

## ARCHAEOLOGICAL FIELD REPORT

SCDOT ENVIRONMENTAL SECTION



**TITLE:** Phase I Cultural Resources Survey of the US 321 over Crane Creek Bridge Replacement

**DATE OF RESEARCH:** 6/13/2019

**ARCHAEOLOGIST:** James Stewart

**ARCHITECTURAL HISTORIAN:** Tina Poston

**COUNTY:** Richland

**PROJECT:** US 321 over Crane Creek Bridge Replacement

**F. A. No.:**

**File No.**

**PIN:** P037047

### **DESCRIPTION:**

The South Carolina Department of Transportation (SCDOT) proposes to replace the existing bridge along US 321 over Crane Creek (Structure No. 4020032100200) in Richland County. The project includes replacing the existing structure, realigning the roadway approaches as necessary, and improving the roadway approaches to meet current design criteria. The project area encompasses a 300-foot corridor centered along US 321 for 1,500 feet to both sides of the 170-foot-long existing bridge (Figure 1). The total length of the project area is 3,170 feet and contains a 26.3-acre area composed primarily of floodplain. The Area of Potential Effects (APE) consists of a 300-foot viewshed buffer from the edge of existing right of way.

### **LOCATION:**

The bridge is located halfway between the US 321/Sharpe Road intersection and the US 321/Crane Creek Road intersection in unincorporated Richland County (Figure 1).

**USGS QUADRANGLE:** Columbia North, SC

**UTM:** NAD 83 **ZONE:** 17N

**DATE:** 1972 **SCALE:** 7.5'

**EASTING:** 497625 **NORTHING:** 3771711

### **ENVIRONMENTAL SETTING:**

The project area is located in the Piedmont physiographic region near the fall line transition to the Upper Coastal Plain. The project area extends across the Crane Creek floodplain and adjacent side slopes with elevations ranging between 192 and 206 feet (58.5-62.7 meters) above mean sea level (amsl). Forested swamp covers most of this area. An embankment carries the roadway 5 and 15 feet (1.5 and 4.6 meters) above the natural ground surface (Figure 2). The northwestern corner of the study area also encompasses a part of a residential subdivision. Several buildings are also present near the southern end of the study area.

**NEAREST RIVER/STREAM AND DISTANCE:** Crane Creek flows westward under the bridge slated for replacement.

**SOIL TYPES:** Chewacla (CH) soils are somewhat poorly drained loams that developed in floodplain settings. Georgeville (GeC) silt loams are well drained and form on side slopes with grades of 6-10 percent. Herndon (HeB and HeC) silt loams occur on interfluvies with slopes of 2-10 percent, and are also considered well-drained. Udorthents (Ud) are moderately well drained sandy clay loam.

### **REFERENCE FOR SOILS INFORMATION:**

USDA-NCRS Soil Survey Division, Custom Soil Resource Report ([websoilsurvey.sc.egov.usda.gov](http://websoilsurvey.sc.egov.usda.gov))(Soil Survey Staff 2018)

**GROUND SURFACE VISIBILITY:** 0% \_\_\_ 1-25% ☒ 26-50% \_\_\_ 51-75% \_\_\_ 76-100% \_\_\_

### **CURRENT VEGETATION:**

The project area is mostly covered by a dense hardwood canopy. Dense scrub vegetation grows along the road perimeter and a stand of young pines extends over the northeastern study area corner (see Figure 2). Leaf litter obscured most of the ground surface.

## **INVESTIGATION:**

Background research conducted through the South Carolina ArchSite GIS database identified one cultural resource survey and no archaeological sites or aboveground historic properties within a half mile of the APE (Figure 3). In 2009, Brockington and Associates conducted a cultural resource survey of the Denny Terrace Transmission Line to the north and west of the current study area. Their survey included a segment approximately 0.4 miles west of the current study area (Baluha 2009). An examination of United States Geological Survey (USGS) historic topographic maps, historic Richland County highway and soil maps was also performed.

The 1972 Columbia North, SC historic topographic map shows four buildings in the southern half of the study area. Historic aerial photography shows that one of these buildings, located on the western side US-321, was a house demolished in 2005 (see Figure 2). A second building was plotted at the southwestern corner of the US 321 embankment (see Figure 2). This abandoned gable-roofed concrete block building was in failure during the survey. In the field, a hand-painted sign on the eastern façade advertising new and used tires for sale attests to a commercial activity on the property. Although it is unclear when the building was abandoned, the absence of a driveway apron in the US 321 curbing indicates that it occurred prior to the current roadway design. As this structure was in failure, it was not evaluated for National Register of Historic Places (NRHP) eligibility. Two other buildings are still extant and were recorded during the architectural history survey.

