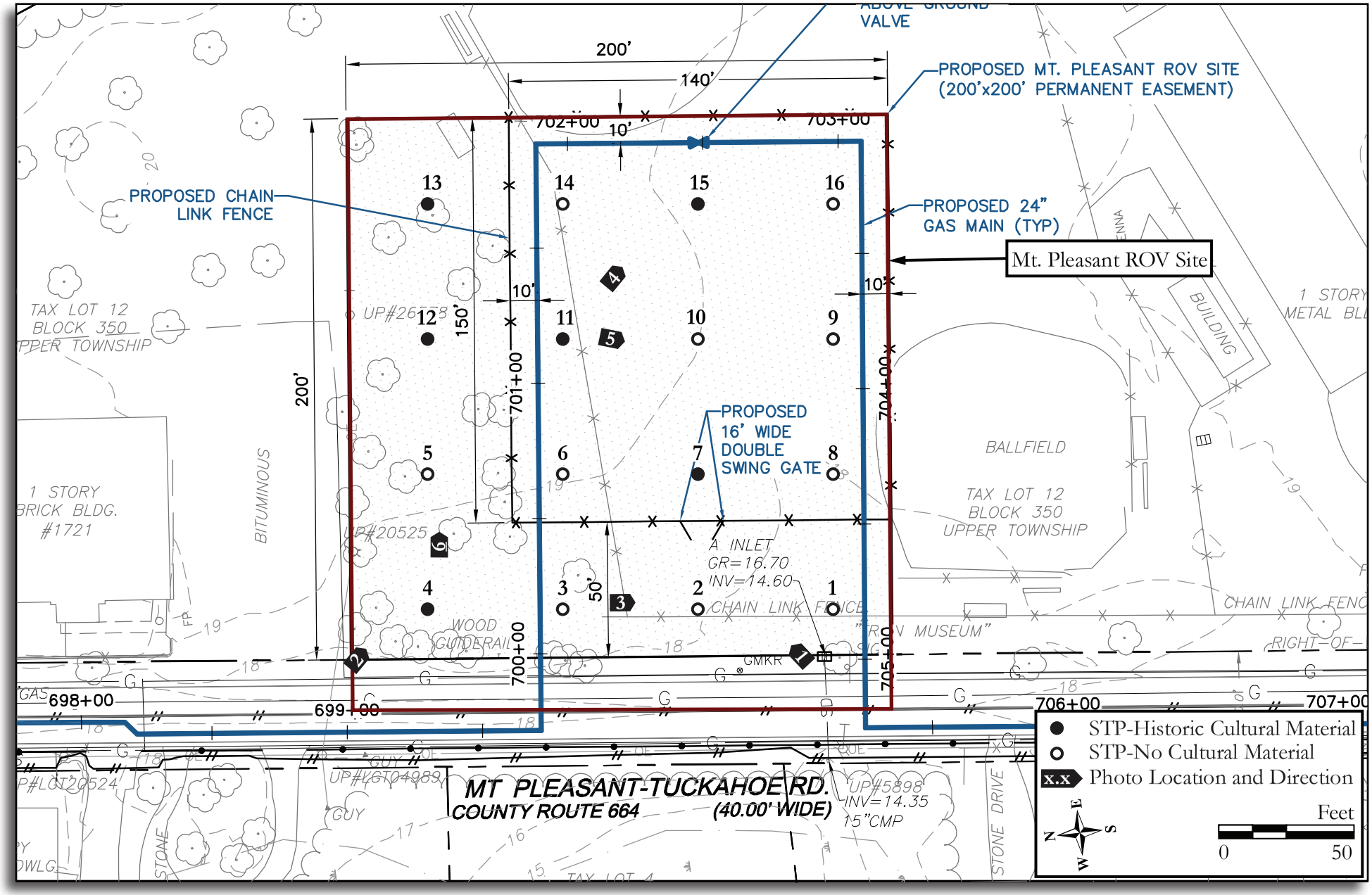

Figure 3: South Jersey Gas Mt. Pleasant ROV Site showing STP and photograph locations (Woodard & Curran, 2014).

