



North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper
Secretary Susi H. Hamilton

Office of Archives and History
Deputy Secretary Kevin Cherry

July 7, 2017

MEMORANDUM

TO: Kate Husband
Office of Human Environment
NCDOT Division of Highways

FROM: Renee Gledhill-Earley *Renee Gledhill-Earley*
Environmental Review Coordinator

SUBJECT: Historic Structures Survey Report for the Replacement of Bridge 262 on SR 1107,
PA 16-10-0036, Caldwell County, ER 17-0939

Thank you for your May 9, 2017 memorandum transmitting the above-referenced report. We have reviewed the report and concur that Shuford Mills and Mill Village (CW0428) are not eligible for listing in the National Register under any criteria.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Mary Pope Furr, NCDOT, mfurr@ncdot.gov



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

May 9, 2017

MEMORANDUM

TO: Renee Gledhill-Earley
Environmental Review Coordinator
North Carolina State Historic Preservation Office

FROM: Kate Husband
Architectural Historian
NCDOT Division of Highways

SUBJECT: PA No. 16-10-0036, Replace Bridge No. 262 on SR 1107 (Falls Avenue)
in Caldwell County

ER 17 0939
To Annie for review
report on L drive
6/17/17 ANCD
where are comments
+ see exhibits 6/27/17

Doc 6/12/17

Enclosed please find the Historic Structure Survey Report, survey site form, and additional materials for the above referenced project. Please feel free to contact me by phone (919-707-6075) or email (klhusband@ncdot.gov) if you have any additional questions or comments. We look forward to hearing from you.

Historic Structures Report for the Replacement of Bridge No.262
over Gunpowder Creek (Old Mill Pond) on State Route 1107 (Falls
Avenue), WBS No.17BP.11.R.135, Caldwell County

Granite Falls, Caldwell County, North Carolina

Prepared for:

North Carolina Department of Transportation, Human Environment Section
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Prepared by:

Environmental Corporation of America
222 2nd Avenue North, Suite 315
Nashville, Tennessee 37201

ECA Project No. T0728
March 2017



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Historic Structures Report for the Replacement of Bridge No. 262 over
Gunpowder Creek (Old Mill Pond) on State Route 1107 (Falls Avenue), WBS.
No. 17BP.11.R.135, Caldwell County

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March 2017

Jaime L. Destefano – Principal Architectural Historian
Environmental Corporation of America

Date

Mary Pope Furr, Supervisor
Historic Architecture Section
North Carolina Department of Transportation

Date

MANAGEMENT SUMMARY

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 262 over Gunpowder Creek (Old Mill Pond) on State Route 1107 (Falls Avenue) in Caldwell County. The project area is located within the southeastern section of Caldwell County. The bridge crosses a section of Gunpowder Creek referred to as Old Mill Pond approximately one (1) mile northeast of downtown Granite Falls. Pursuant to 36 CFR 800.4(a), NCDOT Architectural Historians established an Area of Potential Effects (APE) for the bridge replacement. The APE is defined as approximately 100 feet from the center of the existing road each way and 700 feet from each end of the bridge (*see* Figure 1). Bridge No. 262 was determined not eligible for the National Register of Historic Places (NRHP) in the 2006 NCDOT bridge survey. Therefore, it is not addressed in this report.

NCDOT Architectural Historians contracted Environmental Corporation of America (ECA) in February of 2017 to conduct an evaluation of the NRHP-eligibility of a potential mill village historic district that might be affected by the undertaking. The NCDOT-recommended study area for the Shuford Mills and Mill Village extends into the APE. Architectural Historian, Jaime L. Destefano, conducted the field work on February 22 and 23, 2017 and authored the report. Figure 1 shows the APE for the replacement of Bridge No. 262 over Gunpowder Creek. Figure 2 identifies the boundaries of the National Register evaluation area [hereafter referred to as “Shuford Mills and Mill Village (CW0428)”].

ECA conducted the evaluation and prepared this report in accordance with NCDOT’s current Historic Architecture Group Procedures and Work Products and the North Carolina Historic Preservation Office (HPO) Report Standards for Historic Structure Survey Reports/Determinations of Eligibility/Section 106/110 Compliance Reports in North Carolina. The National Register evaluation meets the guidelines of NCDOT and the National Park Service. As a result of this study, ECA recommends that the Shuford Mills and Mill Village is not eligible for listing on the National Register

Resource Name	Shuford Mills and Mill Village
HPO Survey Site #	CW0428
Period of Significance	c.1880-c.1940
Recommendation	Not Eligible for NRHP

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I. PROJECT LOCATION MAPS

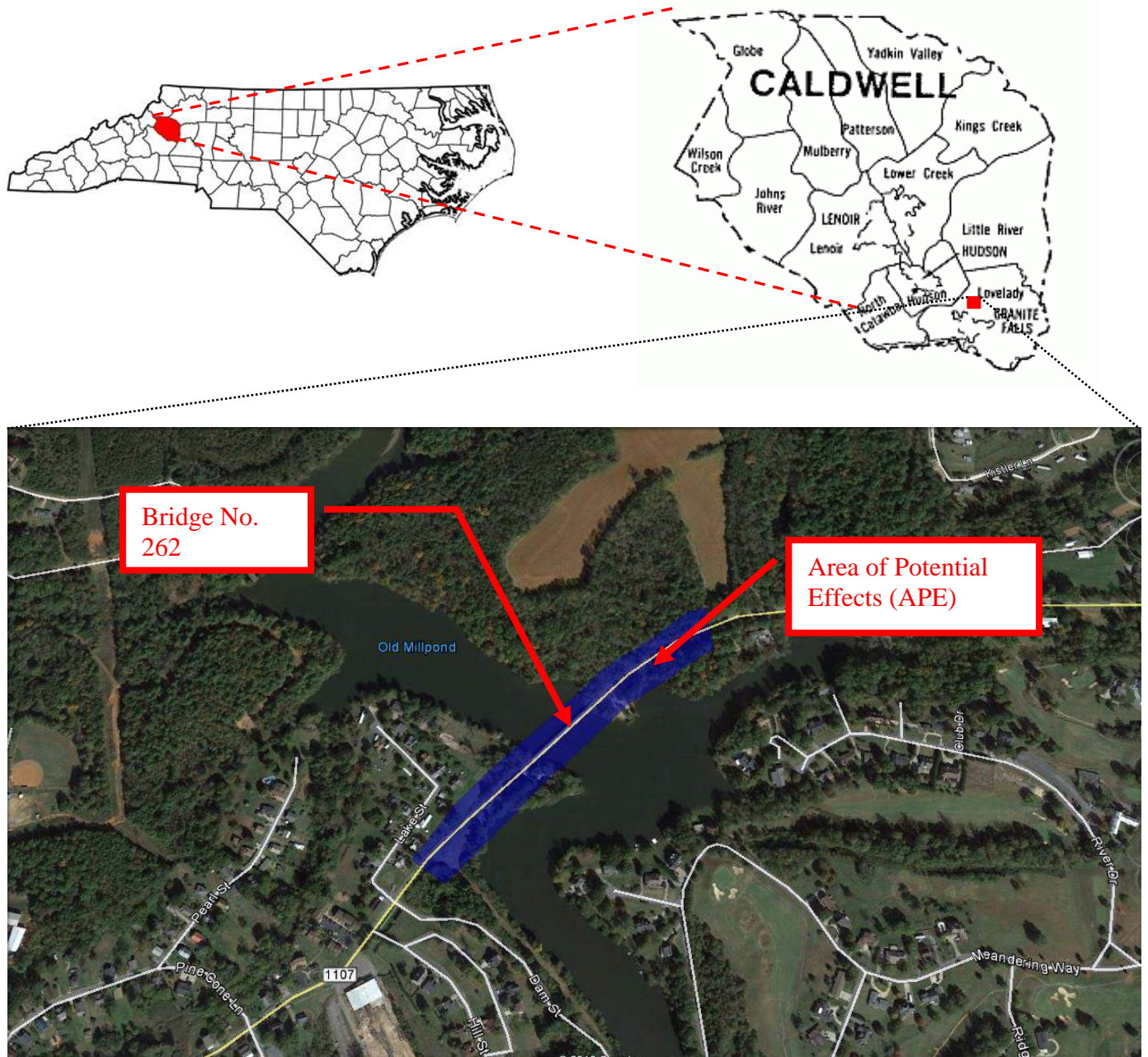


Figure 1. Project Location and Area of Potential Effects (APE)