## **ARCHAEOLOGY**

The archaeological survey was conducted June 13, 2019. Standing water was present throughout the floodplain portion of the project area (Figure 4). Recent alluvial deposits and modern debris were scattered along the western side of US 321. These conditions contrasted with drainage characteristics implied by soils data. The floodplain was determined to have low potential for the presence of archaeological remains and was subjected to pedestrian walkover. Eight non-systematic shovel tests were excavated to confirm poor soil conditions. Excavated tests uncovered poorly drained soils and a shallow (10-20-centimeter-deep) water table. Soils were either reddish yellow (5YR 6/6) silty clay or gray (7.5YR 6/1) silty clay (Figure 5). Uplands were present near the northern and southern edges of the floodplain. Systematic testing of these areas at 30-meter intervals exposed evidence of poor soil integrity and disturbance. Six tests were excavated around Crane Church Road. They revealed 15 centimeters of reddish gray (5YR 5/2) silty clay with gravel overlying reddish brown (5YR 5/3) silty clay. A three-foot-deep (91-centimeter-deep) road cut was also present to the northeast of the modern road. A graded and benched landscape extended east from the road cut to US-321. Reddish brown (10YR 5/4) silty clay subsoils were visible in surface exposures on the opposite side of the highway.

Visible remnants of a driveway and ornamental vegetation were noted near the location of the building demolished in 2005. Photographic evidence and the exposure of saprolite during shovel testing showed that this area was wholly disturbed and, as a result, the former house location was not recorded as an archaeological site. The tire store identified in background research was encountered in the field, but since no archaeological deposits were associated with it and the building is in failure it was not recorded as an archaeological resource (Figure 6). No archaeological resources were identified during the survey.

## **ARCHITECTURAL SURVEY**

Any intact buildings, structures, or cemeteries greater than 50 years of age within the APE were documented with South Carolina State Survey forms and photography, and assessed for NRHP eligibility. These resources were identified and surveyed in accordance with the *South Carolina State Historic Preservation Office (SHPO) Survey Manual: South Carolina Statewide Survey of Historic Places*. The existing US 321 Bridge was not documented due to extensive alterations undertaken in 1974, which diminished the integrity of the resource to such an extent that it was considered ineligible for the current survey. The bridge was evaluated in the *South Carolina Statewide Bridge Survey* and was determined not eligible for the NRHP as part of that study. The architectural survey was conducted on June 13, 2019. The view shed for the project runs roughly 0.72 miles (1.1 km) along US 321 and Crane Church Road (see Figure 1). The project study area was semi-rural with a mixture of commercial and residential development. Background research did not identify any previously recorded architectural resources in the viewshed. During the field survey, three mid-twentieth century buildings and an undated historic roadbed were recorded and assessed (see Figure 3). The buildings included two residential (7659 and 7660) and one commercial (7658) properties. The roadbed, located to the northeast of the bridge, was recorded as Resource 7662 (see Figure 3).

*Table 1: Identified Resources within the APE*

| Site No. | Address  | Historic Use   | Build Date                     | NRHP Status  |
|----------|--|----------------|--------------------------------|--------------|
| 7658     | 7131 Fairfield Road                            | Commercial     | 1952                           | Not Eligible |
| 7659     | 7128 Fairfield Road                            | Residential    | 1969                           | Not Eligible |
| 7660     | 7014 Fairfield Road                            | Residential    | 1957                           | Not Eligible |
| 7662     | Northeast side of US 321, North of Crane Creek | Transportation | Circa 20 <sup>th</sup> century | Not Eligible |

### Resource 7658

Resource 7658 is a commercial property built in 1952 and located at 7131 Fairfield Road (Figure 7). The resource has a rectangular shape and cross gable roof. The gable ends and boxed returns are covered in wood vertical siding. The front entrance has double glass doors with security bars and the front elevation windows have been enclosed with stone veneer. There are two metal-encased service entrances on the south. The resource has a paved parking lot surrounding the front and side elevations.