Plate 1: Overview of the athletic field portion of the Mt. Pleasant ROV Site.

Photo view: Northeast

Photographer: Ilene Grossman-Bailey

Date: May 22, 2014

Plate 2: Overview of the wooded portion of the Mt. Pleasant ROV Site.

Photo view: Southeast

Photographer: Ilene Grossman-Bailey

Date: May 22, 2014

SECTION VIII. SURVEY RESULTS

A. Description of Cultural Resources Encountered

1. Description of each discrete feature/resource and associated artifacts. The Mt. Pleasant ROV Site is located on the east side of CR 664 and comprises a manicured lawn/athletic field and a wooded area (Plates 3-6; see Plates 1 and 2; see Figure 3). The Upper Township recreational and maintenance complex, built in the late twentieth century, is located to the south of the athletic field. To the north of the wooded area are a parking lot and an early twentieth structure that was formerly a municipal building.

Soils typically consisted of fill or redeposited soil levels overlying natural soils. Only STP 3, located in the wooded area, contained a natural soil profile, consisting of a dark gray silty sand A-horizon overlying a yellowish brown sand B-horizon. One to four very compact fill or redeposited soil levels composed of brown, very dark grayish brown, yellowish brown or brownish yellow silt loam, sand, or coarse sand and gravel were observed in the other 15 STPs. Chunks of asphalt were present in six STPs (see Appendix B). Buried A-horizons (Ab) were present in seven STPs consisting of yellowish to very dark grayish brown to dark gray sandy loam or loamy sand. The Ab-horizon ranged in depth from 0.6 feet below ground surface to 1.2 feet below ground surface and in thickness from 0.2 to 0.8 feet. The presence of the Ab-horizon suggests that intact soils were present in portions of the project area. The subsoil or B-horizon was observed in all STPs and was typically brownish yellow or yellowish brown sand or clayey sand (see Appendix B). The depth to the B-horizon ranged from 0.7 to 2.5 feet below ground surface and the variability seems to reflect the surface alterations and filling noted above.

Historic (n=78) artifacts were retained from six STPs (see Figure 3; see Appendix C). Most consisted of late nineteenth to twentieth century bottle glass (n=67 or 86%) from fill and Ab-horizon contexts (see Appendix C). Two positive STPs located in the athletic field (STPs 7 and 15) yielded 41 historic artifacts from an Ab-horizon stratum and fill (see Plates 3-5). Fill 3 in STP 15 yielded single fragments of clamshell and window glass, and 34 fragments of bottle glass. The Ab-horizon in STP 7 yielded five artifacts, including Mason jar fragments (post 1858; Miller 2000) and a sherd of whiteware (post 1820). In the wooded area, 37 artifacts were recovered from STPs 4, 11, 12, and 13 (see Plates 2 and 6). Fill 2 in STP 13 yielded 13 artifacts including a cut nail, window glass, and a pressed glass bowl fragment in addition to bottle glass. In STPs 4, 11, and 12, Ab-horizons yielded a cut nail, fragments of window glass, three sherds of whiteware, two sherds of post-1842 white granite ware, a sherd of an unglazed red earthenware flower pot, and late nineteenth-early twentieth century bottle glass. Most artifacts were classified as domestic. The two cut nails and nine fragments of window glass were scattered and did not seem to indicate the presence of any structural remains. No structural remains or features were noted. Small amounts of plastic, asphalt, a steel pipe fragment, asbestos shingle fragments, modern beverage bottle glass, and coal were discarded. The recovered artifact assemblage and discarded artifacts were likely the result of secondary deposition from filling and grading and may be associated with the mid-twentieth century structures shown on historic aerial photographs (NETR 1951). The recovered artifact assemblage and discarded artifacts are not considered a potentially significant archaeological resource.