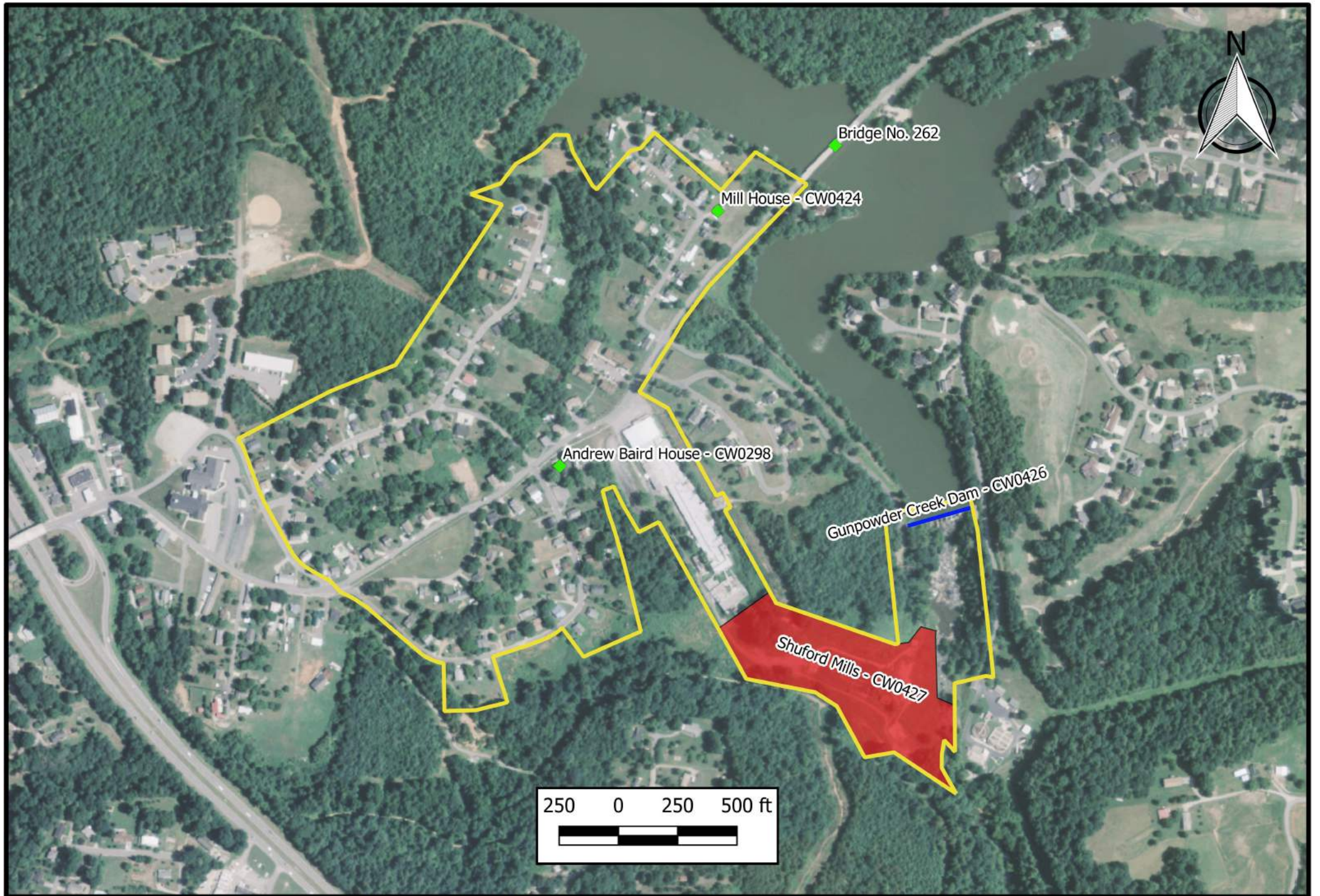
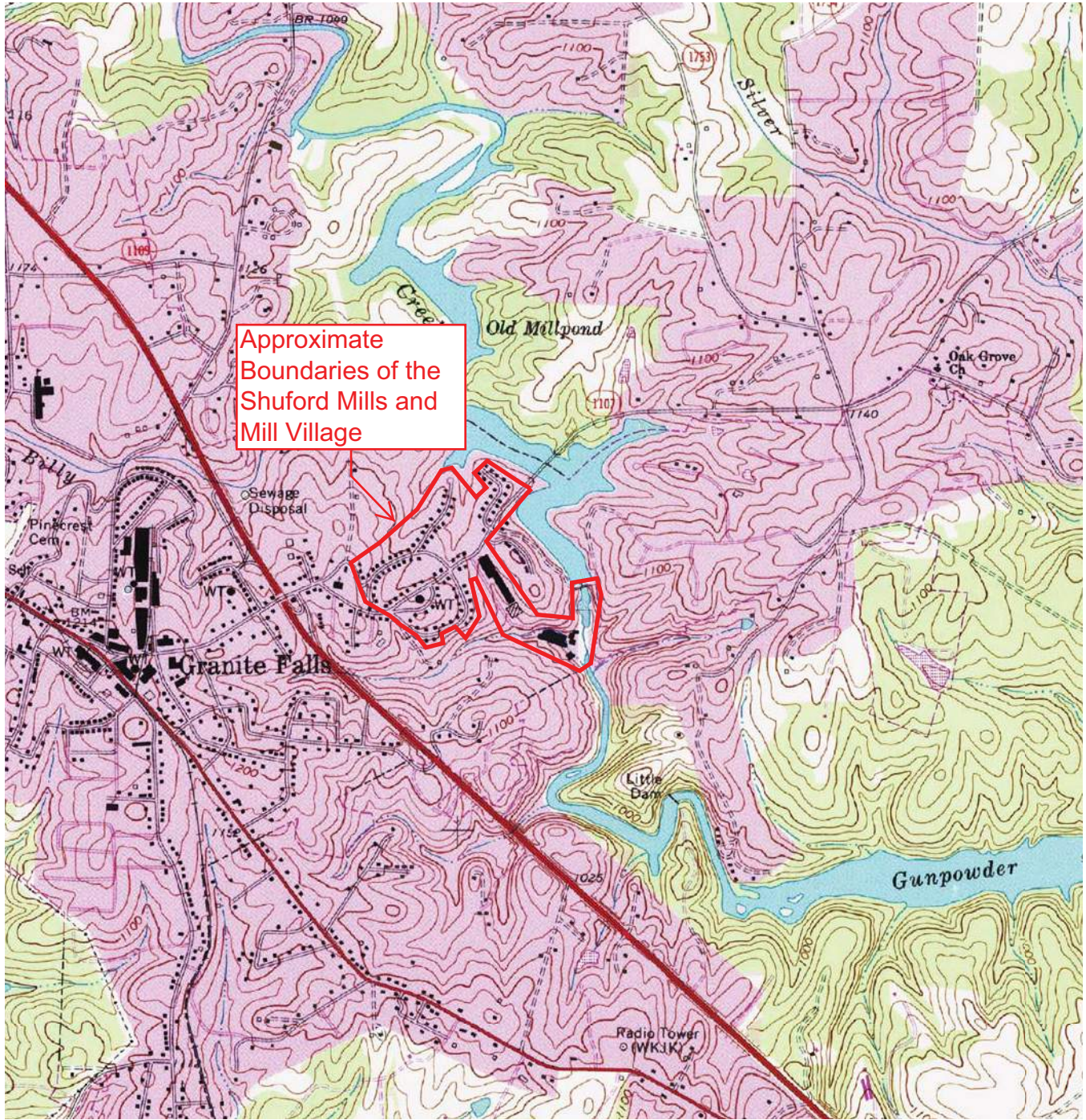


Figure 2: Boundaries of the Shuford Mills and Mill Village (CW0428)



Approximate
Boundaries of the
Shuford Mills and
Mill Village



Source: USGS Topographic Map, 7.5 Minute Series, Granite Falls, N.C.-TENN (1993).

