



Cultural Resources Survey of 39 acres at the Edison Solar Site, Barnwell County, South Carolina. Final Report

Prepared For:

C2 Energy Capital

Prepared By:

TRC Environmental Corporation

EXECUTIVE SUMMARY

TRC Environmental Corporation (TRC) was retained by C2 Energy Capital (also known as “Client” or “User”) to perform an intensive Cultural Resource Survey at the Edison Solar Site (herein referred to as the “Site”) located in the town of Barnwell in Barnwell County, South Carolina. TRC’s assessment was conducted in connection with the Client’s planned purchase of a fully constructed, utility-scale solar development at the Site. The Cultural Resource Survey described in this report meets the qualifications specified in the Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation (FR 48:44716-44742) and the South Carolina Standards and Guidelines for Archaeological Investigations (SHPO et al. updated 2013). All supervisory personnel meet or exceed the Secretary of the Interior’s Professional Qualifications Standards set forth in 36 CFR Part 61.

The Edison Solar Site consists of a 39 acre tract that has been developed as a solar farm. Joey Zorn Boulevard acts as the northern boundary of the site. Property lines make up the southern and eastern boundaries, and Barwick Road serves as the western boundary. The entire tract has been disturbed by construction. The project area has been leveled and compacted. Solar arrays have been constructed, underground lines have been put in place, a perimeter fence surrounds the site and trees will be planted as vegetative screening.

Surface exposure within the tract was 75-100 percent. Close interval visual inspection and shovel testing at 30 and 60-meter (m) intervals was conducted to determine whether the construction had impacted and any significant cultural resources. No archaeological sites were identified during the survey and no artifacts were observed or recovered. The architectural survey identified the Barnwell Heights neighborhood (Resource 0502) as a resources eligible for listing in the NRHP as a historic district under Criterion A in the areas of Community Planning and Development and Industry, and under Criterion C in the Area of Architecture. The neighborhood is significant for its association with NRHP-eligible Savannah River Site. TRC also documented the Apple Street neighborhood (Resource 0503). This resources lacks historic and architectural significance and is not eligible for listing in the NRHP. Finally, TRC recommends that the house at 360 Corley Heights Richardson Road (Resource 0504) lacks historic and architectural significance and is not eligible for listing in the NRHP.

The solar farm itself has a low visual profile with the arrays being no more the 10 feet tall. Existing trees around the perimeter fence and existing vegetation effectively obscure the solar farm from the surrounding neighborhoods. The project has not adversely affected any significant above ground resources.

This Executive Summary is part of this complete report; any findings, opinions or conclusions in this Executive Summary are made in context with the complete report. TRC recommends that the User read the entire report for all supporting information related to findings, opinions and conclusions.

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1.0 INTRODUCTION

In December of 2018 TRC conducted an intensive Cultural Resource Survey of the Edison Solar Site in the Town of Barnwell in Barnwell County, SC (Figure 1). The Edison Solar farm is a newly constructed utility-scale solar development.

Energy Capital (C2) is potentially seeking federal funding for this facility. Consequently, this report is being submitted as a Section 106 compliance project in anticipation of receiving funding from the USDA to purchase the solar farm. TRC Senior Archaeologists Sean Norris, M.A., RPA, and Ramona Grunden conducted the fieldwork and background research. Architectural Historian David Price, M.A. RPA evaluated the structures within and adjacent to the Site.

The project area consists of a newly constructed solar facility. Joey Zorn Boulevard acts as the northern boundary of the site. Property lines mark the eastern and southern boundaries, with Barwick Road on the west. Parallel rows of solar arrays have been built within an approximately 29-acre section of a 39-acre parcel. The site has been cleared of vegetation and ground surface visibility exceeds 80% (Figure 2).

Background research indicated that there were no previously recorded archaeological sites or within the tract, but there is one archaeological site within a one-mile radius of the project area (see Figure 1). In addition, the NRHP eligible Barnwell Downtown Historic District abuts the one-mile radius (see Figure 1).

No archaeological sites were identified during the course of the survey. Soils at the site were disturbed to subsoil. The area had been disked and leveled during the construction of the solar facility. Support structures for the solar panels have been driven into the ground, access road have been constructed and underground utility lines have been put in place. The likelihood of intact significant cultural deposits within the tract is minimal.

The architectural survey identified the Barnwell Heights neighborhood (Resource 0502) and is recommending it eligible for listing in the NRHP as a historic district under Criterion A, and under Criterion C in the Area of Architecture. The neighborhood is significant for its association with NRHP-eligible Savannah River Site.

TRC also documented the Apple Street neighborhood (Resource 0503). This resource lacks historic and architectural significance and is not eligible for listing in the NRHP. One other historic house was identified. The house at 360 Corley Heights Richardson Road (Resource 0504) lacks historic and architectural significance and is not eligible for listing in the NRHP.

The height of the solar farm is minimal and is surrounded by vegetation. Additionally the historic resources are surrounded by modern infrastructure and the infill of newer homes and businesses. The solar project will have no effect on the historic nature or viewshed of the historic resources.

1.1 Physical Setting

The project area consists of approximately 39 acres in the Coastal Plain physiographic province. The project area is situated between the Salkehatchie River 1.5 miles to the west and Turkey Creek 0.5 miles to the east. It has been in use as agricultural field for a greater part of the last century.



Figure 1. USGS topographic quadrangle showing site location.



Figure 2. Typical surface exposure and ground surface visibility encountered.

The land is flat and open with a slight slope to the east towards a tributary of Sanders Branch. Elevations at the site range from 220 to 250 feet AMSL. The surrounding area is characterized by light industry, tract housing, and commercial development.

1.2 Soils

A mix of well-drained and poorly drained soils were encountered at the Site (Figure 3). The soils encountered are described below:

- Barnwell loamy sand (DaB) – 2-6 - percent slope. Well-drained and considered farmland of statewide importance.
- Wagram sand (FuB) – 2-6 - percent slope. Well-drained and considered farmland of statewide importance.