Prior Stage IB testing was conducted along CR 664 in the grassy margin proximate to the project area and adjacent to the proposed pipeline (see RGA 2013b: Figure 11r; Plates 28 and 29). Eight STPs were excavated (STPs AS48-1 to AS48-4 and AS49-5 to AS49-8). One STP, AS48-4, was positive for historic artifacts, yielding a fragment of twentieth century Coca Cola bottle glass and a fragment of unidentified metal (see RGA 2013b: Appendix E).

Plate 3: STP 1 in progress in the athletic field portion of the Mt. Pleasant ROV Site.

Photo view: South

Photographer: Ilene Grossman-Bailey

Date: May 22, 2014

Plate 4: STP 15 in progress in the athletic field portion of the Mt. Pleasant ROV Site.

Photo view: Southeast

Photographer: Ilene Grossman-Bailey

Date: May 22, 2014

Plate 5: STP 10 in progress in the athletic field portion of the Mt. Pleasant ROV Site.

Photo view: Southeast

Photographer: Sean McHugh

Date: May 22, 2014

Plate 6: STP 5 in progress in the wooded portion of the Mt. Pleasant ROV Site.

Photo view: East

Photographer: Ilene Grossman-Bailey

Date: May 22, 2014

2. Assessment of relation of features/resources to each other.

a. Detailed descriptions and results of analytical methods:

Laboratory Methods
As indicated, retained artifacts were brought to the RGA laboratory in Cranbury, New Jersey, where they were washed, catalogued, and bagged in preparation for analysis (see Appendix C).

The assemblage from the Supplemental Stage IB cultural resources survey consisted of historic artifacts (see Appendix C). Historic artifacts were analyzed and cataloged according to provenience, artifact group, material, artifact type, decorative or surface treatments(s), and period of manufacture using standard references (e.g., Miller 2000). An historic artifact bibliography is included with the catalog in Appendix C.

b. Photographs/artifact drawings; Artifact Inventory:
The artifact inventory is presented in Appendix C.

c. Tables or other summary information:
See Appendix C

d. Rationale for artifacts not collected or discarded: Modern and/or non-diagnostic artifacts (e.g. plastic, asphalt, a modern one-inch diameter steel pipe fragment, asbestos shingle fragments, modern beverage bottle glass, and coal) are noted in the STP log (see Appendix B).

e. Repository of artifacts and project notes:
Office of Richard Grubb & Associates, Cranbury, New Jersey

B. Relationship to Pinelands Cultural Resource Management Plan for Historic Period Sites.

1. Resource group attribution of historic period resources. The retained historic artifacts were not considered potentially Pinelands Designation-eligible historic period archaeological resources.

2. Determination as to Pinelands Designation eligibility. The criteria used by the Pinelands Commission to determine Pinelands Designation are laid out in the Criteria for Eligibility for Pinelands Designation in the Pinelands Cultural Resources Management Plan (1991: 18-47). The nominated resource will be evaluated by the Commission of planning board according to four specific criteria of eligibility (N.J.A.C. 7:50-6.154(b)1). These criteria are virtually identical to those used by the State and National Registers and include the following:

i. The presence of structures, sites, or areas associated with events of significance to the cultural, political, economic or social history of the nation, state, local community or the Pinelands; or

ii. The presence of structures, sites, or areas associated with that are associated with the lives of persons or institutions of significance to the cultural, political, economic or social history of the nation, state, local community or the Pinelands; or

iii. The presence of structures that represent the work of a master, or that possess high artistic values, or that embody the distinctive characteristics of a type, period or method of construction, or that represent a distinguishable entity of significance to the cultural , political, economic or social history of the nation, state, local community or the Pinelands; or

iv. The presence of a site or area which has yielded or is likely to yield significant information regarding the history or archaeological history of the Pinelands.

In addition, the resource must have retained its historic integrity (Pinelands Cultural Resources Management Plan 1991: 19-20; Liggett and Wilson 1980).

No archaeological resources considered to be potentially eligible for Pinelands Designation were identified.

3. Recommended treatment measures.
None. No further cultural resources survey is recommended.

SECTION IX. SOURCES

Beers, F. W.
1872 Topographical Map of Cape May County, New Jersey. Comstock & Cline, New York, New York.