Replace Bridge No. 262 over Gunpowder Creek (Old Mill Pond)
on SR 1107 (Falls Avenue), WBS No. 17BP.11.R.135

Granite Falls, Caldwell County, North Carolina

Figure 3: Shuford Mills and Mill Village (CW0428), Shown on USGS Topographic Map



North

ECA Project T0728

II. INTRODUCTION & METHODOLOGY

NCDOT propose to replace Bridge No. 262 on State Route 1107 (Falls Avenue), over Gunpowder Creek (Old Mill Pond), Caldwell County. The project area is located within the southeastern section of Caldwell County. NCDOT Architectural Historians contracted Environmental Corporation of America (ECA) in February of 2017 to conduct a National Register evaluation of a potential historic district within the APE, hereafter referred to as Shuford Mills and Mill Village (CW0428).

Architectural Historian, Jaime Destefano of ECA, conducted the field work on February 22 and 23, 2017, photographing and mapping resources and the setting, and authored this report. Basic research on the project area was conducted to obtain a greater understanding of the historical development of the district and to place it within its historic and architectural context. Information was acquired through research at the Caldwell County Register of Deeds, Caldwell County Geographic Information System online maps, the HPO western office, the Granite Falls Historical Association, and a general internet search. The Caldwell County Public Library Genealogical Room was closed due to renovations. Sanborn maps do not cover the project area; however, historic aerial photographs dating from 1947 were reviewed.

During the site visit, a windshield survey was first conducted along the periphery of the evaluation area to better define the boundaries of a potential historic district. Properties along the periphery lacking association with the development of the mill village, and those less than 50 years of age were eliminated from the boundaries of the National Register evaluation area. Figure 1 shows the APE for the replacement of Bridge No. 262 over Gunpowder Creek. Figure 2 shows the boundaries of the National Register evaluation area [hereafter referred to as “Shuford Mills and Mill (CW0428)”] based upon the results of the initial windshield survey and preliminary background research.

During the site visit, all properties were photographed. Those exhibiting unique significance were formally surveyed and assigned survey site numbers. Streetscapes and the surrounding landscape and setting were photographed, and trends in construction materials, design, and alterations noted during the site visit. Site visits were also made to nearby mill villages in Rhodiss, Lenoir, Hudson, Marion, and Hickory to compare housing types, integrity, and degree of significance.

Background research at the HPO western office identified one (1) previously recorded historic resource within the Shuford Mills and Mill Village. The Andrew Baird House (CW0298) is surveyed only; however, it received a NCDOT Enhancement Grant for its restoration in 2006. It presently serves as the Granite Falls History and Transportation Museum. No other previously recorded historic resources were identified within the National Register Evaluation Area.

During the National Register evaluation of the Historic District three (3) additional resources bearing architectural distinction and/or significance were identified. The following chart lists the previously identified Andrew Baird House, as well as those identified during the evaluation of the Historic District. Survey site numbers were requested from the HPO and noted in the chart. Formal individual National Register evaluations of these resources were not conducted as part of the district evaluation.

Location/Description	HPO Survey Site No.	PIN#
Andrew Baird House 107 Falls Avenue	CW0298	5103
Mill House 11 Lake Street	CW0424	2372
Gunpowder Creek Dam over Gunpowder Creek	CW0426	1908
Shuford Mills West bank of Gunpowder Creek	CW0427	6365

The historical development, architecture, and cultural significance of the Shuford Mills and Mill Village was assessed and evaluated within its respective contexts per the established NRHP criteria. ECA conducted the evaluation and prepared this report in accordance with NCDOT's current Historic Architecture Group Procedures and Work Products and the HPO's Report Standards for Historic Structure Survey Reports/Determinations of Eligibility/ Section 106/110 Compliance Reports in North Carolina. The National Register evaluation meets the guidelines of NCDOT and the National Park Service.

III. NATIONAL REGISTER EVALUATION OF THE SHUFORD MILLS AND MILL VILLAGE (CW0428)



Resource Name	Shuford Mills and Mill Village
HPO Survey Site #	CW0428
Location	Roughly bounded by Gunpowder Creek and dam to the east; the original Shuford Mills complex and residential properties fronting Pine Street to the south; Concord Drive to the west; and properties fronting the west side of Pearl Street to the west.
PIN	Varies
Period of Significance	c.1880 – c.1940
Recommendation	Not Eligible for NRHP

LOCATION AND SETTING

Granite Falls is situated within the southern section of Caldwell County occupying land within a portion of the Southern Piedmont Region. The broad, rolling ridges of the area allow for a wide range of land uses.¹

The Shuford Mills and Mill Village occupies approximately 83 acres of land located less than one (1) mile northeast of the heart of Granite Falls and directly west of Gunpowder Creek (Old Mill Pond) and the Gunpowder Creek Dam (CW0426). The dam was constructed in 1916 and played a vital role in the success and development of the mill, and ultimately, that of Granite Falls. Bridge No. 262, constructed in 1942, crosses Gunpowder Creek (Old Mill Pond) along Falls Avenue.

¹ United States Department of Agriculture, *Soil Survey of Caldwell County, North Carolina*, in cooperation with the Natural Resources Conservation Service, 1989.

Begun in 1880, the original mill complex is located near the southeastern corner of the district along the western bank of Gunpowder Creek (*see* Figure 2). Much of the historic mill complex was demolished during the early 2000s; however, the foundations of its many buildings, as well as the historic Power House survive. Figures 4 and 5 are aerial photographs of the original mill complex prior to, and following its demolition.



Figure 4. Bird's Eye View of the Original Shuford Mills Complex, date unknown
Source: Etched in Granite, p.145

- 1) Original Two-Story Mill; 2) Dam over Gunpowder Creek, 1915; 3) Plant No. 1; 4) Power House

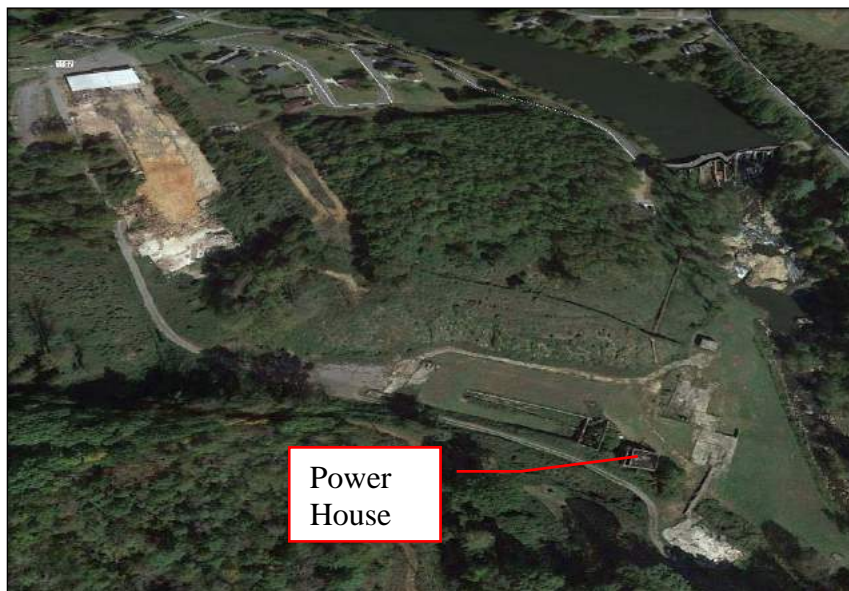


Figure 5. 2016 Aerial Photograph of Original Mill Complex

Constructed in 1919 northwest of the original mill complex and fronting Falls Avenue, Plant No. 2 was demolished in recent years. A c.1970 brick plant building is all that remains of this later mill complex (Photograph 1).



Photograph 1. Circa 1970 Plant Building Fronting Falls Avenue

The specific siting of residential development within the mill village appears to have been planned on high ground above Old Mill Pond and generally outside of prominent drainage features which dissect the area and feed into Old Mill Pond and into Gunpowder Creek below the dam. As such, the planned village had less to do with residential design, but rather the topography of the landscape.

Falls Avenue (formerly Mill Street) serves as the primary artery through the district, running in an east-west direction and connecting the town of Granite Falls to Gunpowder Creek. Prior to the construction of Bridge No. 262, Falls Avenue extended to Dam Street, which curved along the creek in a southeasterly direction, before crossing the dam. This served as the only transportation route across Gunpowder Creek between 1915 and 1942 within Granite Falls.