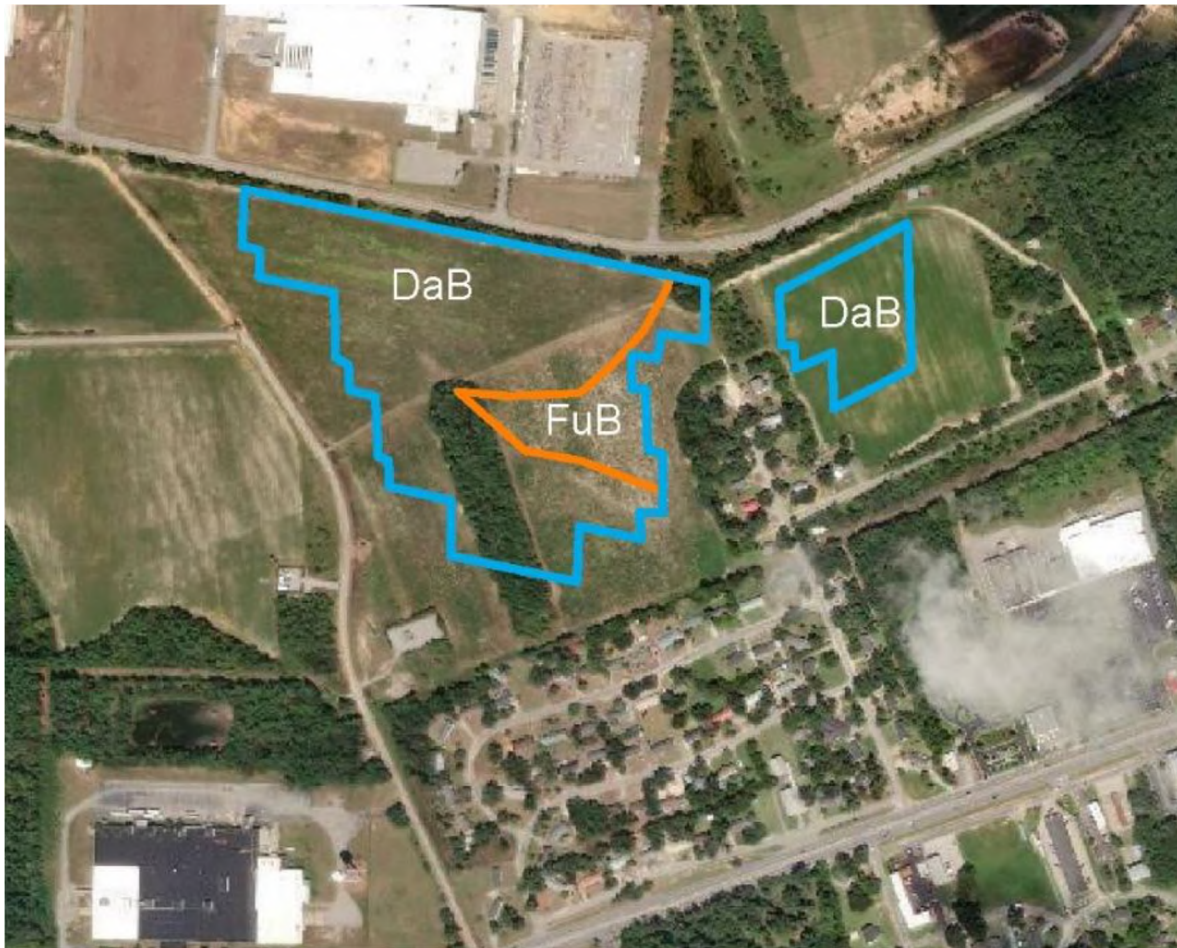


Figure 3. Soils encountered at the Site. Source: USDA Web Soil Survey.

2.0 CULTURAL CONTEXT

The cultural resources identified during the course of the survey consisted a mid-twentieth century neighborhood. No archaeological sites were discovered. A brief context of the history of Barnwell County and the general project area follows as a background for the interpretation of the structures.

2.1 Historic Overview

No prehistoric or historic artifacts were recovered from the project area. Non-Native American people were settling in the vicinity of Barnwell by the late eighteenth century, but the town was not formally established until 1829. There are historic resources and one archaeological site within the one-mile APE.

A brief account of the history of Barnwell County and the project area follows to provide context for the cultural resources identified during the survey.

2.1.1 Settlement and Developmental History of the Project Tract Vicinity

The project area is situated between the Salkehatchie River and Turkey Creek. Being close to a water source indicated that the site had some potential for buried Native American sites. However,

no previously recorded archaeological sites were identified within the vicinity of the project area, although this is likely related to the lack of archaeological work conducted in the area.

Settlement of the region generally occurred along the Salkehatchie River and its tributaries. Trading towns such as Augusta and Fort Moore were in place by the 1730s, but the establishment of farms and plantations was slow to follow. The town of Barnwell began as a small community known as Red Hill, situated on the Stage Coach Road from Augusta to Charleston (Edgar 2006). Mills Atlas, first published in 1825, illustrates the general setting of the area in the early nineteenth century, and shows the town on the eastern banks of Turkey Creek (Figure 4). Growth remained slow, and Barnwell declined in importance when the railroad connecting Augusta and Charleston was placed to the north, giving rise to Williston and Blackville.

The area did not play a significant role in the Civil War, as Union troops failed to make much headway into the South Carolina interior until General William T. Sherman brought his scorched earth policy to the state in 1865 following his more famous March through Georgia. Sherman's main objective was Columbia, but on his march from Savannah toward the capital, he directed cavalry under the command of General Kilpatrick to harass enemy troops in the Central Savannah River Area as a diversion. Union troops occupied Barnwell, Williston, and Blackville, burning all three towns before moving towards Columbia (Henderson 1951).

After the war, farmers were faced with a variety of economic, social, and political problems. Slave owners were divested of a large portion of their wealth and had to develop an entirely new labor system. The newly freed African Americans faced uncertain circumstances as they negotiated labor contracts or rental agreements with their former owners and other white landowners. Capital for investments to replace lost buildings, equipment, and stock was difficult to come by. In addition, unscrupulous men took advantage of the disrupted political system to acquire money and power. A reorganization of the state's political districts resulted in the designation of Barnwell and Edgefield counties in 1868, and the creation of Aiken County in 1871 from portions of Barnwell, Edgefield, Orangeburg, and Lexington counties (Henderson 1951).

After a short period in which gang labor was used on the farms of South Carolina, a system of sharecropping and renting emerged as the most satisfactory for blacks and whites. This system allowed blacks to have some amount of autonomy over their situation and established the family unit as the core of the labor arrangement. The sharecropping system proved fundamentally detrimental to both tenants and landlords because of the opportunity for abuse by the landlords in the distribution of the proceeds and the lack of incentives for the tenant to make improvements to the land. High prices led to over production, which in turn drove prices down. Many white farmers eventually found themselves as tenants, as well (Cabak and Inkrot 1997). A worldwide agricultural depression and the arrival of the boll weevil during the 1920s further eroded the established agricultural regime of the region.