The resource has been subject to alterations and does not embody a distinctive characteristic of a type, period, or method of construction. It also does not represent the work of a master or possess high artistic value, and is not known to be associated with events or persons significant in the past. Therefore, Resource 7658 is recommended not individually eligible for the NRHP under Criteria A, B, or C.

### Resource 7659

Resource 7659 is a Linear Ranch House built in 1969, located at 7128 Fairfield Road (Figure 8). The resource has a rectangular shape with a side gable roof. The roof is covered in composition shingles and the gable ends are clad in fiberglass board. The exterior of the resource is clad in brick veneer and the foundation was not visible. The resource has a front entrance with a fan light and one side entrance on the south elevation with a 6-light window. The windows are two-over-two with wood sashes and the front elevation has a four-light window flanked by two-over-two wood sash windows. There is a small, uncovered front entry stoop with brick steps and concrete slab floor.

The landscape surrounding the house contains several large trees and bushes, but is otherwise minimally adorned. While the resource has been subject to only minor alterations, it does not embody any notable characteristics of a Ranch House, historic period, or method of construction. It also does not represent the work of a master or possess high artistic value. The resource is not known to be associated with events or persons significant in the past. Therefore, Resource 7659 is recommended not individually eligible for the NRHP under Criteria A, B, or C.

### Resource 7660

Resource 7660 is a Side Gable Bungalow residence built in 1957 and located at 7014 Fairfield Road (Figure 9). The resource has a rectangular shape with rear and side additions. The gable roof is clad in composition shingles and the exterior walls are covered in plain weatherboard. The front porch appears to be a later addition with a gable roof over the front entrance and extended uncovered to the south elevation. The porch supports are decorative metal posts and the porch foundation is continuous brick. The windows include two-over-two wood sashes and a four-light window on the front elevation. The rear addition has six-over-six wood sash windows and there are two interior brick chimneys.

The resource has been subject to minor alterations and it was not found to embody a distinctive characteristic of a Bungalow type, period, or method of construction. It also does not represent the work of a master or possess high artistic value. It is also not known to be associated with events or persons significant in the past. Therefore, Resource 7659 is recommended not individually eligible for the NRHP under Criteria A, B, or C.

### Resource 7662

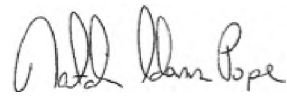
Resource 7662 is a circa twentieth century disconnected roadbed that runs parallel to US 321 on the northeastern quadrant of the APE (Figure 10). The roadbed is 7.5 meters (25 ft.) wide and extends approximately 256 meters (279 yd.) north from Crane Creek. This alignment parallels US 321 for this entire span. The roadbed was crowned and bordered by one-foot-wide (30 cm) drainage ditches.

A row of mature hardwoods was aligned to the eastern side of the road, approximately 10 feet (3.0 m) from the ditch. The road terminates at Crane Creek. Although no visible evidence of bridge abutments was observed at the creek bank, the near-vertical end of the road suggests that a bridge once spanned Crane Creek at this location. Visual inspection of the surrounding area did not locate any evidence of nearby historic structures or activity areas.

The roadway may represent an earlier alignment of US 321. However, historic maps and aerial photography available for this area do not provide enough detail for comparison of the two road alignments. This particular section of roadbed is not found to be the best resource to convey associations with transportation history in Richland County and is recommended not eligible for the NRHP under Criterion A. As the roadway cannot be associated with any other historic resources or activities, it has little context or research potential. Since the road cannot convey any associations with any significant people, the resource is recommended not eligible for the NRHP under Criterion B. Resource 7662 does not embody any distinctive characteristics of a type, period, or method of construction. The road bed does not contain any notable engineering, design, or material elements and is also recommended not eligible under NRHP Criterion C. While the road appears to be in a good state of preservation, the resource's archaeological data potential is limited to documentation of the road's construction sequence and secondary refuse deposits. Since the roadbed is unlikely to provide any unique research contributions, it is also recommended not eligible under NRHP Criterion D.

**REMARKS AND RECOMMENDATIONS:** No archaeological sites were identified in the project area. The architectural survey identified four historic resources. These resources (7658, 7659, 7660 and 7662) are recommended not eligible for the NRHP under Criteria A, B, C, and D. No further work is recommended.