Residential housing fronts Falls Avenue. Remaining residential streets within the mill village are laid out in a curvilinear pattern, rather than a traditional gridded plan common among the late-19th century planned residential neighborhoods. The following plat map shows the layout of the village as it likely appeared by the close of the 1920s. The present layout deviates little from the village as developed by the Granite Falls Manufacturing Company (also Shuford Mills) during the late-19th century.

The evaluated boundaries for the Shuford Mills and Mill Village generally follow those shown on the 1940s plat. Excluded from the present National Register evaluation boundaries are lots located along Hill Street. A 1951 aerial photograph shows a row of four large rectangular buildings occupying these lots (Photograph 2). It is probable that the lots were either mill-related facilities, or managerial housing. The buildings were demolished prior to the 1990s and replaced with a modern subdivision.



Figure 6. Plat of the Southwest Section of the Granite Falls Manufacturing Co. Mill Village
(Plat Book 2, Page 71), c.1940s



Figure 7. Plat of the Northwest and Northeast Sections of the Granite Falls Manufacturing Co. Mill Village
(Plat Book 2, Page 71), c.1940s



Photograph 2. 1951 Aerial Photograph of Shuford Mills and Mill Village Showing Row of Buildings (Not Extant) along Hill Street

Residential lots vary in size and shape throughout the district, likely a result of the topography and patterns of development. Lots fronting Falls Avenue tend to be somewhat wider than those along the other residential streets. Dwellings throughout the district share a generally consistent setback of approximately 20 to 30 feet from the street. Residential landscaping throughout the mill village is minimal, with a few properties exhibiting retaining walls, shade trees, and foundation shrubs. A few properties feature driveways extending from the street along the side of the residence. The driveways are later modifications, not associated with the historic development of the village. Outbuildings tend to be sited to the rear of the lot. The south side of Falls Avenue features the only sidewalk within the mill village.

Sited at the north end of Pearl Street is remnants of a water treatment facility associated with the mill. The facility reportedly ceased operations during the 1940s when it was sold to the Town of Granite Falls.²

The following photographs reflect the present character, residential streetscapes, general landscaping elements, and the overall setting of the Shuford Mills and Mill Village.

² Brief conversation with a local resident during the site visit.



Photograph 3. Gunpowder Creek Dam, looking northeast



Photograph 4. Northwesternly View from Gunpowder Creek Dam toward Old Mill Pond



Photograph 5. Bridge No. 262, 2016
Source: Caldwell Journal, 12/12/2016



Photograph 6. Shuford Mills Power House, looking northeast



Photograph 7. View from Original Shuford Mills Complex toward Gunpowder Creek Dam, looking north



Photograph 8. Waste Water Facility at North End of Pearl Street, looking northwest toward Old Mill Pond



Photograph 9. South Side of Falls Avenue at Intersection with Pine Street, looking southwest



Photograph 10. North side of Falls Avenue near Intersection with South End of Cascade Lane, looking northeast



Photograph 11. Northeasterly View along Pearl Street near Intersection with Concord Drive



Photograph 12. View toward Grassed Triangle at Intersection of Pearl Street and Concord Drive, looking northwest

INVENTORY

The Shuford Mills and Mill Village is comprised of a total of 119 parcels of land. Among the 119 parcels, one (PIN #1908) is occupied by the Gunpowder Creek Dam (CW0426), and another (PIN #1632) is occupied by Gunpowder Creek. Both the dam and creek provided a source of power for the mill, and are both included as resources within the inventory for the Shuford Mills and Mill Village National Register evaluation. One large parcel (PIN #6506) on the north side of Falls Avenue is occupied by six (6) large apartment buildings constructed in 1982. Among the 119 parcels, nine (9) are vacant lots. A total of 110 resources (historic and non-historic) are located within the National Register evaluation area for the Historic District.

Based on field observations and background research, among the 110 resources within the Shuford Mills and Mill Village, a total of 34 (approximately 31%) were identified as lacking historic integrity. These include resources constructed outside of the Period of Significance (c.1880-c.1940) and those exhibiting extensive alterations to such a degree that the building's original form is not discernible. Vacant parcels were not documented as retaining or lacking integrity, as there are no physical structures or buildings on the property.

Andrew Baird House (CW0298), PIN #5103, Constructed 1792 and c.1880

The Andrew Baird House is the second oldest home surviving in Caldwell County. The Town of Granite Falls was awarded an NC Department Transportation Enhancement Grant for the restoration of the building and the construction of sidewalks, bike paths, and to acquire transportation-related artifacts. The building presently serves as the Granite Falls History and Transportation Museum, which opened in 2007.³



Photograph 13. Rear Ell of the Andrew Baird, Constructed 1792

The Baird House is a frame, two-story dwelling comprised of the original 1792 rear ell massing constructed by Baird, and a c.1880 single-pile, I-house on the front. The latter fronts the south side of Falls Avenue. The house rests on a continuous brick foundation and features a low-pitched, corrugated metal roof. The original massing is characterized by its nine-over-nine, double-hung sash windows. Above the first floor on the façade of the 1792 residence is a shed roof over a concrete sidewalk and supported by square posts. The c.1880 I-house massing is symmetrical and three bays wide with exterior brick end chimneys. The entry door leads into a wide central hallway flanked on either side by a single room. The entry door features multi-light sidelights and transom. Windows on this massing are two-over-two, double-hung wood sash. A nearly full-width porch with hipped roof supported by turned posts is along the façade (north elevation). The chamfered porch posts, square balustrade with a molded rail, and the transom and sidelights all appear to be original to the addition.

³ Granite Falls History & Transportation Museum, Town of Granite Falls, <http://granitefallsn.com/transportationmuseum.html> , accessed 25 February 2017.



Photograph 14. Circa 1880 I-House Addition to the Andrew Baird House, facing south

The Andrew Baird House is among the most significant resources within Granite Falls surviving from the early settlement of the county. Andrew Baird played a vital role in the establishment of Granite Falls through the operation of his iron forge along Gunpowder Creek. The forge would later be replaced with the Shuford Mills complex, and the Baird House occupied by the mill's foreman. The Andrew Baird House retains a high degree of integrity.

Gunpowder Creek Dam (CW 0426), PIN #1908, Constructed 1916

Completed in 1916 by the Granite Falls Manufacturing Company (originally Shuford Mills, Inc.), the present dam replaced a natural rock dam that served the community for over one hundred years. The 1916 dam features a long flume extending to the Shuford Mills Power House to power the turbines that generated electricity for the operation of the plants.



Photograph 15. Upstream Side (North) of Gunpowder Creek Dam, looking southeast

Prior to the introduction of electricity, the mill ran a single shift until 6:00pm. Electricity made it possible to run a second shift from 6:00pm until 6:00am.⁴ The dam is an excellent representation of a concrete gravity dam that not only sourced power for the mill, but also served as a one-way bridge across Gunpowder Creek. The bridge is supported by paired concrete piers above a concrete wall. Water flows from the Old Mill Pond/Gunpowder Creek through the piers to the base of the dam on the opposite side. The south side of the dam features prominent concrete supports, or buttresses. The Gunpowder Creek Dam played a critical role in the success of Shuford Mills, as well as the development and prosperity of the Town of Granite Falls. Further, it provided the first efficient transportation route across Gunpowder Creek, allowing for the continued growth of the community. As such, Gunpowder Creek Dam is an important physical element to the Shuford Mills and Mill Village.

⁴ Maxine McCall, *Etched in Granite*, Charlotte: Jostens Graphics, 1999; p. 144



Photograph 16. South Side of Gunpowder Creek Dam, looking northeast



Photograph 17. Concrete Bridge across the Gunpowder Creek Dam, looking east

Shuford Mills (CW0427), 1880-1990s

The 8.3-acre parcel of land (PIN #6365) encompassing the original Shuford Mills complex includes the former site of the late-18th century Baird's Forge, a mid-19th century four mill, the original two-story Shuford Mills building (c.1880), Power House, plant additions, and concrete bridges over a narrow branch of Gunpowder Creek that powered the mill. With the exception of the Power House and bridge remnants, the majority of the historic resources associated with Shuford Mills were demolished during the early-2000s. Foundations of many of the demolished buildings survive. A small brick utility garage is sited near the northeastern corner of the parcel.



Photograph 18. Stone Foundation of Plant No. 1
(see Figure 4), facing east

The early- to mid-20th century equipment garage and utility building is rectangular in shape and constructed of brick. Historic aerial photographs indicate that its roof was a front gable that has since collapsed. The building faces southwest toward the original mill building and features two wide garage bays. One of the bays is partially enclosed with weatherboard and a door opening.