Although the tenant system was detrimental to the land and the economy over the long run, cotton farming formed the basis of the county's economy from the end of the Civil War until the beginning of World War I. The project area was still largely rural as illustrated on the 1919 Allendale Quadrangle (Figure 5). The Town of Barnwell remains east of Turkey Creek. Cotton

production began a steady decline from 1920s until the 1960s. New Deal programs during the Depression helped reduce cotton acreage, and many exhausted fields were planted in pines to control erosion and provide for future income from the land. Crop diversification was also encouraged. Farmers began to experiment with other crops, which were rotated with corn and cotton to restore depleted soil nutrients. Farm size began to increase as banks foreclosed on farms and mechanization and consolidation led to corporate-owned operations where tenants were no longer needed (Cabak and Inkrot 1997).

America's entry into World War II essentially ended the period of cotton monoculture and sharecropping in the region's agriculture. As tenancy became less viable, the jobs created by the war drew tenants away from the farm. The acquisition of a large portion of southern Aiken County and western Barnwell County for the Savannah River Nuclear Power Plant led to further movement away from a strictly agricultural economy. Large numbers of skilled workers were needed to build and operate the plant, and a series of communities developed on the edge of the site to house and provide needed services to these workers. Nonetheless, Barnwell was slow to grow. 1964 aerial photograph of Barnwell County shows a small neighborhood of residences adjacent to the project area with a majority of the land being devoted to agriculture (Figure 6). By the late twentieth century light industry and tract housing begin to appear in the area tract, while the project tract itself remained agricultural.



Figure 4. Mills' 1825 map of Barnwell District.

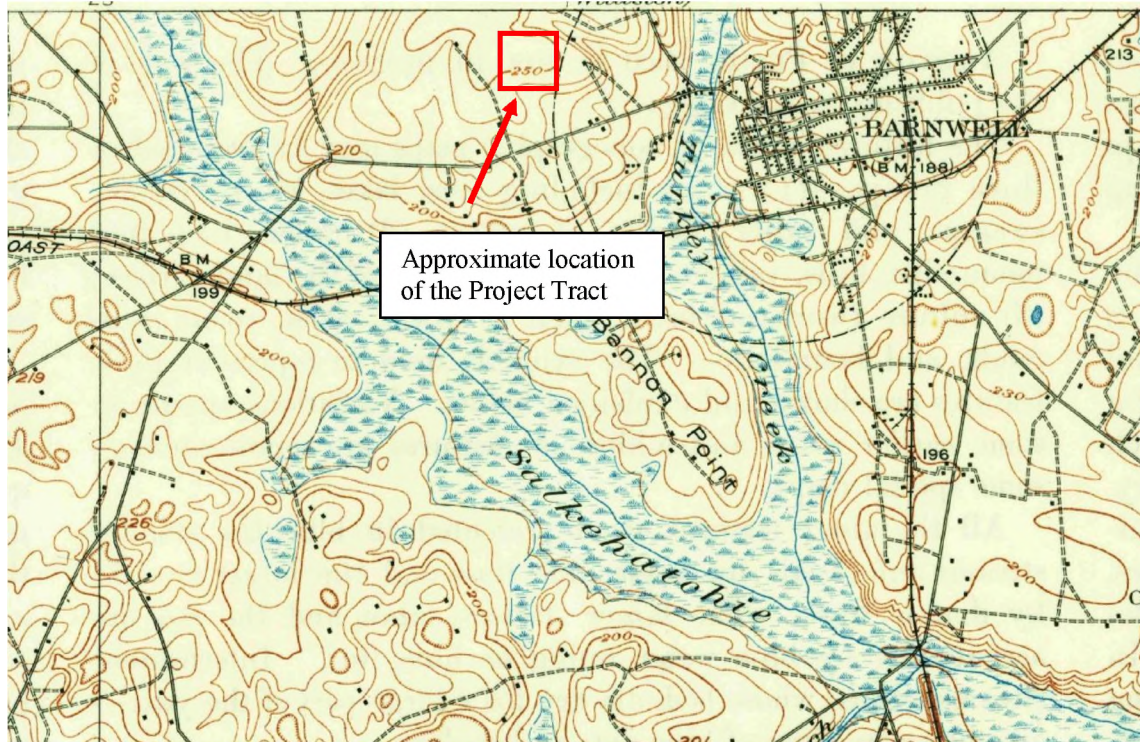


Figure 5. 1919 Allendale USGS topographic quadrangle.