**SIGNATURE:**



**DATE:** 7/1/2019

References Cited:

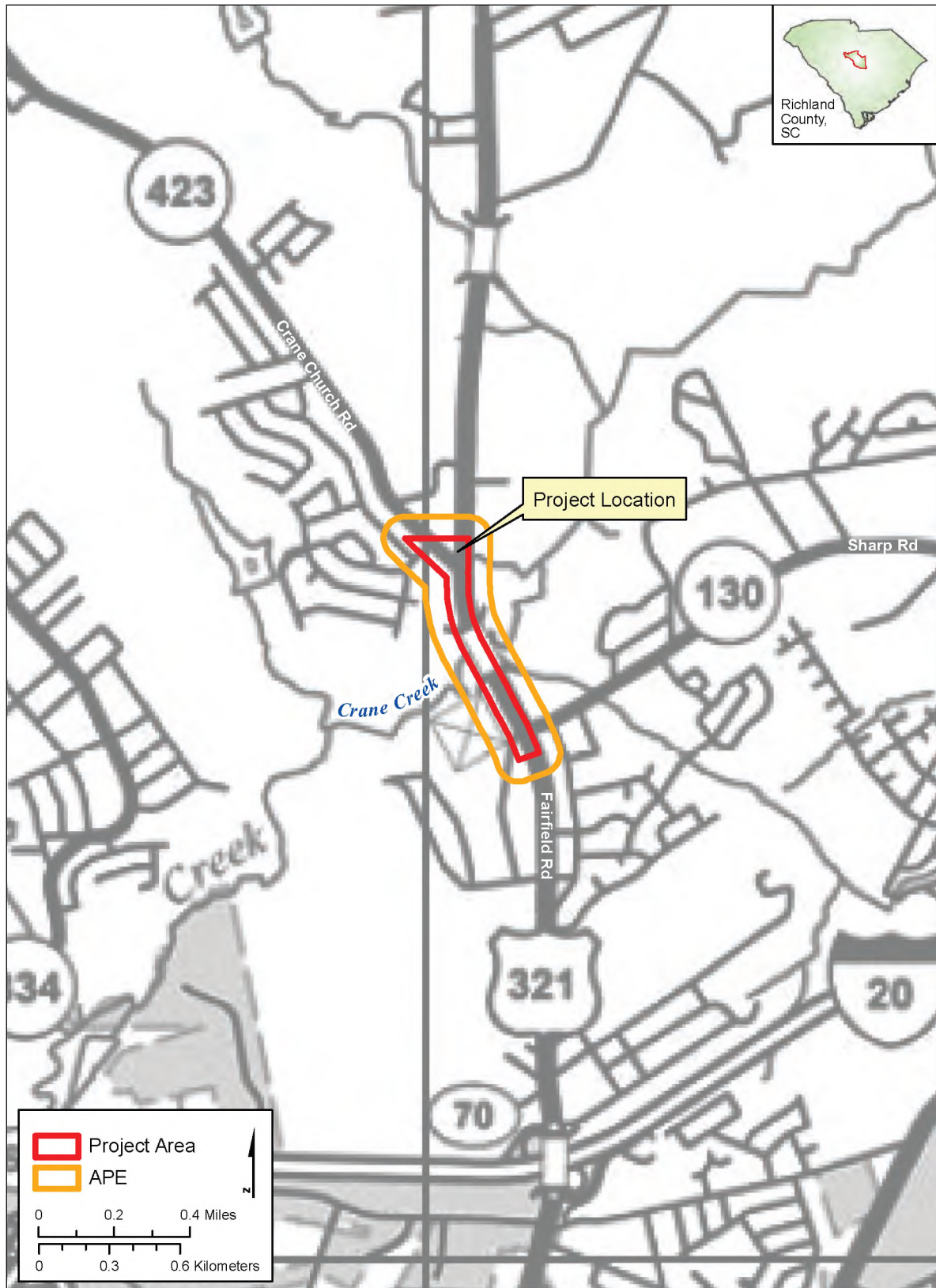
Baluha, David S.

- 2009 Cultural Resources Survey of the Denny Terrace Transmission Line Project, Richland County, South Carolina. Brockington and Associates, Inc., Charleston SC.

Soil Survey Staff

- 2018 *Web Soil Survey of Selected Area in Gordon County, Georgia*. Natural Resources Conservation Service, United States Department of Agriculture, Washington D.C..