Photograph 19. Concrete Foundation and Brick walls of Plant No. 1, facing northwest



Photograph 20. Brick and Concrete Bridge Crossing Branch of Gunpowder Creek, facing northeast.



Photograph 21. Garage and Utility Building, facing northeast

The Shuford Mills Power House is contemporaneous with the construction of the dam in 1916. A flume extended from the dam to the Power House turbines. The Power House rests on a concrete foundation straddling a narrow stream leading from Gunpowder Creek.

The Power House is a one-story brick building with a corbelled brick cornice topped with a limestone course. The cornice is enhanced by decorative pointed limestone. The building features a flat roof and

faces east toward Gunpowder Creek. The foundation extends from the façade, creating a path leading to the entry door above the stream. Window openings feature limestone sills and flat jack arches with keystone. The window sash are no longer extant. On the west elevation of the building is a lower brick wing providing a small office space within the Power House. This wing also features limestone sills and headers; however, windows are set high on the wall and are two-pane sliding sash.



Constructed in 1916, the building is an excellent representation of an early-20th century hydroelectric power house. Much of the original equipment survives in the building's interior. The roof is supported by heavy, exposed wooden beams, and the brick walls exhibit a seven-course American bond. Interior doors are topped by a flat vertical brick arch.

Photograph 22. Power House, looking northeast



Photograph 23. Interior View of Power House

Unfortunately, nearly all the buildings associated with both historic mill complexes are no longer extant.

Shuford Mill Village Houses

Among the 111 resources within the Shuford Mills and Mill Village Historic District, a total of 105 are residential. The majority of the historic dwellings were built and owned by the mill company until the 1930s when they began selling the properties to mill workers. Among the 105 residential buildings within the Shuford Mills and Mill Village, a total of 74 were identified as retaining overall integrity, and 31 determined to lack integrity.

The earliest houses are sited along Lake and Pine streets and are characterized by their L-shape form. Those along Lake Street are among the oldest surviving mill houses within the district and date to the late-19th and early years of the 20th century. Mill housing typology is dominated by late-19th and early-20th century L-cottages (21 examples), and 1920s front-gabled bungalows (47 examples). There is one (1) example of a hall-parlor house, five (5) double-pile residences, five (5) bungalows with hipped roofs, and seven (7) side-gabled bungalows. Presently, all mill houses are frame, single-family; however, exterior observations suggest that a few of the residences were at one time multi-family homes. Unlike traditional mill villages where houses were occupied by at least two families, census records from the 1920s indicate an even distribution of single- and multi-family dwellings. Nearly all the residences feature prominent front porches and continuous brick foundations. These enhanced features, coupled with the private occupancy of the mill houses suggest that employees of Shuford Mills enjoyed higher-quality living standards than comparable villages within the region.

Among the earliest mill houses constructed within the Shuford Mill Village is the *hall-parlor* house located at 109 Falls Avenue. The only representation of this form within the district, this house is single-story, one-room deep with a symmetrical façade and a side gable roof. It features a central entry door and two, unequal rooms. A later ell addition projects from the rear. A three-quarter-width entry porch is centered on the facade.



Photograph 24. 109 Falls Avenue

The five (5) representations of a *double-pen* mill house within the mill village are symmetrical, three bays wide, and two rooms deep. These houses were likely constructed by the company during the 1900s-1910s and were built to accommodate at least two families. This mill house features four symmetrical rooms and is characterized by a recessed entry door leading into an entryway or central hall with two rooms flanking either side. These cottages feature two interior chimneys, and full-width entry porches are common. The best representation of this house type within the village is located at 101 Falls Avenue.



Photograph 25. 101 Falls Avenue

Occurring in greater frequency is the *L-cottage*. Named for its ell-shaped form, this house type is comprised of a side-gabled massing, one room deep, with a projecting front gable bay on the façade. An entry porch is often inset within the front ell. *L-cottages* are the first mill-worker houses to be constructed within the village. The majority are generally small and compact, with little, if any, architectural stylistic enhancements such as the resource located at 24 Pine Street. *L-cottages* accommodated one or two families. In some instances, a rear projecting wing would be accessible from a secondary entry door. An exemplary interpretation of the latter is located at 11 Lake Street (CW0424).



Photograph 26. 24 Pine Street



Photograph 27. 11 Lake Street

The mill house located at 11 Lake Street (CW0424) is the largest and most intact representation of an *L-cottage* surviving within the Shuford Mills and Mill Village Historic District. The house is clad in weatherboard siding and features partial returns in the gable ends. A projecting gable bay extends from both the front and rear elevations of the house. The rear addition is accessed via a secondary porch and entryway. Unlike the more modest representations of the *L-cottage* in the village, this example features two windows, rather than one, on the side elevations of the principal massing. A porch with decorative square brick piers further enhances the house. An interior brick chimney is off-centered on the roof, and an exterior brick chimney is on the rear ell. The mill company sold the house in 1940 to Fred W. Byrd, a foreman of Shuford Mills (Deed Book 194, Page 11).

The *front-gabled bungalow* is the most common house type within the mill village. The majority are single-story; however, a few one-and-one-half-story *front-gabled bungalows* are represented within the village (108 Falls Avenue). The *front-gabled bungalows* within the Shuford Mill Village are generally modest, rectangular dwellings featuring an interior brick chimney straddling the ridgeline. Full-width porches are either recessed beneath the principal roof, or feature a lower front gable roof. Several *front-gabled bungalows* within the village are enhanced by the application of brackets in the gable ends. Doors are most often off-centered, suggesting entry into a small hallway. A few examples reflect an intact duplex plan with two entry doors on the façade, similar to a double shotgun dwelling. A good interpretation of a front-gabled duplex is located at 20 Concord Drive.



Photograph 28. 108 Falls Avenue



Photograph 29. 20 Concord Drive



Photograph 30. 26 Pearl Street

Alternating among the front-gabled bungalows near the north end of Pearl Street are five (5) mill houses with low-pitched hipped roofs. Like the front-gabled variations, the hipped examples generally include a centered brick chimney on the roof ridgeline and a recessed entry porch. A single door is off-centered on the façade. Two examples feature a dormer window with shed roof.

straddling the ridgeline. The one-story, *side-gabled bungalows* are smaller in scale and lack enhancements such as gable end brackets such as the resource located at 86 Falls Avenue. Those exhibiting an upper half-story are often accented by a tri-partite window in the gable end of the porch. Entry doors are off-centered, suggesting its original function as duplex, or multi-family dwelling.

The few *side-gabled bungalows* located within the Shuford Mill Village include both single-story and one-and-one-half-story examples. All representations include a prominent front-gable entry porch with a vent or window in the gable end, and a centered brick chimney



Photograph 31. 86 Falls Avenue

Houses in the mill village have been altered in various ways. Among the most common alterations include the application of vinyl siding, replacement of original window sash, and the partial- or full enclosure of entry porches. Rear ell additions are common as well. In a few instances, the facades historically featured two entry doors leading into separate living spaces. The secondary entry was removed and replaced with a window when the dwelling was modified as a single-family residence. Many of the dwellings feature replacement porch posts. Despite the loss of original cladding, porch supports, and other ornamentation, houses within the mill village appear to be largely intact with regard to the general architectural forms of buildings. The majority of the mill houses appear to retain integrity and would contribute to a potential Historic District. Collectively, the houses continue to reflect trends in mill housing development and the subsequent creation of a cohesive community with a shared population and distinct housing types.

HISTORICAL BACKGROUND

The landholdings amassed by Andrew Baird for the operation of his iron forge throughout the late-18th century and early-19th century were sold during the mid-19th century. Among the landholdings were 1,200 acres purchased by J.L. Kistler & J.A. Killian. The acreage included land on both sides of Gunpowder Creek including the old iron forge, the Baird homestead and mansion (CW0298), a sawmill, stables, barns, grist mill, and the falls.⁵ Kistler and Killian established a flour mill on the site of the old forge. Following the Civil War, the establishment of cotton mills throughout North Carolina increased dramatically, particularly in the piedmont region and in the foothills. By the 1880s, waterpowered mills were established along the Catawba and Second Broad rivers, as well as along smaller streams.⁶ Such is the case of Shuford Mills.