Liggett, Barbara and Budd Wilson
1980 Historical Archaeological Resources of the Pinelands for the New Jersey Pinelands Commission. On file, New Jersey Pinelands Commission, New Lisbon, New Jersey.

Markley, Marco L.
1977 *Soil Survey of Cape May County, New Jersey.* United States Department of Agriculture, Soil Conservation Service in cooperation with New Jersey Agricultural Experiment Station, Cook College, Rutgers, the State University and the New Jersey Department of Agriculture State Soil Conservation Committee.

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Miller, George L. with contributions by Patricia Samford, Ellen Shlasko, and Andrew Madsen
2000 Telling Time for Archaeologists. *Northeast Historical Archaeology* 29:1-22.

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2002 Historic Aerial Photographs. Electronic Document, www.historicaerials.com, accessed May 2014.

Natural Resources Conservation Service (NRCS)
2012 Natural Resources Conservation Service, United States Department of Agriculture, Web Soils Survey, Electronic document, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx accessed May 6, 2013.

New Jersey Pinelands Commission
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Richard Grubb & Associates, Inc. (RGA)
2013a Stage IA Archaeological Survey and Historic Architectural Screening, South Jersey Gas Pipeline Project, Maurice River Township, Cumberland County, Estell Manor City, Atlantic County and Upper Township, Cape May County, New Jersey. On file, Pinelands Commission, New Lisbon, New Jersey.

2013b Stage IB/II Cultural Resources Survey, South Jersey Gas Pipeline Project, Maurice River Township, Cumberland County, Estell Manor City, Atlantic County, and Upper Township, Cape May County, New Jersey. On file, Pinelands Commission, New Lisbon, New Jersey.

Skinner, Alanson, and Max Schrabisch
1913 A Preliminary Report of the Archaeological Survey of the State of New Jersey. *Geological Survey of New Jersey*, Bulletin No. 9. Geological Survey of New Jersey, Trenton, New Jersey.

United States Geological Survey
1995 7.5' Quadrangle: Tuckahoe, NJ

URS Greiner, Inc.
1999 Phase II Archaeological Evaluation, Williams-Shoemaker House Site (28CM41), Tuckahoe River Bridge Replacement Project, State Route 50, Tuckahoe, Upper Township, Cape May County, New Jersey. On file, Historic Preservation Office, Trenton, New Jersey.

SECTION X.

APPENDIX A: VITAE OF THE PRINCIPAL INVESTIGATOR

Richard Grubb & Associates, Inc.
Cultural Resource Consultants
DBE/WBE/SBE Certified
email: mail@richardgrubb.com ● www.richardgrubb.com

Ilene Grossman-Bailey / Senior Archaeologist (36 CFR 61)

Years of Experience
With this firm:
2002-Present
With other firms: 8

Education
Ph.D. 2001
Temple University
Anthropology

M.A. 1998
Temple University
Anthropology

B.A. 1979
College of
New Jersey
English

Professional Training
40-Hour Health and Safety Training for Hazardous Waste Operations and Emergency Response (OSHA 29 CFR 1910.120), February 2005; 8-Hour HAZWOPER Refresher, March 2014

National Register of Historic Places Workshop, Lawrenceville , NJ
June 2012

Professional Registration
Register of Professional Archaeologists (RPA)

Professional Experience Summary:

Dr. Grossman-Bailey's experience focusing on the identification and evaluation of prehistoric resources. Ilene has extensive experience in applying Section 106 of the National Historic Preservation Act, as amended, and other relevant state and municipal laws and has served as a Principal Investigator on all phases of archaeological investigations, and specializes in prehistoric archaeology. She exceeds the qualifications set forth in the Secretary of Interior's Standards for Prehistoric Archaeologists [36 CFR 61], as well as the SHPO's qualification standards in Pennsylvania, New Jersey, Massachusetts, West Virginia, Maryland, Delaware, Massachusetts, and New York.