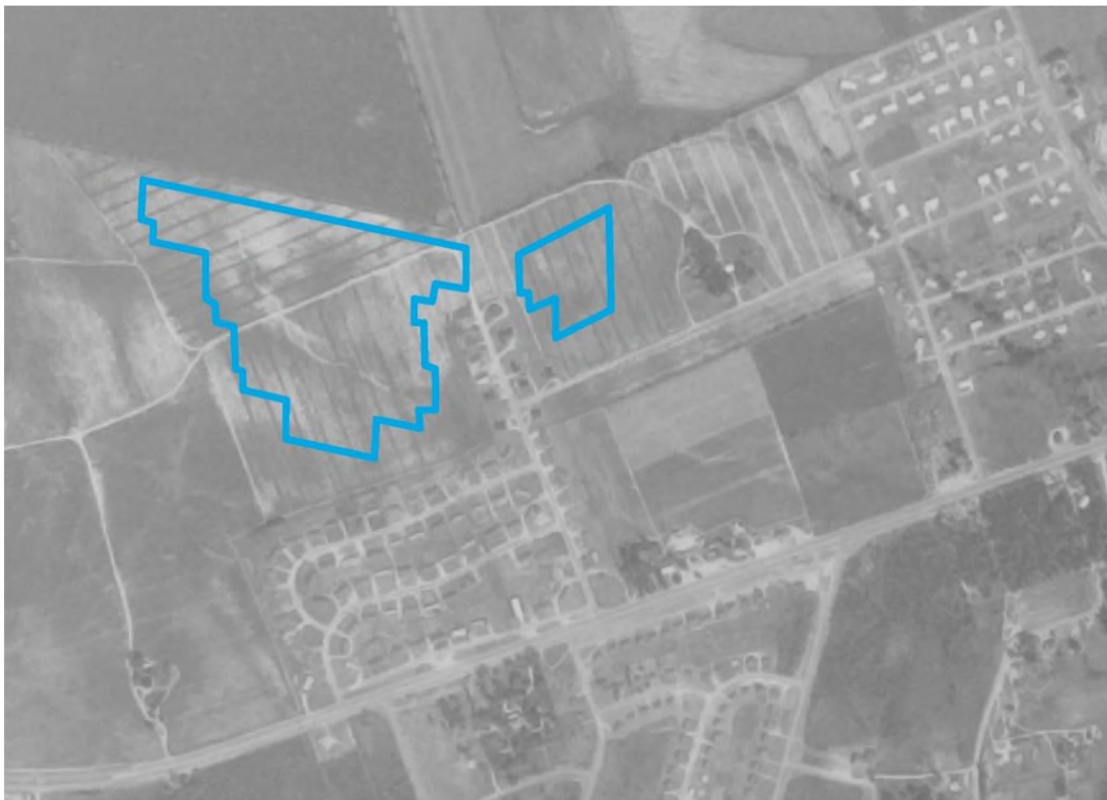


Figure 6. 1964 Barnwell County Digital Aerial Photograph.

3.0 METHODS

3.1 Literature Review

Prior to fieldwork, TRC conducted background research at the South Carolina Department of Archives and History (SCDAH) in Columbia, and at the South Carolina Institute of Archaeology and Anthropology (SCIAA) in Columbia. The records examined at SCDAH included a review of ArchSite the GIS-based Cultural Resource Information System (CRIS) for sites listed in or eligible for inclusion in the National Register of Historic Places (NRHP), and a review of the SCDAH Finding Aid for previous architectural surveys near the project area. The records examined at SCIAA include the master archaeological site maps, state archaeological site files, and any associated archaeological reports.

3.2 Field Survey

The Francis Marion National Forest has developed a probability or predictive model for cultural resources in the Coastal Plain (O'Donoghue 2008). This methodology identifies upland flats, knolls and low slope areas adjacent to water sources or lithic raw material sources as areas that are most likely to contain prehistoric sites. Historic house sites are generally found in the same areas as well as adjacent to old road beds. TRC utilized this predictive model to identify the most likely areas of ground disturbance and those most likely to contain cultural resources.

The project area was visually inspected along parallel transects spaced 30 meters apart. Shovel testing was conducted at 30 and 60-meter intervals across the site and around the perimeter fence. All shovel tests were approximately 30 centimeters (cm) in diameter and excavated to sterile subsoil. Soil was screened through 0.25-inch hardware mesh, and artifacts, if encountered, were bagged according to provenience. Notes were kept in a field journal and on standard TRC site forms. Areas with little to no surface vegetation were visually examined for artifacts and above ground resources.

3.3 Architectural survey

The purpose of the architectural survey was to identify historic architectural properties aged 50 years or older within the project APE that are listed, or eligible for listing, in the NRHP. The architectural APE for this study consisted of the approximately 39-acre Project area, in addition to any areas visually connected to it via viewshed to and from the project area within a 0.5-mi radius surrounding the Project site. Areas within the survey radius that were determined not to be within view of the planned Project due to terrain, vegetation, and/or modern built environments were not considered part of the architectural APE.

TRC's architectural survey consisted of driving all accessible roads within the architectural survey radius to identify architectural resources that appear to be 50 years old or older and visually connected to the Project area. All architectural resources that met the age criterion and fell within visual line of sight to the project area were plotted on the applicable United States Geological Survey (USGS) quadrangle map and photographed with a high resolution digital camera.

Information recorded in the field included a brief description of the main resource, identification of outbuildings, dates of construction, physical integrity, and historic context.

3.4 National Register Eligibility Assessment

A final step in the analysis involved assessing the significance of the identified resources, and developing recommendations for further work, if warranted. Site significance was assessed in accordance with the National Register Criteria for Evaluation (36CFR 60.4), which are designed to guide state and federal agencies in evaluating potential entries for the NRHP. NRHP eligible sites are those that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad pattern of our history; or
- B. That are associated with the lives of persons significant in the past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or that possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That may have yielded, or may be likely to yield information important to history or prehistory.

Criterion D is most often employed in assessing an archaeological site, although other criteria may be appropriate in the case of historic period sites. For an archaeological site to be considered significant, it must have potential to add to the understanding of the area's history or prehistory. A commonly used standard to determine a site's research potential is based on a number of physical characteristics including variety, quantity, integrity, clarity, and environmental context (Glassow 1977). All of these factors were considered in assessing the significance of the one site recorded during these investigations.

4.0 RESULTS

4.1 Background Review

Background research indicates that there are no archaeological sites or aboveground resources within the boundaries of the project tract. There is one archaeological site within a 1.0-mile radius of the tract, and the Barnwell Downtown Historic District abuts the APE on the east.

Site 38BR510 is located east of the project tract, on the east side of US Highway 278 (Figure 1). Recorded as part of a collectors' survey, the site is said to contain Early-Late Archaic materials, but it has not been evaluated.

The Barnwell Downtown Historic District abuts the project APE on the east (Figure 1). The district includes the county courthouse and infrastructure, as well as commercial buildings, and dates from the late nineteenth to mid-twentieth century. It is recommended eligible for the NRHP but is not a listed property.

4.2 Archaeological Survey

In December, 2018 TRC conducted a Cultural Resources Survey at the Edison Solar site. An approximately 29-acre section of the parcel has been developed into a utility scale solar farm. According to the on-site construction manager the property had been graded and compacted to form a solid base for the solar arrays. Solar arrays stand approximately 10 feet in height. An eight-foot-tall security fence surrounds the solar facility. A total of 73 shovel tests were excavated around the within the project area. Soils were disturbed to a depth of approximately 40 cmbs, containing mixed deposits of dark yellowish brown (10YR 4/4) and brownish yellow (10YR 6/6) sand, over strong brown (7.5 YR 5/8) sandy loam subsoil.

No artifacts were recovered during shovel testing and none were observed on the surface. The project tract has little potential for containing intact, significant archaeological deposits.