Following the Civil War, Kistler and Killian sold the 1,200 acres, including the flour mill, to A.A. Shuford, P.G. Moore, and N.H. Gwyn in 1880. The men purchased the land with the intent to establish a cotton spinning mill for the production of yarn. That same year, the men, including a number of stockholders, formed the Shuford, Gwyn, & Co. Recognizing the potential of the cotton mill industry during a new era in Southern industrialization, Kistler and Killian not only sold their land for the project, but also offered to build a 50-foot by 100-foot, two-story building for the mill, and to provide 15 mill-worker houses in exchange for shares in the company.⁷ The ideal location for the mill proved to be the exact site “where granite falls on Gunpowder Creek had powered Andrew Baird’s forge one hundred years before.”⁸

The initial investors of Shuford, Gwyn & Co., later Shuford Mills and Granite Falls Manufacturing Company, brought in James Munroe Allred of Mountain City, Tennessee to help design and run the mill. During his time employed with Shuford Mills, Allred resided in the Andrew Baird House. It was during his occupation when he built the large, two-story I-house addition. When the mill first opened in 1880, it employed 50 workers operating 2,000 spindles in the plant. Within months, Shuford Mills yarn was being sold at retail stores across the country. Workers came from nearby farms or from mountains of neighboring counties for employment. In 1885, the company was incorporated as Granite Falls Manufacturing Company. During this time, the community was known as Lovelady. From its early beginnings in 1880, the company would become the largest cordage mill in the world.⁹

Abel Alexander Shuford was the company’s first president. In 1904, the company built Granite Falls Mill No. 1 (not extant), a brick facility adjacent to the original frame building. By 1907, the company was producing twine, window sash cord, and clothesline from cotton yarn. Granite Cordage Company was founded that year and soon became the world’s largest cordage producer.¹⁰

⁵ *Ibid.*

⁶ Bishir 1999, p.43.

⁷ *Ibid.*, p.32.

⁸ McCall 1999, p.32.

⁹ McCall 1999, p. 32.

¹⁰ McCall 1999, p.144.

As the mill prospered and expanded within Granite Falls, the company built additional homes for their employees, as well as a company store.¹¹ It is unclear where the store was located. Shuford reportedly planted a row of maple trees near the mill, creating a park for the workers.¹² In 1916, Shuford Mills erected the present concrete gravity dam to provide hydroelectric power for mill production. The dam also became the first efficient means of transportation crossing Gunpowder Creek.

A 1917 map of Granite Falls shows the extent of development of the early mill village. It confirms the construction of the L-shaped cottages along Lake Street by this time. Pine Street does not appear to be laid out, and a string of houses near present-day Pearl Street are evident. These houses were later demolished and replaced by the c.1920s bungalows. It is probable that the present curvilinear street layout of the mill village occurred contemporaneous with the development of the Pearl Street dwellings. The row of houses north of the mill visible on the 1917 are no longer extant, having been replaced by four mill-related facilities by the 1940s. These buildings were torn down by the early-1990s and replaced by a subdivision c.2000. Also noted on the 1917 map are four dwellings sited southwest of the original mill complex. With the exception of one, two-story residence, all were demolished prior to the 1947 aerial photograph. The former was destroyed by the 1960s.¹³

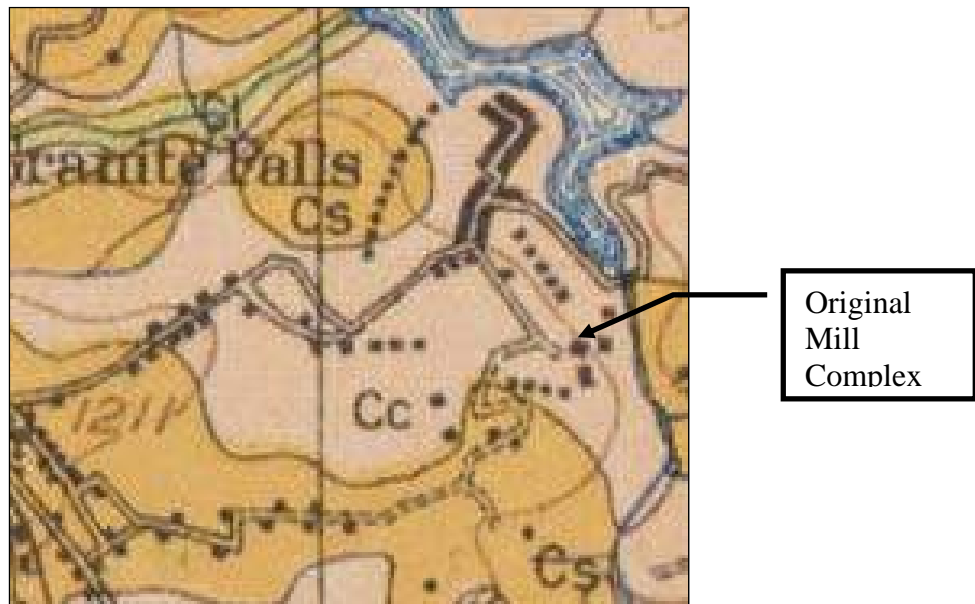


Figure 8. 1917 Soil Survey Map

Mill No. 2, a cotton spinning operation, was built in 1919 northwest of the original mill along Falls Avenue (not extant). That same year, Shuford's son, Alex, started a dairy farm to provide affordable fresh milk to mill employees.¹⁴ The location of the dairy farm is unclear; however, there is no indication that it was within the boundaries of the mill village. Based on historic maps and aerial photographs, the present layout of the village and the construction of a large number of mill houses

¹¹ "History of Transportation in Granite Falls," *The Granite Tablet*, A Publication of the Granite Falls History Committee, First Edition, March-April 2013.

¹² McCall 1999, p.144.

¹³ Historic aerial photographs, 1947, 1951, 1961, 1966.

¹⁴ *Ibid.*

occurred during the 1920s. Since the 1920s, Shuford Mills expanded operations in other communities throughout western North Carolina including Highland, Hudson, and Hickory, among others.

A review of census records indicates that Shuford Mills/Granite Falls Manufacturing Company employed only white laborers. Census records from the 1920s suggest a relatively even distribution of multi-family dwellings within the Mill Village. Many of the census entries of that year indicate that a single family rented the house and housed additional “boarders.” By the 1930 census, however, there is no indication that more than one family was occupying a mill house.

The Great Depression resulted in a considerable financial slump for the company and expansion of the mill and mill village slowed dramatically. By 1936, however, the economy rebounded, and management began to once again look toward expansion. Shuford Mills became a leader in a move to “upgrade efficiency and production and to establish labor standards with built-in incentives.”¹⁵ Employees began to enjoy pay increases, as well as a reduction in weekly work hours. In 1938, the company joined a move among other Southern cotton mills, to sell the mill houses to its employees. A three-room house sold for approximately \$550; a four-or-five room house for about \$800. Most of Shuford Mills employees chose to purchase their homes.¹⁶ A review of the 1940s Federal Census confirms the majority of the dwellings were employee-owned.

In 1947, all related plants and operations throughout the region were consolidated under the umbrella of Shuford Mills, Inc. Diversification of production continued within the launch of synthetics operation in 1954, followed by pressure sensitive tape in 1955. Cotton remained important to the company’s manufacturing process throughout its history. By 1996, the small tape division of Shuford Mills outpaced the sales and profitability of legacy textile products. Shuford Mills’ management elected to spin off the tape division into a separately managed and operated company – what’s known today as Shurtape Technologies.¹⁷ Operations at the Granite Falls plant gradually ceased. By 2005, the original mill complex was demolished, followed shortly thereafter by the 1904 Granite Falls Plant No. 2 in 2015. The present c.1970 brick building at the site of Plant No. 2 is operated by Cons Metal.

ARCHITECTURAL CONTEXT

Due to the loss of the historic mill plant buildings that were vital to the early development and growth of Granite Falls, the worker’s houses are all that survive of the first Shuford Mills operations. Granite Falls’ mill village was typical of hundreds of such communities constructed by mill owners throughout State during the late-19th and early-20th centuries. The development of these mill villages “was as much a social movement as an industrial one with thousands of white, southern families leaving farms for the factories.”¹⁸ To entice the labor force, mill companies offered housing at low rental costs to its employees, and oftentimes provided stores, parks, churches, and schools, among other services. According to one source, by the turn-of-the-20th century, ninety-two percent (92%) of southern textile

¹⁵ *Ibid*, p. 145.