Representative Project Experience:

Horseshoe Road Superfund Site, Sayreville Borough, Middlesex County, NJ
(Sponsor: US Environmental Protection Agency) Senior archaeologist for a Stage II cultural resources survey at the Middle Woodland period Upper Terrace Prehistoric Site within the Horseshoe Road Industrial Complex as part of a Remedial Investigation/Feasibility Study conducted for the US Environmental Protection Agency (USEPA) and the US Army Corps of Engineers (USACE) by CDM Federal Programs Corporation and carried out in compliance with Section 106 of the National Historic Preservation Act. Due to the absence of prehistoric features and the low density of artifacts, the site was determined ineligible for listing on the National Register of Historic Places.

Madeira Development, Moorestown Township, Burlington County, NJ
(Sponsor: Burris Construction Company) Principal Investigator, senior archaeologist for a Phase I-III archaeological survey for a residential development in southern New Jersey. Phase I/II archaeological survey and subsequent mitigation work (Phase III) identified a significant prehistoric site containing fragments of blocked end tubular pipes associated with the Early Woodland period Middlesex-Adena complex and diagnostic teardrop points. These artifacts provide an intriguing link to pan-regional trade, social, and religious practices associated with the Ohio-centered Adena and east coast Middlesex-Adena and Delmarva Adena complexes.

Atlantic City Electric Monroe To Williamstown 69 kV Transmission Line Improvements, Gloucester and Camden Counties, NJ
(Sponsor: Pepco Holdings, Inc.) Principal Investigator and senior archaeologist for the Phase IA reconnaissance-level and Phase IB intensive-level archaeological investigations of the 8-mile long transmission line conducted to satisfy regulations of the Pinelands Commission. No significant archaeological resources were identified. The Pinelands Commission concurred with the report and these findings.

I-295/Route 42 Missing Moves Project, Camden and Gloucester Counties, NJ
(Sponsor: NJDOT) Senior archaeologist, Principal Investigator for the cultural resources investigation for bridge and roadway expansion and wetlands mitigation. Prepared a scope of work to identify significant archaeological resources. Phase I-level subsurface archaeological testing did not identify National Register-eligible archaeological resources.