4.3 Architectural Survey

Two twentieth century neighborhoods of tract houses, and one separate structure, were identified near the project area (Figure 7). In a letter dated January 30, 2019 SHPO recommended additional information on the above ground resources adjacent to the solar sites. TRC focused efforts on re-evaluating two neighborhoods identified in the Project's Area of Potential Effect (APE), including the Barnwell Heights (Cherry/Berry/Bomway) neighborhood (Resource 0502) and the Apple Street neighborhood (Resource 0503), as well as a single circa-1890 farmhouse with outbuildings (Resource 0504). The January 30 letter recommended combining the two neighborhoods into one resource but additional research shows they are not historically connected and were therefore evaluated separately.

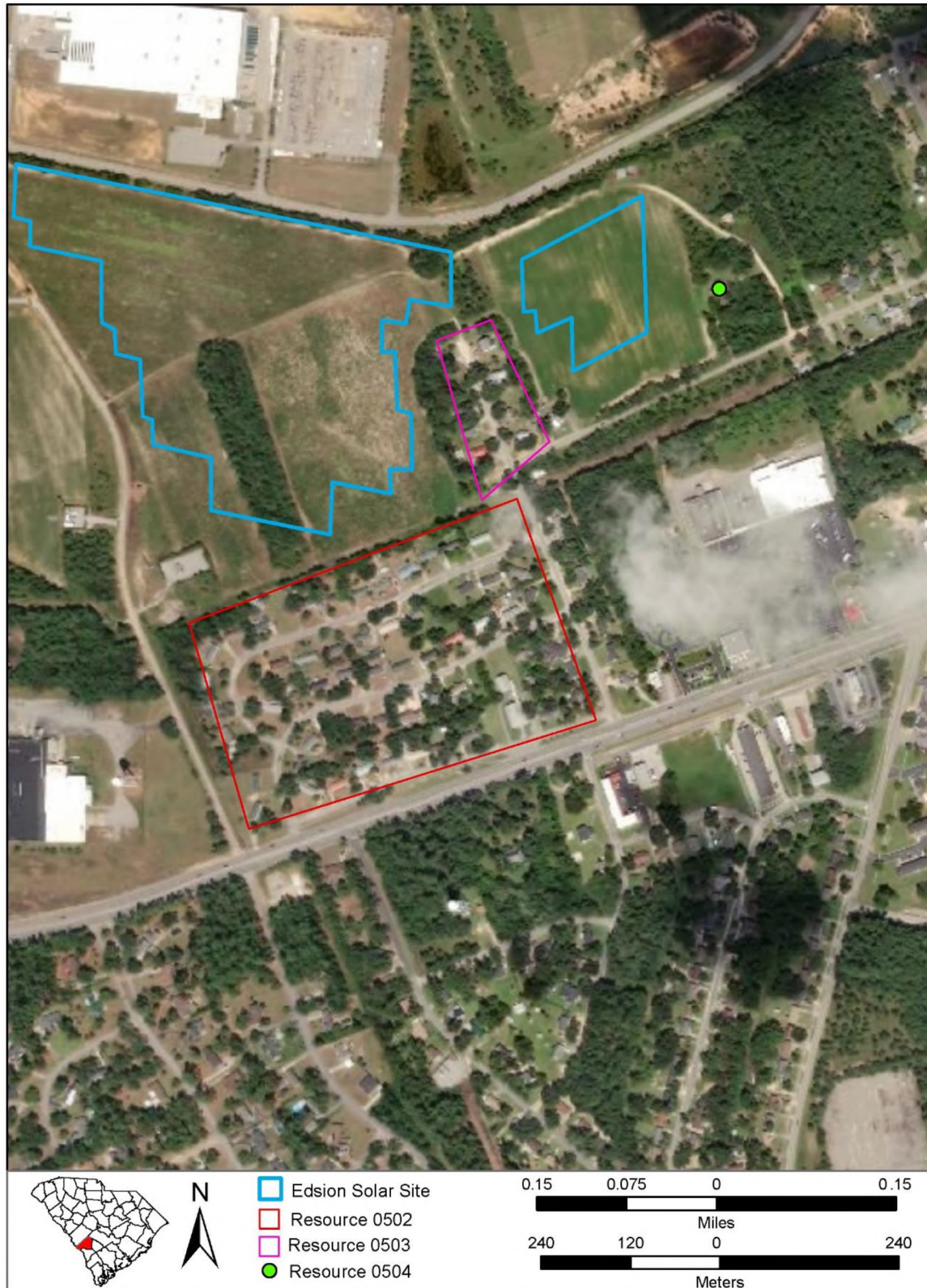


Figure 7. Location of identified resources.

Resource 0502 – Barnwell Heights Neighborhood

History

TRC's initial cultural resources report identified this neighborhood of mid-twentieth century houses as the Cherry/Berry/Bomway neighborhood. Additional background research and field work revealed that this neighborhood is historically known as Barnwell Heights and was established in 1951 to provide worker housing for the nearby Savannah River Site (SRS). The SRS was constructed by the Atomic Energy Commission (AEC) in the early 1950s to produce materials used in the manufacture of nuclear weapons, primarily tritium and plutonium-239. Recognized for its significance in the history of the Cold War, the SRS was determined eligible for listing in the NRHP in 2003 (U.S. Department of Energy 2019).

As construction of the SRS began the AEC faced a shortage of worker housing in the surrounding rural areas and small towns. The solution was a new programmatic housing program created in 1951 by the passage of Public Law 139, *The Defense Housing and Community Facilities and Services Act*, which spurred the construction of housing developments in communities around the SRS. This law relaxed credit controls, provided federal mortgage-insurance, and offered mortgage purchase assistance to incentivize private builders and developers to build housing for both temporary and operations staff at SRS. The legislation prompted an investment of \$6 million in federal housing aid and resulted in the construction of 3,225 rental units and 625 housing units for sale in the SRS area. Almost 80 percent of the units were built in Augusta, Georgia, and Aiken, South Carolina, with the remaining 20 percent spread to other towns.

Located just east of the SRS, the City of Barnwell received a large share of new SRS housing with 287 units built in the Barnwell Heights, Peachtree Gardens, and Hagood Heights neighborhoods. Barnwell Heights was designed in 1951 by the South Carolina architectural firm of Lyles, Bissett, Carlisle & Wolff in partnership with Atlanta-based landscape architect and planning consultant Eugene R. Martini (Reed et al. 2000). The original plat map of the neighborhood is shown below in Figure 8.