¹⁶ *Ibid*.

¹⁷ Company History, Shurtape Technologies, online <https://www.shurtape.com/company-history> , accessed March 2017.

¹⁸ Rick Mattson and Frances Alexander, “Pineville Mill Village historic District,” National Register of Historic Places Nomination Form, 2011; Section 8, Page 24.

families lived in villages owned by their employers and “the company town established the contours of everyday existence.”¹⁹

Southern textile companies generally built villages of small, free-standing, wooden dwellings reflecting vernacular forms. The worker houses in the Shuford Mills and Mill Village Historic District are similar to house types erected in most mill communities during the peak of the textile industry between the 1880s and 1920s. Common forms during the late-19th century and early years of the 20th century were single story, rectangular forms, usually with rear ells and traditional, hall-parlor (109 Falls Avenue) and double-pen plans (101 Falls Avenue). Also common among cotton and textile mill villages was a modest, ell-shaped cottage with cross-gabled roof. The earliest houses within the Shuford Mills and Mill Village front Lake Street and reflect this latter form.

During the 1920s, the Shuford Mill Village underwent substantial development when the earlier dwellings near present-day Pearl Street were demolished, and Pearl and Pine Streets laid out in a curvilinear design. The majority of the houses along these streets, as well as a number of examples along Falls Avenue, contain bungalow mill houses. These houses reflect the influence of the bungalow movement and are distinct from the earlier mill houses. They are generally larger than their predecessors, adaptable to variation, and affordable. Bungalow mill houses “provided workers with style-conscious dwellings that were free of any of the negative connotations associated with traditional, uniform mill housing.”²⁰ The Shuford Mills and Mill Village Historic District includes numerous representations of a simple bungalow mill house, including front-gable, hipped, and side-gabled variations. All feature prominent entry porches. A few examples within the district are enhanced by gable end brackets, shed-roofed dormers, or upper-story tri-partite windows and vents.

Throughout North Carolina, hundreds of mill villages contemporaneous with the Shuford Mills and Mill Village reflect similar development patterns and house forms. Various searches of the NC HPOWEB GIS database and a review of *A Guide to the Historic Architecture of Western North Carolina* identified three (3) previously recorded mill villages within Caldwell County. These include the American Effird Textile Mill Village Historic District (CW0053; DOE 1995), Patterson Mill Houses (CW0063; SL 1998), Cotton Mill Hill (CW0402, surveyed only), and Rhodiss Mill Village (CW0354; 1987 surveyed only).

The textile plant associated with the American Effird Textile Mill Village Historic District is no longer extant. Two groupings of mill houses dating to the 1920s survive to the north and south of the former plant. Those grouped to the north include hall-parlor dwellings with rear T-wings. Those located south of the former mill are generally square, hipped cottages. Although determined eligible for the National Register in 1995 as a historic district, the loss of the mill, coupled with the relative isolation of the contemporaneous groups of dwellings, resulted in the loss of sense of cohesion characterizing textile mill villages.

¹⁹ Jacquelyn Dowd Hall, James Leloudis, Robert Korstad, Mary Murphy, L Ann Jones, and Christopher B. Daly, *Like a Family: The Making of a Southern Cotton Mill World*, Chapel Hill: University of North Carolina Press, 2000; p.114.

²⁰ Matteson 2011; Section 8, Page 30.

Located along a hilltop southeast of Lenoir Cotton Mills, is an excellent representation of an early-20th century mill village in Caldwell County. Unlike the mill village in Granite Falls, the Lenoir Cotton Mill Village includes an array of buildings characterizing a Southern mill village including small worker-houses, larger residences for mill managers, a company store, and a church. Exterior modifications are similar to those observed in Granite Falls including vinyl siding, replacement windows, and porch enclosures. The historic mill plant remains intact.



Photograph 32. Mill Houses along Cotton Mill Hill, Lenoir

Rhodiss Mill Village features a good collection of mill houses on hilltops on either side of the Catawba River. The village occupies land within both Burke County and Caldwell County. The village includes the imposing dam and plant of the Rhodiss Manufacturing Company, modest mill houses, a company store, a boarding house, a church, and post office. Mill houses date between the 1910s to 1940s and are represented by modest, vernacular forms. Among the most common house form within the Rhodiss Mill Village is a one-and-one-half-story, side-gabled dwelling featuring a porch with shed roof centered on the façade. Smaller, single-story hipped bungalows also occur within the village. Exterior modifications do not appear to be as extensive as some of the residences observed within the Granite Falls Shuford Mill Village. Further, the wide array of resources that are characteristic of a bustling Southern mill village during the early- to mid-20th century remain intact.



Photograph 33. Mill Houses in Rhodiss Mill Village

In nearby McDowell County, the Marion Manufacturing Company (MC0168) developed a mill village adjacent to its plant. Unlike the village in Granite Falls, streets along the Marion Mill Village are straight and lots relatively small. House types are generally restricted to modest, hall-parlor plans, one-room deep with a side-gabled roof. There are a few examples of larger, hipped bungalows, and two-

Photograph 34. Marion Manufacturing Company Mill Houses



story residences for company supervisors are scattered throughout the village. Much of the mill plant survives, and the village remains intact. Exterior modifications to the dwellings are minimal, and the overall character of an early-20th century mill village is evident.

Another mill village in neighboring Catawba County closely resembles the Granite Falls mill village. In 1909, Shuford Mills began operation of its Highland plant near Hickory (CT0842, not extant). The Shuford Mill Village in Highland (CT1465) developed across the railroad

track, opposite the plant. Houses within the village were built during the 1910s and 1920s and are similar in form and scale as those constructed in Granite Falls. Houses within the Highland village are primarily one-story, side-gable L-plan frame dwellings with front-gable wings and attached partial-width porches. There are some examples of hip-roof and front-gable dwellings as well, but they are far less common. The majority of the houses in the mill village have been altered with the addition of vinyl or synthetic siding and there are numerous examples of material alterations including window and porch replacements.²¹ The Shuford Mill Village in Highland developed alongside the Highland Cordage Mill Village (CT1467), creating a sense of cohesion and community distinguishing a Southern mill village.

The Granite Falls mill village includes a higher number of dwellings exhibiting substantial exterior modifications making the original form nearly discernible. The Highland mill village, on the other hand, appears to retain greater integrity and is a good collection of mill housing built by the Shuford Mill company during the early-20th century. The historic plants responsible for the development of both mills are no longer extant.

²¹ Acme Preservations Services, "Hickory Survey Update Summary Report," 2015; p.46-47.



Photograph 35. Shuford Mill Village in Highland (CT1465), streetscape views on 15th Street

INTEGRITY

The Shuford Mills and Mill Village experienced considerable transformation since its establishment in 1880. Many of the original mill houses constructed during the late-1800s and early years of the 20th century were replaced with the later mill houses built during the 1920s. These later houses, which are primarily comprised of bungalows, survive as a reminder of a period of prosperity and expansion for Shuford Mills. It is also during this period when the village adopted its present street layout.

Although there are few modern (less than 50 years of age) intrusions, it should be noted that the historic mill village has experienced the loss of numerous resources, most notably the original mill complex and Plant No. 2. Although excluded from the National Register-evaluation boundaries, the worker-housing formerly sited along present-day Hill Street, north of the original mill complex, are no longer extant, having been replaced with a modern subdivision. The former resources were among the earliest dwellings built by Shuford Mills. The loss of these resources compromises the overall integrity of the mill village. Finally, a water tower that once stood on the south side of Falls Avenue between Cascade Lane was torn down during the early 1990s and replaced with modern residences.

With few exceptions, houses within the village exhibit a high degree of exterior modifications including the application of vinyl or asbestos siding, the replacement of windows and doors, and porch modifications. Despite these alterations, houses reflecting their historic form are considered to retain integrity. Those exhibiting extensive alterations to such a degree that the historic form is no longer recognizable are considered to be lacking in integrity. Figure 9 shows the distribution of resources retaining and lacking historic integrity throughout the Shuford Mills and Mill Village. Among the 110 resources within the Shuford Mill and Mill Village, a total of 34 (approximately 31%) were identified as lacking integrity.