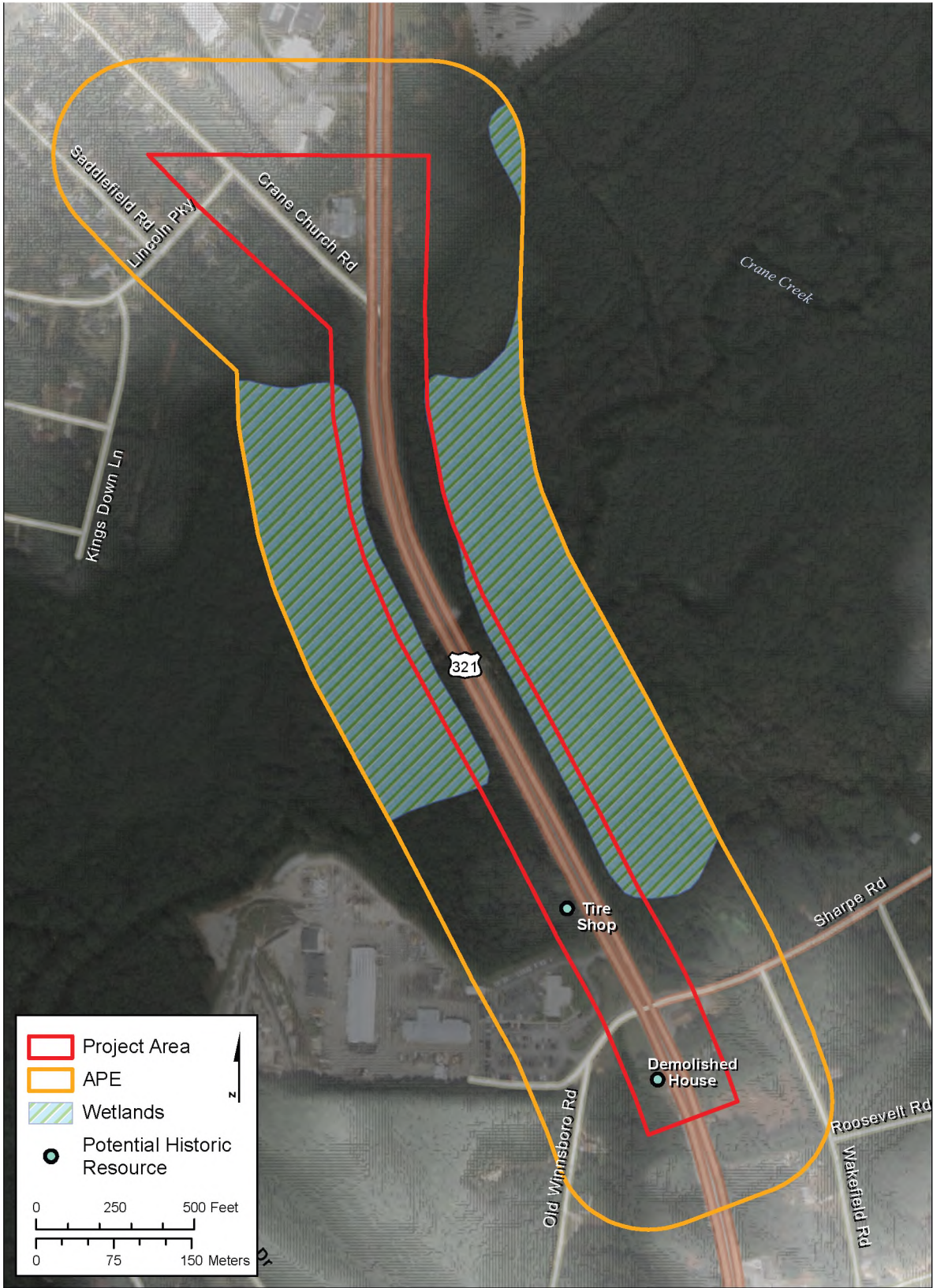
Figure 1.  
General Location Map



Source: SCDOT Richland County Highway Map (2016)