APPENDIX B: SHOVEL TEST PIT LOG

APPENDIX B: SHOVEL TEST PIT LOG

STP	DEPTH*	STRATUM	MUNSELL	SOIL TYPE	COMMENTS/ ARTIFACTS
1	0.0-0.7	Fill 1	10YR 4/2	Silt Loam	NCM
	0.7-2.0	Fill 2	10YR 6/6 m/w 10YR 3/2	Silt Loam w/ Asphalt & Pebbles	NCM
	2.0-3.0	B	10YR 6/6	Sandy Clay	NCM
2	0.0-0.5	Fill 1	10YR 4/3	Loamy Sand	NCM
	0.5-1.5	Fill 2	10YR 5/6	Coarse Sand w/ Asphalt & Gravel	NCM; (NR: modern glass, asphalt, plastic)
	1.5-2.5	B	10YR 5/8	Sand	NCM
3	0.0-0.7	A	10YR 4/1	Sandy Silt Loam	NCM
	0.7-2.4	B	10YR 5/8	Sand w/ Pebbles	NCM
4	0.0-0.3	Fill	10YR 6/8	Coarse Sand w/ Pebbles	NCM
	0.3-0.7	Ab1	10YR 4/4	Loamy Sand	CM
	0.7-1.0	Ab2	10YR 3/2	Loamy Sand w/ Roots	NCM
	1.0-2.0	B	10YR 5/8	Sand	NCM
5	0.0-0.6	Fill	10YR 4/3 m/w 10YR 5/1	Silt Loam w/ Pen	NCM
	0.6-1.4	Ab	10YR 4/1	Sandy Silt Loam	NCM
	1.4-2.9	B	10YR 5/8	Sand w/ Pebbles	NCM
6	0.0-0.2	Fill 1	10YR 4/3	Silt Loam	NCM
	0.2-0.9	Fill 2	10YR 4/3 m/w 10YR 6/6	Silt Loam w/ Pebbles	NCM
	0.9-1.1	Ab	10YR 4/2	Silt Loam	NCM
	1.1-2.2	B	10YR 5/8	Sand w/ Pebbles	NCM
7	0.0-0.7	Fill 1	10YR 4/3	Loamy Sand w/ Roots	NCM
	0.7-1.2	Fill 2	10YR 5/6	Coarse Sand w/ Asphalt & Pebbles	NCM; (NR: coal, asphalt, auto glass, steel pipe)
	1.2-1.4	Ab	10YR 3/2	Loamy Sand	CM
	1.4-2.2	B	10YR 6/8	Sand w/ Iron Concretions & Lamellae	NCM
8	0.0-0.8	Fill 1	10YR 4/2	Silt Loam	NCM
	0.8-2.1	Fill 2	10YR 6/6 m/w 10YR 3/2	Silt Loam w/ Asphalt & Pebbles	NCM
	2.1-3.1	B	10YR 6/6	Sandy Clay	NCM
9	0.0-1.1.	Fill 1	10YR 4/2	Silt Loam	NCM
	1.1-2.5	Fill 2	10YR 6/6 m/w 10YR 3/2	Silt Loam w/ Asphalt & Pebbles	NCM
	2.5-3.5	B	10YR 6/6	Sandy Clay	NCM
10	0.0-0.4	Fill 1	10YR 4/3	Loamy Sand w/ Roots	NCM
	0.4-1.0	Fill 2	7.5YR 5/3	Coarse Sand w/ Gravel	NCM
	1.0-1.4	Fill 3	10YR 7/3	Coarse Sand	NCM
	1.4-2.2	B	10YR 6/8	Sand w/ Lamellae	NCM
11	0.0-0.5	Fill 1	10YR 4/2	Silt Loam	NCM
	0.5-1.2	Fill 2	10YR 5/1 m/w 10YR 6/1	Coarse Sand w/ Pebbles	NCM
	1.2-1.5	Ab	10YR 3/1	Silt Loam	CM; (NR: Asbestos tiles)
	1.5-2.7	B	10YR 6/6	Sandy Clay	NCM
12	0.0-0.5	Fill 1	10YR 4/3	Loamy Sand w/ Roots	NCM
	0.5-0.8	Fill 2	10YR 7/3 m/w 7.5YR 5/3	Coarse Sand w/ Pebbles	CM
	0.8-1.0	Ab	10YR 4/4	Loamy Sand w/ Roots	NCM
	1.0-2.0	B	10YR 5/6	Sand w/ Roots	NCM

STP	DEPTH*	STRATUM	MUNSELL	SOIL TYPE	COMMENTS/ ARTIFACTS
13	0.0-0.5	Fill	10YR 4/3	Loamy Sand w/ Roots	CM
	0.5-0.8	Ab	10YR 4/1	Loamy Sand	NCM
	0.8-2.1	B	10YR 5/6	Sand w/ Pebbles	NCM
14	0.0-0.3	Fill 1	10YR 4/2	Silt Loam	NCM
	0.3-1.5	Fill 2	10YR 6/1 m/w 10YR 3/2	Silt Loam w/ Asphalt & Pebbles	NCM
	1.5-2.3	B	10YR 6/6	Sandy Clay	NCM
15	0.0-0.4	Fill 1	10YR 4/3	Loamy Sand	NCM
	0.4-0.9	Fill 2	10YR 7/3	Coarse Sand	NCM
	0.9-1.4	Fill 3	10YR 3/2	Loamy Sand	CM
	1.4-1.8	Fill 4	10YR 5/6	Coarse Sand w/ Gravel	NCM
	1.8-2.6	B	10YR 5/8	Sandy Clay	NCM
16	0.0-0.6	Fill 1	10YR 4/2	Silt Loam	NCM
	0.6-2.0	Fill 2	10YR 6/6 m/w 10YR 3/2	Silt Loam w/ Pebbles	NCM
	2.0-2.5	B	10YR 6/6	Sandy Clay	NCM