The Shuford Mills and Mill Village retains its historic **location** along the western banks of Old Mill Pond and Gunpowder Creek. A large number of resources characterizing the industrial era of Granite Falls, and the cohesion and sense of community within Southern mill villages have vanished from the Shuford Mill Village. The company store and park built by Shuford for their employees are not extant. Most notably, the demolition of the mill plant and buildings associated with Shuford Mills greatly compromises the historic **setting** of the mill village. The mill houses within the district are no longer occupied by mill workers, and the overall sense of place characterizing life within a bustling mill village is not evident. As such, the district no longer retains its historic **association** as a late-19th to mid-20th century mill and mill village. Further, the overall **feeling** and sense of place associated with a mill village is compromised. Although approximately 70% of resources within the district retain their historic **design** and form, the loss of exterior **materials** and **workmanship** is relatively significant throughout the district.

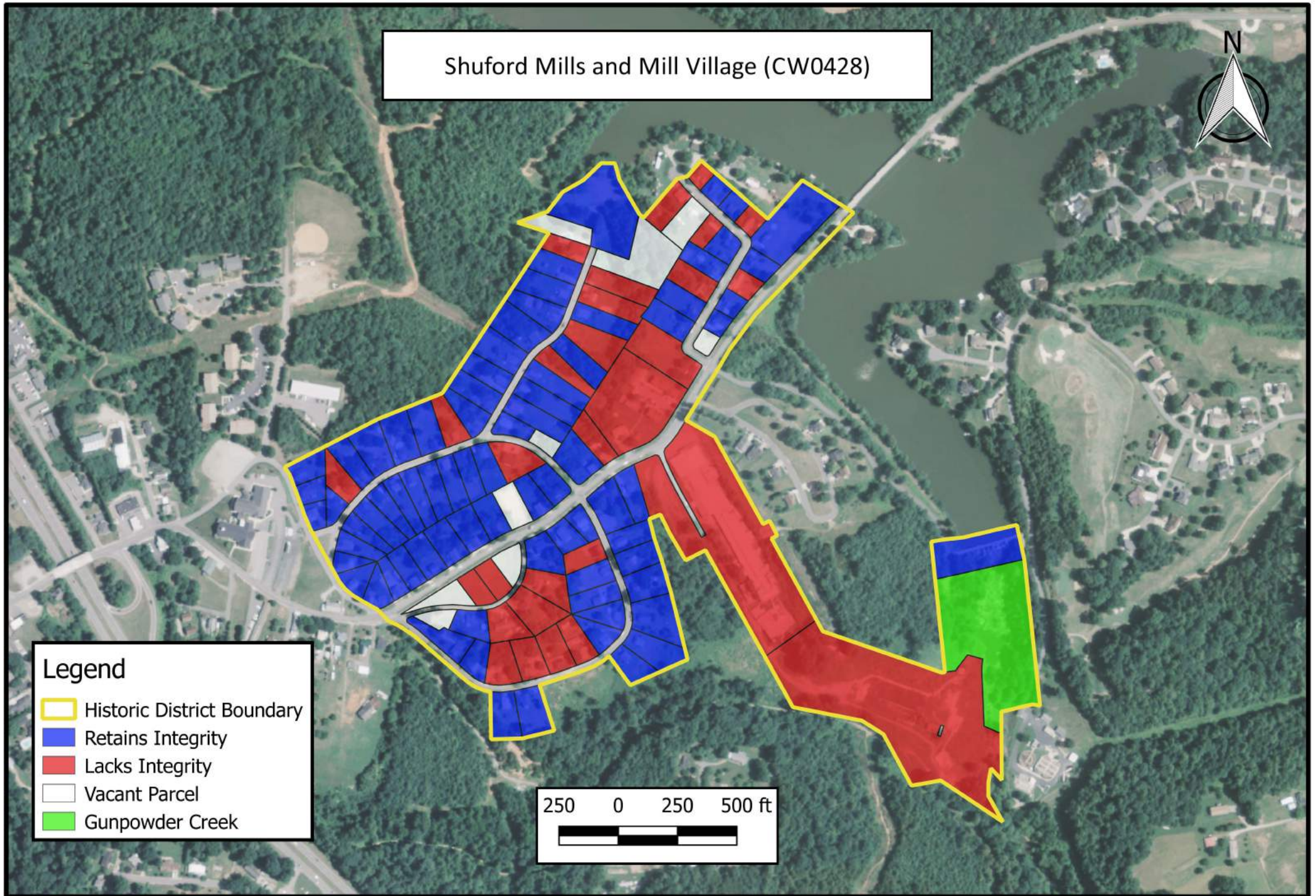


Figure 9. Distribution of Resources Retaining and Lacking Integrity

EVALUATION

For purposes of compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, the Shuford Mills and Mill Village Historic District is **not eligible** for the National Register of Historic Places. The historic integrity of the mill and mill village is significantly compromised by the loss of several historic resources, particularly the numerous historic mill buildings. Further, the introduction of non-historic buildings, material alterations, and additions resulted in a high degree of loss of historic integrity.

Properties can be eligible for the NRHP under **Criterion A** if they are associated with a significant event or pattern of events that have made contributions to history at the local, state, or national level. The Shuford Mills and Mill Village Historic District is a reflection upon the late-19th and early-20th century cotton and textile industry that significantly influenced the development of North Carolina. Textile mills promised commercial benefits locally, as well as a contribution to the diversification of the state's economy. The Shuford Mill/Granite Falls Manufacturing Company grew to become the largest industry and principal employer in the town of Granite Falls for more than 100 years. The growth of the town, and ultimately its prosperity, resulted from the establishment of the mill and mill village along the banks of Gunpowder Creek. The operation of the mill throughout the 20th century augmented the town's population and physical size. Unfortunately, the mill, which played such a critical role in the development of Granite Falls, is no longer extant. The mill houses and street layout embody characteristics reminiscent of an early-20th Southern mill village. However, other contemporaneous villages within the region better exemplify not only the significance of the cotton and textile industry to North Carolina, but also trends in community planning as mill villages developed around plants.

The Rhodiss Mill Village in Caldwell and Burke Counties includes the impressive early-20th century dam and mill plant, and contains a unique intact collection of mill houses. The village also includes resources commonly provided by the mill owners to further attract employees such as stores and churches. The Rhodiss Mill Village best signifies the importance of industrialization within the region, but also the evolving trends in the establishment and growth of mill villages by mill owners. Therefore, the Shuford Mills and Mill Village in Granite Falls is **not significant** under Criterion A.

Under **Criterion B**, properties can be eligible for being associated with significant persons. One individual resource, the *Andrew Baird House* (CW0298) survives as the only extant building within the region associated with its earliest settler. While Andrew Baird played a paramount role in the early settlement of Granite Falls as early as the late-18th century, the district is not directly associated with Baird. Collectively, the Shuford Mills and Mill Village Historic District does not illustrate the activities of any person notable in national, state, or local contexts. Therefore, it is **not significant** under Criterion B.

Criterion C states that a property can be eligible if it embodies the distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic value. Due to the loss of the mill buildings, the district contains only two surviving resources (the dam and the Power House) that are reflective upon North Carolina's textile mill industry throughout the late-19th and early-20th centuries. Despite the loss of the principal mill facilities, it consists of a dense

concentration of approximately 85 workers' houses erected between the late-19th century and the 1920s by Shuford Mills/Granite Falls Manufacturing Company. The village is characterized by L-shaped mill houses constructed around the turn-of-the-20th century, and bungalows built in the 1920s. The earlier house forms represented within the district are indicative of traditional mill-worker housing – modest in scale, with little, if any enhancements. The later bungalows are reflective upon evolving trends in residential design and construction, as well as changing ideals of the mill workers. Among the numerous mill villages within the region, the Shuford Mill Village in Highland, Catawba County contains nearly identical house types and enhancements as those observed in Granite Falls. Further, the degree of exterior alterations and loss of historic resources observed within the Highland village is not as considerable as the Granite Falls village. Therefore, the Shuford Mills and Mill Village Historic District in Granite Falls is **not significant** under **Criterion C** in the area of architecture.

Properties can be eligible if they are likely to yield additional information important in prehistory or history under **Criterion D**. It is unlikely that the Shuford Mills and Mill Village Historic District would yield additional information pertaining to late-19th to mid-20th century building technology and industrialization not already obtained through research. It is recommended **not significant** under Criterion D.

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