Description

Barnwell Heights is located on the north side of Dunbarton Boulevard (Highway 64) and includes properties located on Bomway Street, Berry Street, Cherry Street, and the section of Apple Street to the south of its intersection with Corley Heights Richardson Road. The neighborhood was typical of the new subdivisions built for SRS workers with a mixture of single and duplex-type linear Ranch houses set on curving streets. Individual lots are approximately 0.25-acre in size and feature grassy lawns, mature trees, and landscape shrubbery. The 1951 plat map in Figure 1 shows the house types included two- and three-bedroom models that served the needs of both single workers and families. The neighborhood contains 62 one-story houses, the majority of which are duplex Ranch houses, and the 1962 Barnwell Church of Christ.

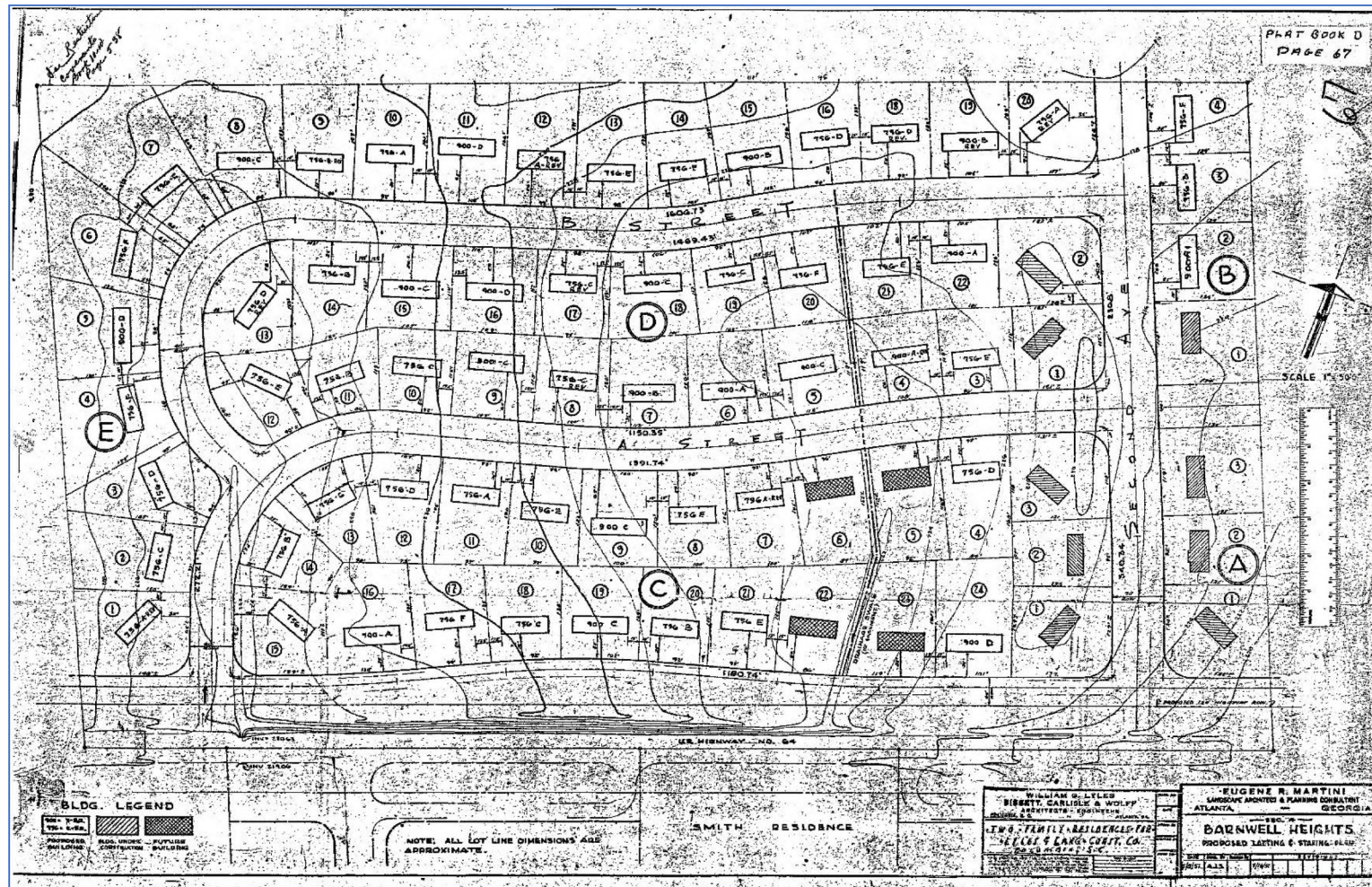


Figure 8. 1951 Plat Map of Barnwell Heights (Source: Barnwell County Register of Deeds)

The typical duplex houses in Barnwell Heights have side-gable roofs clad in asphalt shingles, clapboard or plywood siding, interior chimneys, concrete slab foundations, and rectangular floor plans. A smaller number of houses have brick exteriors and lateral hip roofs. Houses in the neighborhood feature a variety of typical window types found in Ranch houses, including two-over-two, four-over-four, and three-part picture windows. Many of the duplexes have symmetrical or nearly-symmetrical facades with front-facing entrances, while others have asymmetrical facades with one front-facing entrance and one recessed or side-entrance. The few single-type Ranch houses in the neighborhood reflect the same design characteristics as the duplexes but with only one front entrance. Front and side porches tend to be small stoops or narrowly recessed under the front eaves of the house with plain metal posts. Most houses in Barnwell Heights do not have garages or carports with the exception of a few single-type houses. Outbuildings tend to be non-original, modern garden sheds. Typical alterations to some of the houses in the neighborhood include synthetic siding and replacement windows and doors. Representative streetscapes and views of individual houses in Barnwell Heights are provided below in Figures 9-12.

The Barnwell Church of Christ was reportedly built in 1962 and features a Mid-century Modern design that complements the architecture of the Barnwell Heights neighborhood (Barnwell County Heritage Book Committee 1994: 189). It has a low-pitched front-gable roof with flat side-roof portions, a plain white pyramidal steeple, a brick exterior, and a concrete slab foundation. The south-facing façade features a central recessed full-height entrance with a set of double doors, vertical transom lights and side lights. There are double-light fixed ribbon windows under the eaves of the façade. Photographs of the church are shown in Figures 13-14.

