



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

December 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, Widen SR 1523 (Wilson Ridge Road) from SR 1522 to US 421/US221, PA 16-11-0001, U-5810, Watauga County, ER 16-1985

Thank you for your October 13, 2017, memorandum transmitting the above-referenced report. We have reviewed the report and concur that the following property is not eligible for listing in the National Register of Historic Places under any criteria.

- Bamboo Road Quarry (WT0950 and WT0951)

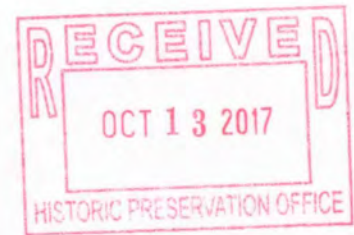
The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

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

October 13, 2017

MEMORANDUM

ER 16-1985
H Annie 11/20
Due 10/27
of letters

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. 16-11-0001: U-5810 Widen SR 1523 (Wilson Ridge Road) and SR 1514 (Bamboo Road) in Watauga County

Enclosed please find the Historic Structures Survey Report, survey site database, and additional materials for the above referenced project in compliance with the Section 106 review process. Please 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.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
PDEA-HUMAN ENVIRONMENT SECTION
MAIL SERVICE CENTER 1598
RALEIGH NC 27699-1598

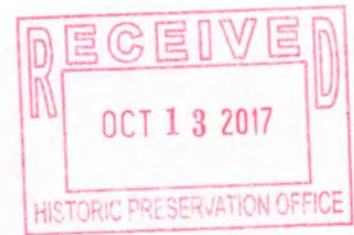
Telephone: (919) 707-6000
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1020 BIRCH RIDGE RD
RALIEGH NC 27610



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**Historic Architectural Resources Eligibility Report
Widen SR 1514 (Bamboo Road) and SR 1523 (Wilson Ridge Road) from SR 1522
(Deerfield Road) to US 421/US 221
Watauga County, North Carolina
PA# 16-11-0001
TIP# U-5180
WBS# 44383.1.1**

Prepared for:

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

Prepared by:

Cultural Resource Analysts, Inc.
Virginia Office
2727 Enterprise Parkway, Suite 203-A
Henrico, Virginia 23294

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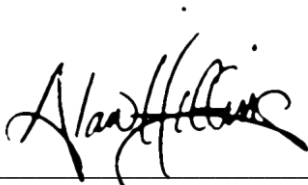
North Carolina Department of Transportation
Human Environment Section
Raleigh, North Carolina 27699-1598

Prepared by:

Cultural Resource Analysts, Inc.
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Laura R. Purvis, M.A.
Architectural Historian

September 2017



S. Alan Higgins, Principal Investigator
Cultural Resource Analysts, Inc.

10/4/2017

Date

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

Date

MANAGEMENT SUMMARY

In April 2017, Cultural Resource Analysts, Inc. (CRA), conducted an intensive-level historic architectural analysis for the North Carolina Department of Transportation (NCDOT) in association with the proposed road widening project on SR 1514 (Bamboo Road) and SR 1523 (Wilson Ridge Road) from US 421/US 221 to SR 1522 (Deerfield Road) in Watauga County, North Carolina (WBS No.: 44383.1.1). This project is subject to review under the Programmatic Agreement for Minor Transportation Projects (NCDOT/NC HPO/FHWA, 2015). The purpose of this analysis and report was to evaluate the National Register of Historic Places (NRHP) eligibility of historic architectural resources within the area of potential effects (APE) for the project, including individual eligibility and evaluation of any potential historic districts. North Carolina defines that project’s APE as all parcels adjacent to the proposed road widening project. Twenty-three resources were recorded during that survey.

NCDOT architectural historians reviewed the properties recorded by the April 2017 survey and determined that one resource warranted further evaluation: Radford Quarries’ Bamboo Quarry, located at 5544 Bamboo Road (WT950) and 5605-5665 Bamboo Road (WT951). In August 2017, Laura Purvis, architectural historian for CRA, revisited the site for additional research and documentation. The North Carolina Historic Preservation Office (NC HPO) determined that the two parcels comprising this resource should be assigned individual resource numbers. However, because the parcels currently function in unison for quarry functions, both are referred to collectively throughout this report. An expanded context for rock quarries was also requested in order to sufficiently evaluate this understudied property type.

Based on available research and documentation, CRA recommends that WT950 and WT951 are not individually eligible for listing in the NRHP under Criterion A, B, C or D due to lack of integrity and significance. Research of other regional quarries indicates that additional worthwhile study could be conducted on quarries specifically dedicated to architectural stone products and building materials. However, gravel and sand quarries like WT950 and WT951 are commonplace throughout western North Carolina (and the country). Crushed stone is expensive to transport while being a relatively inexpensive material to mine. As a result, gravel and sand quarries serve a radius of one or two counties as travel costs begin to price them out of other more distant markets.

Resource Name	Address	Site Survey Number	NRHP Eligibility Recommendation	NRHP Criteria
5544 Bamboo Road, Bamboo Quarry	5544 Bamboo Road	WT950	Not Eligible	n/a
5605-5665 Bamboo Road, Bamboo Quarry	5605-5665 Bamboo Road	WT951	Not Eligible	n/a

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METHODOLOGY

Cultural Resource Analysts, Inc. (CRA) completed the investigation between August 22 and August 24, 2017 with a combination of archival research, visual investigations, and photographic documentation of the extant building and structures, including their contextual setting. CRA performed the historic architectural analysis in compliance with the National Historic Preservation Act of 1966, as amended; the Archaeological and Historic Preservation Act of 1974; Executive Order 11593; and Title 36 of the Code of Federal Regulations, Parts 660-66 and 800 (as revised, 1999). The field research and report meet the requirements specified in the Secretary of the Interior’s “Standards and Guidelines for Archaeology and Historic Preservation.” (Federal Register 48: 190:44716-44742) (National Park Service 1983), as well as North Carolina Department of Transportation’s (NCDOT) Historic Architecture Group Procedures and Work Products (2015) and the North Carolina Historic Preservation Office’s (NC HPO) Architectural Survey Manual: Practical Advice for Recording Historic Resources and Digital Photography for Historic Property Surveys and National Register Nominations, Policy and Guidelines (2012).