Key:
*In Feet, Below Ground Surface
m/w = Mottled With
NCM = No Cultural Material
CM= Cultural Material
NR=Not Retained

APPENDIX C: HISTORIC ARTIFACT CATALOG

APPENDIX C: HISTORIC ARTIFACT CATALOG

CATALOG #	TEST #	LEVEL	DEPTH*	STRATUM	COUNT	GROUP	ARTIFACT MATERIAL	ARTIFACT CLASS	ARTIFACT TYPE	DESCRIPTION	MEASUREMENTS/ COMMENTS/DATES
1	4	2	0.3-0.7	Ab 1	1	AGR	Ceramic	Red earthenware	Flower pot	Unglazed terra cotta base fragment. Very small flower pot	
1	4	2	0.3-0.7	Ab 1	1	ARCH	Ferrous Metal	Nail	Cut	Slightly corroded, clinched	1805-1893 (Wells 1998)
1	4	2	0.3-0.7	Ab 1	3	ARCH	Glass	Flat	Window	Pale aqua fragments	
1	4	2	0.3-0.7	Ab 1	3	DOM	Ceramic	Whiteware	Small bowl	Undecorated rim fragments, 2 fragments mend	Post 1820
1	4	2	0.3-0.7	Ab 1	1	DOM	Glass	Vessel	Bottle	Amber colored body fragment. Possible flask. Air bubble and mold seam present	
1	4	2	0.3-0.7	Ab 1	1	DOM	Glass	Vessel	Bottle	Pale aqua colored body fragment	
1	4	2	0.3-0.7	Ab 1	1	DOM	Glass	Vessel	Bottle	Manganese colored base fragment. Small medicinal bottle.	1880-1920
1	4	2	0.3-0.7	Ab 1	3	DOM	Glass	Vessel	Bottle	Manganese colored body fragment. Possibly part of the above bottle	1880-1920
2	7	3	1.2-1.4	Ab	1	DOM	Ceramic	Whiteware	Unidentified	Undecorated body fragment. Possible plate fragment	Post 1820
2	7	3	1.2-1.4	Ab	1	DOM	Glass	Vessel	Bottle	Colorless body fragment	
2	7	3	1.2-1.4	Ab	1	DOM	Glass	Vessel	Jar	Colorless mason jar lip and neck with threaded rim	Post 1858 (Miller 2000)
2	7	3	1.2-1.4	Ab	2	DOM	Glass	Vessel	Jar	Colorless body fragment. Possibly part of above vessel	Post 1858 (Miller 2000)
3	11	3	1.2-1.5	Ab	1	DOM	Ceramic	White Granite	Serving dish	Molded body fragment, bluish/gray tint.	1842-1930 (Miller 2000)
3	11	3	1.2-1.5	Ab	2	DOM	Glass	Glass	Vessel	Colorless body fragments	
4	12	2	0.5-0.8	Fill 2	1	ARCH	Ferrous Metal	Nail	Cut	Slightly corroded	1805-1893 (Wells 1998)
4	12	2	0.5-0.8	Fill 2	5	ARCH	Glass	Flat	Window	Pale aqua color	
4	12	2	0.5-0.8	Fill 2	3	DOM	Glass	Vessel	Bottle	Colorless body fragments	
4	12	2	0.5-0.8	Fill 2	1	DOM	Glass	Vessel	Bottle	Pale green body fragment	
4	12	2	0.5-0.8	Fill 2	1	DOM	Glass	Vessel	Bowl	Decorative serving bowl or dish. Pressed glass with vertical iridescent orange linear pattern on the interior. Two fragments mend	Post 1825 (Miller 2000)
4	12	2	0.5-0.8	Fill 2	2	DOM	Glass	Vessel	Unidentified	Colorless body fragments, possible same vessel as above	
5	13	1	0.0-0.5	Fill	1	DOM	Ceramic	Whiteware	Cup or bowl	Undecorated body fragment.	Post 1820 (Miller 2000)
5	13	1	0.0-0.5	Fill	4	DOM	Glass	Vessel	Unidentified	Cobalt blue body fragments, mend	Post 1914; Miller and McNichol 2002: 8
5	13	1	0.0-0.5	Fill	1	DOM	Glass	Vessel	Bottle	Colorless body fragment with screen applied lettering "E lair"	
5	13	1	0.0-0.5	Fill	1	DOM	Ferrous Metal	Unidentified	Unidentified	Heavily corroded, flat fragment	
6	15	3	0.9-1.4	Fill 3	1	ARCH	Glass	Flat	Window	Colorless fragment	