NRHP Evaluation

TRC evaluated the Barnwell Heights Neighborhood for listing in the NRHP under Criteria A, B, and C. TRC recommends the neighborhood is eligible for listing as a historic district at the local level of significance under Criteria A in the area of Community Planning and Development and in the area of Industry for its association with the NRHP-eligible SRS. In the area of Community Planning and Development, Barnwell Heights is significant as an example of a neighborhood that was financed, planned, and constructed as part of the 1951 federal effort to create worker housing for the SRS, which had a significant impact on the City of Barnwell's population and economy. In the area of Industry, the neighborhood is significant for its role as worker housing associated with the manufacture of nuclear materials at the SRS.

Background research did not reveal that Barnwell Heights has an association with a historically significant person or people and TRC recommends it is not eligible under Criterion B.

TRC recommends the Barnwell Heights neighborhood eligible for listing at the local level of significance under Criterion C in the area of Architecture as a mid-twentieth century neighborhood that embodies the distinctive characteristics of its type, period, and method of construction. The neighborhood contains 62 contributing single- and duplex-type Ranch houses that are united by plan, type, scale, proportions, materials, and workmanship. In addition to the 62 houses in the neighborhood is the 1962 Barnwell Church of Christ, which contributes to the character of the neighborhood with its distinctive Mid-century Modern design.



Figure 9. Streetscape view of Bomway Street, looking west



Figure 10. Streetscape view of Berry Street, looking east.



Figure 11.
Representative
houses in Barnwell
Heights (Resource
0502) including
single- and duplex-
type Ranch houses



Figure 12.
Representative
houses in Barnwell
Heights (Resource
0502) including
single- and duplex-
type Ranch houses.





Figure 13. Barnwell Church of Christ, looking northwest



Figure 14. Barnwell Church of Christ, oblique view looking north



Figure 15. Surveyed resource locations and proposed NRHP boundaries for Barnwell Heights Historic District.

The proposed Barnwell Heights Historic District has a period of significance from 1951 to 1962, which includes the years of construction of its 63 total contributing resources. The neighborhood retains all seven aspects of integrity, including location, setting, design, materials, workmanship, feeling, and association. The neighborhood retains all 63 original contributing resources. No original houses in the neighborhood have been demolished and few have been expanded or enlarged in any way. There is no modern infill construction in the neighborhood. The neighborhood's integrity of materials has been slightly compromised on some houses by the use of synthetic siding and replacement windows and doors, but the majority retain their original materials. The proposed historic district is bounded by Bomway Street on the south, Barwick Road on the west, Apple Street on the east, and the Edison Solar Project on the north. A map of the proposed historic district boundaries is provided in Figure 15.

Section 106 Assessment of Effect

Pursuant to 36 CFR Part 800.5, TRC applied the Section 106 criteria of adverse effects to the Project. TRC recommends that the Project has no adverse effect on the proposed Barnwell Heights Historic District. The district has been located along a major highway thoroughfare in the City of Barnwell for almost 70 years and for most of that time has been surrounded by modern commercial and residential development. The Project did not physically damage or destroy any portion of the

district; it did not alter the district in such a way that is not consistent with the Secretary's Standards for the Treatment of Historic Properties; it did not result in the removal of a property from its historic location; it did not substantially change the character of the property's use or of physical features within its setting that contribute to the district's historical significance; it did not introduce visual, atmospheric, or audible elements that diminish the integrity of the district's significant historic features; and it did not result in the neglect of the district. There is no indirect adverse visual effect on the district or its setting due to the low-profile visibility of the existing solar panels, as well as low-visibility conditions created by tree and vegetation lines that separate the neighborhood from the Project (Figures 16 and 17).



Figure 16. Typical Barnwell Heights Structure, looking north towards solar farm.



Figure 17. View from solar farm south towards Barnwell Heights neighborhood.

Resource 0503 – Apple Street Neighborhood

Description

The Apple Street neighborhood contains 11 single-family dwellings that were built circa 1940-1950 and appear to predate the construction of Barnwell Heights. Located along both sides of Apple Street at and north of its intersection with Corley Heights Richardson Road, the neighborhood contains a mixture of common one-story vernacular house types, including one pyramidal hip roof cottage, five front-gable Bungalows, four side-gable cottages, and one Ranch house. The houses are generally in fair to poor condition with common modern alterations including synthetic siding and replacement windows and doors. Streetscapes and representative views of houses in the neighborhood are shown below in Figures 18-20.

NRHP Evaluation

TRC evaluated the Apple Street neighborhood for listing in the NRHP under Criteria A, B, and C. Background research did not reveal the neighborhood's association with a historic event or pattern of events. Though it is located adjacent to the Barnwell Heights neighborhood, the Apple Street neighborhood was not developed as part of the SRS programmatic housing effort. It appears to have grown organically as a working-class neighborhood and is possibly associated with the former agricultural areas surrounding it. As a result, recommends the neighborhood is not eligible under Criterion A.

Background research did not reveal any association with a significant person or people and TRC recommends the neighborhood is not eligible under Criterion B.

The neighborhood contains one-story vernacular dwellings that are typical for their time and place throughout the City of Barnwell and Barnwell County (Figure 21). They do not possess architectural significance and in general retain a low level of historic integrity. TRC recommends the neighborhood is not eligible under Criterion C.



Figure 18. Streetscape view of Apple Street neighborhood, looking north



Figure 19.
Representative houses in
Apple Street neighborhood
(Resource 0503).



Figure 20.
Representative houses in Apple
Street neighborhood (Resource
0503).