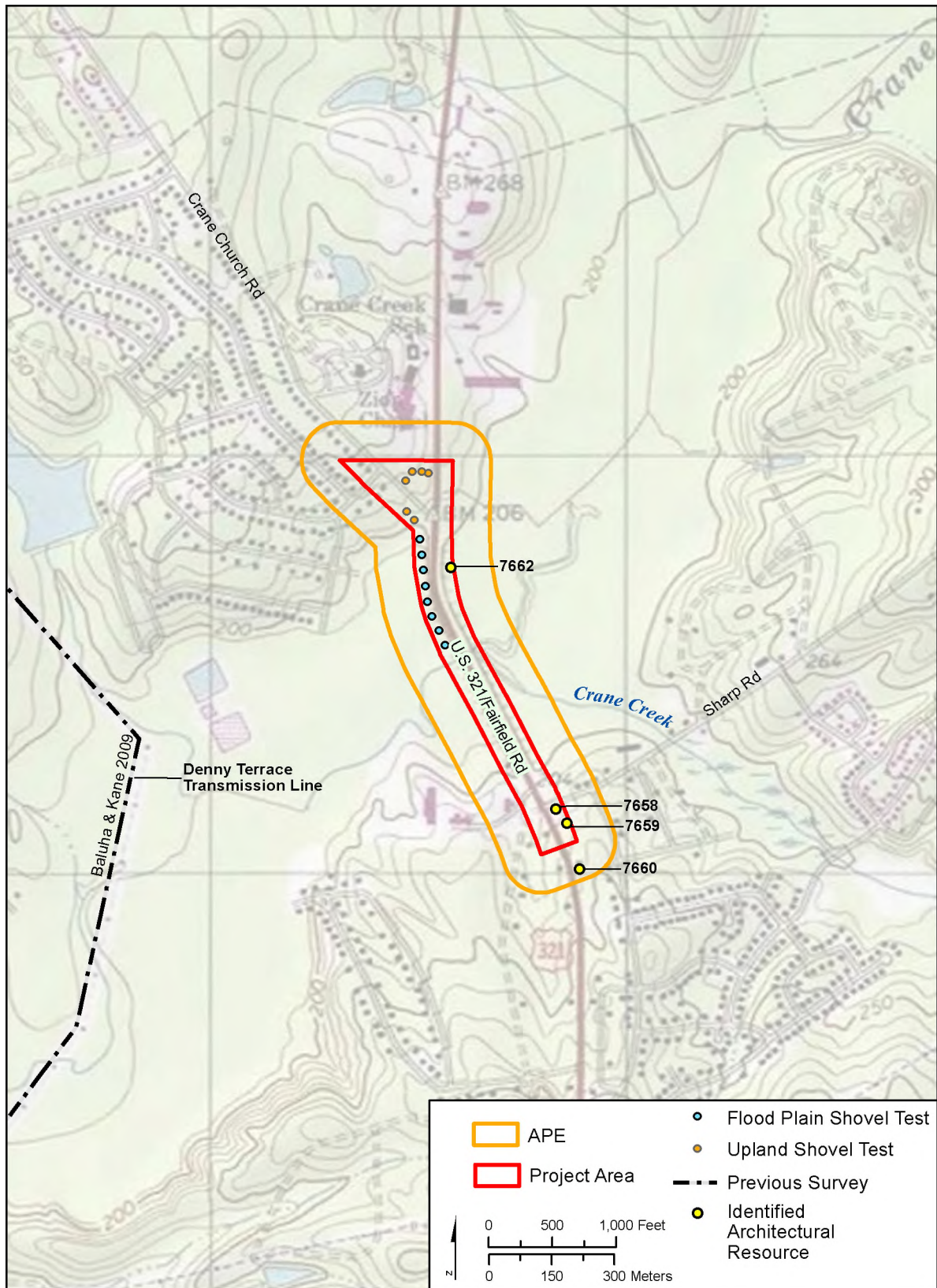
Figure 2.  
Aerial Photograph of the APE



Source: ESRI World Imagery (2019)



Figure 3.  
Cultural Resources within One-Half Mile of the Project Area and Location of Shovel Tests



Sources: USGS Topographic Quadrangle Map, Columbia North, SC (1973) & ESRI Resource Data (2019)



Figure 4.  
Forested Swamps in the Project Area





Figure 5.  
Representative Shovel Tests

A. Poorly  
Drained Soil



B. High  
Water Table





Figure 6.  
Tire Store, West Elevation



Figure 7.  
Resource 7658





Figure 8.  
Resource 7659



Figure 9.  
Resource 7660





Figure 10.  
Resource 7662