CATALOG #	TEST #	LEVEL	DEPTH*	STRATUM	COUNT	GROUP	ARTIFACT MATERIAL	ARTIFACT CLASS	ARTIFACT TYPE	DESCRIPTION	MEASUREMENTS/ COMMENTS/DATES
6	15	3	0.9-1.4	Fill 3	1	BIO	Faunal	Shell	Clam	Body fragment	3.0 g
6	15	3	0.9-1.4	Fill 3	1	DOM	Glass	Vessel	Bottle	Amber colored beer bottle fragment	20th century
6	15	3	0.9-1.4	Fill 3	3	DOM	Glass	Vessel	Bottle	Bright green base fragment	20th century
6	15	3	0.9-1.4	Fill 3	5	DOM	Glass	Vessel	Bottle	Cobalt blue base fragments, 3 mend. Small rectangular-shaped bottle	Post 1914; Miller and McNichol 2002: 8
6	15	3	0.9-1.4	Fill 3	3	DOM	Glass	Vessel	Bottle	Colorless base fragments. Mend. Rectangular-shaped bottle	
6	15	3	0.9-1.4	Fill 3	1	DOM	Glass	Vessel	Bottle	Colorless neck fragment	
6	15	3	0.9-1.4	Fill 3	12	DOM	Glass	Vessel	Bottle	Colorless body fragments	
6	15	3	0.9-1.4	Fill 3	9	UNID	Glass	Vessel	Unidentified	Pale green body and base/rim fragment. Possible lid fragments. Two pieces mend	

Key:

* in feet below ground surface
AGR - Agricultural
ARCH - Architectural
BIO - Biological
DOM - Domestic
UNID - Unidentified

APPENDIX C: HISTORIC ARTIFACT CATALOG REFERENCES

Miller, George L. with contributions by Patricia Samford, Ellen Shlasko, and Andrew Madsen
2000 Telling Time for Archaeologists. *Northeast Historical Archaeology* 29:1-22.

Miller, George L. and Tony McNichol
2002 "Dates For Suction Scarred Bottoms: Chronological Changes in Owens Machine-Made Bottles." Paper presented at the 2002 Annual Meeting of the Society for Historical Archaeology, Mobile, Alabama.

Wells, Tom
1998 Nail Chronology: The Use of Technologically Derived Features. *Historical Archaeology* 32(2): 78-99.

APPENDIX D: ANNOTATED BIBLIOGRAPHY

Author:	Ilene Grossman-Bailey, RPA
Title:	Supplemental Stage IB Cultural Resources Survey, South Jersey Gas Pipeline Project, Mt. Pleasant ROV Site, Tax Lot 12, Block 350 Upper Township, Cape May County, New Jersey Pinelands Development Application #2012-0056.001
Date:	June 2014
RGA Database Title:	SJG Mt. Pleasant ROV Site
RGA Project No.:	2014-119
State:	New Jersey
County:	Cape May
Municipality:	Upper Township
U.S.G.S. Quad:	Tuckahoe, NJ
Drainage Basin:	Tuckahoe River, Great Egg Harbor Bay, Atlantic Ocean
Regulation:	Pinelands Commission
Project Type:	Gas Line Construction
Project Sponsor:	South Jersey Gas
Client:	Woodard & Curran
Level of Survey:	Stage IB (Identification-level)
Cultural Resources:	None