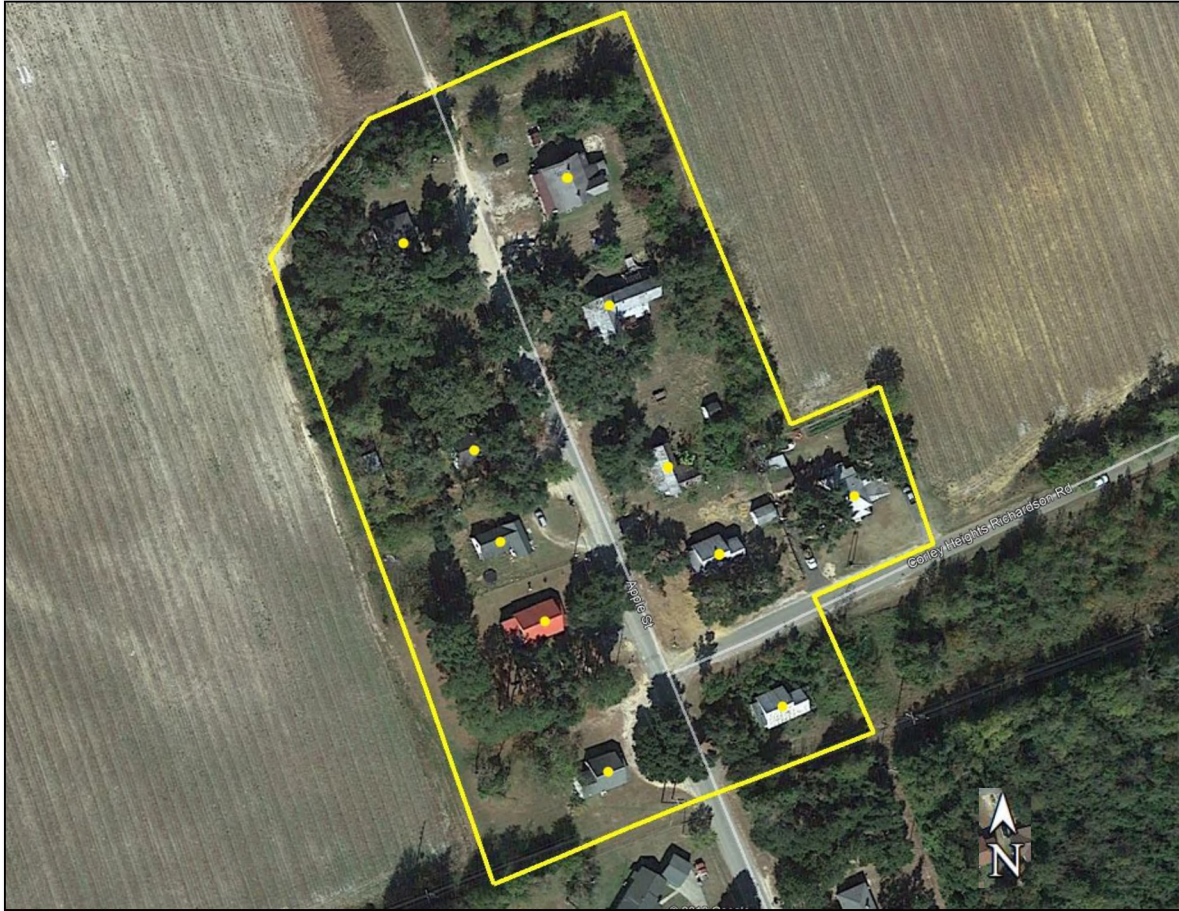


Figure 21. Surveyed resource locations and boundaries of the Apple Street neighborhood

Resource 0504 – House, 360 Corley Heights Richardson Road

Description

Resource 0504 is a vacant farmhouse with outbuildings located on the same 59-acre parcel that contains the Project. The main farmhouse is a significantly altered circa-1890 one-story vernacular dwelling with a side-gable roof clad in standing seam metal, a clapboard exterior, a brick pier foundation with concrete block infill, and a rear shed-roof addition. Built across the original façade of the house is a circa-1950 addition with a hip roof clad in asphalt shingles and a clapboard exterior. The original section of the house has interior brick chimneys and six-over-six double hung windows. The façade addition has six-over-one windows and a central entrance with a covered stoop. Just east of the house is an L-shaped assembly of wood frame sheds and garages with metal roofs.

Other outbuildings on the property include a circa-1940 one-story vernacular dwelling just north of the main dwelling. This second house has a side-gable roof clad in metal and what appears to be a parged concrete block structure. The central entrance is covered by a front-gabled screened porch that is deteriorated and missing its original screens. The house has six-over-six windows and an interior brick chimney. On the northern edge of the property is a pole barn with a metal roof and sides. Photographs of the property are provided below in Figures 22-24.

NRHP Evaluation

TRC evaluated Resource 0504 for listing in the NRHP under Criteria A, B, and C. Background research did not reveal an association with a significant event or pattern of events and TRC recommends that it not eligible under Criterion A. Background research did not reveal an association with a historically significant person or people and TRC recommends it not eligible under Criterion B. The property contains a common vernacular farmhouse that has been significantly altered with a façade addition and it does not possess architectural significance. The second house on the property is also a common vernacular type that does not possess architectural significance. TRC recommends Resource 0504 not eligible under Criterion C.



Figure 22. Oblique view of Resource 0504 farmhouse showing façade addition at left and original house at right, looking northwest



Figure 23. Rear oblique view of Resource 0504, looking east at rear (north) and side (west) elevations



House

Figure 24.
Outbuildings at Resource
0504



Pole Barn



Sheds

5.0 CONCLUSIONS AND RECOMMENDATIONS

No archaeological sites were identified within the proposed boundaries of the Edison Solar Site.

TRC conducted additional architectural investigations on resources 0502, 0503, and 0504 for the Edison Solar Site Project in Barnwell, South Carolina. This work was done as requested by the SC SHPO in correspondence dated January 30, 2019. As a result of additional background research and field work, TRC recommends the Barnwell Heights neighborhood (Resource 0502) eligible for listing in the NRHP as a historic district under Criterion A in the areas of Community Planning and Development and Industry, and under Criterion C in the Area of Architecture. The neighborhood is significant for its association with NRHP-eligible Savannah River Site. TRC applied the Section 106 criteria for adverse effect and recommends that the Project has no adverse direct or indirect effects on the proposed Barnwell Heights historic district. TRC recommends that the Apple Street neighborhood (Resource 0503) lacks historic and architectural significance and is not eligible for listing in the NRHP. Finally, TRC recommends that the house at 360 Corley Heights Richardson Road (Resource 0504) lacks historic and architectural significance and is not eligible for listing in the NRHP.

The maximum height of the facility is approximately 10 feet. Existing trees and a planned vegetation barrier effectively block the solar farm from all nearby. The solar farm will have no impact on significant above ground resources.

Shovel testing and visual inspection were used to investigate whether the solar farm has impacted any significant archaeological resources. Background research indicates that the project area has been used for agriculture for the greater part of the twentieth century and likely earlier. In addition to the disturbance of the top soil that has been caused by historic plowing the construction of the solar farm has recently disturbed the top 40 cm of soil. Shovel testing indicated a thin layer of intact soil below the disturbance and above the subsoil, however, no artifacts or indication of features was identified. The solar site has not impacted any significant archaeological sites.

If you have any questions, please do not hesitate to contact me at 803-933-9991 or via e-mail at snorris@trcsolutions.com.

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