Based on the nature of the proposed project and the character of the surrounding landscape, the area of potential effects (APE) for the historic architectural resource survey has been defined by the NCDOT to include properties adjacent to the proposed road widening project on SR 1514 (Bamboo Road) and SR 1523 (Wilson Ridge Road) from US 421/US 221 to SR 1522 (Deerfield Road) in Watauga County, North Carolina (WBS No.: 44383.1.1). The APE took into account both direct and indirect effects for the proposed project. Before entering the field, CRA consulted the NCSHPO’s Historic Preservation Office WEB GIS Service (HPOWEB) to confirm the presence of any previously- recorded properties located within the APE. One previously-recorded property in the immediate vicinity of the project area was identified during this search, SSN# WT-0277, the Elrod-Van Dyke House. The road is characterized by areas of steep grade and clusters of mid-1960s to early-1980s residential development as areas surrounding Boone transitioned from agricultural hamlets to bedroom communities. The northern limits of the APE are at the intersection of US 421/US 221 and SR 1514 (Bamboo Road) and are defined by a creek to the west and a quarry, with associated industrial infrastructure, to the east. 5544 Bamboo Road, Bamboo Quarry and 5605-5665 Bamboo Road, Bamboo Quarry, buildings spread across SR 1514 to the west at the intersection with Brook Hollow Road. SR 1514 then becomes residential in character bounded by a c. 1970-1981 trailer park to the south and single-family residences to the north. There are several vacant lots in the eastern section of this corridor. At the intersection of SR 1514 and SR 1523 (Wilson Ridge Road) there are large open lots that buffer higher density townhouse developments. Evidence of the area’s rural agricultural past is visible here with the intact outbuildings of WT-0277 despite the house’s recent demolition. There are increasingly larger lots along SR 1523 with some acreage dedicated to fields and pastures. Evidence of property subdivision is also clear along this route as well. The steepest terrain is located along this section of the project area. The APE’s southern boundary is at the intersection of SR 1523 and SR 1522 (Deerfield Road).

Archival Research

Prior to fieldwork, CRA conducted background research on Watauga County’s development patterns and the role of quarries and mines in western North Carolina’s economic and land use histories. CRA consulted the NC HPO’s online HPOWEB GIS Service to ascertain the level of existing documentation of the properties or of other properties within the area that might share a similar context. There were 11 resources within HPOWEB that returned with the keyword “quarry” (Table 1). Of them, North Carolina

Granite Corporation (SR003) is the only NRHP-listed resource that includes a historic quarry. Other resources listed include quarries and associated historic buildings; however, these are located outside of the western North Carolina mountain region. Surry County, which borders the western region, was included as a comparison to 5544 Bamboo Road, Bamboo Quarry and 5605-5665 Bamboo Road, Bamboo Quarry. All other comparisons were located while conducting fieldwork to more accurately represent the character of the property type in the region. Those comparable quarries are referenced in Table 2 within the Historic and Architectural Context section of this report.

Table 1: List of quarry-related resources located in HPOWEB GIS Service.

Resource Name	County	Site Survey Number	NC HPO Status Code
Bald Mountain Quarry Conveyor Ruins	Davidson	DV1786	Survey Only (SO)
Quarry Office	Forsyth	FY6233	Survey Only
Rock Quarry	Guilford	GF1676	Survey Only
Little Governor’s Creek Millstone Quarry	Lee	LE0455	Study List (SL)
Granite Quarry Survey Area	Rowan	RW0853	Surveyed Area (SA)
Granite Quarry Depot (Current Site)	Rowan	RW0854	Survey Only
Granite Quarry Depot (Gone)	Rowan	RW0854	Survey Only, Moved (SD)
Granite Quarry School	Rowan	RW0927	National Register Listed (NR)
North Carolina Granite Corporation Quarry Complex	Surry	SR0003	National Register Listed
Greystone Quarry	Vance	VN0070	Survey Only
Rolesville Rock Quarry	Wake	WA1831	Survey Only

Archival research also included an investigation at the NC HPO Western Office and an inspection of archival resources, published histories, historical aerial images, topographical quadrangle maps, and historical map collections available through local facilities, such as the Watauga County Public Library, Appalachian State University, and resources such as the North Carolina Maps Project and the North Carolina Digital Collections, a partnership between the State Library of North Carolina and the State Archives of North Carolina.

CRA also researched available data for the mining history of Watauga County and Western North Carolina. Quarry records and historic documents available from the State Archives of North Carolina and the State Library of North Carolina begin in the late 19th century and last through to the present. There are several overview histories of mining activity in the region that highlight gold, iron, coal, kaolin, and mica starting from the period of European settlement to the 21st century. However, these histories do not include sand and crushed stone quarries as part of their narratives. While other mining activities were heavily associated with railroad transportation and the industrialization of western North Carolina, stone quarries appear to have a different, although related, historic development pattern falling into categories based on use: sand and crushed stone quarries or architectural stone quarries (of which North Carolina Granite Corporation, SR0003, is the most famous). Gravel quarries often produce to NCDOT construction

standards, but not all advertise that qualification as part of their services. For the purposes of this study, both sand and crushed stone quarries and architectural stone quarries are referenced as comparable resources to create the most complete context within the scope of work.

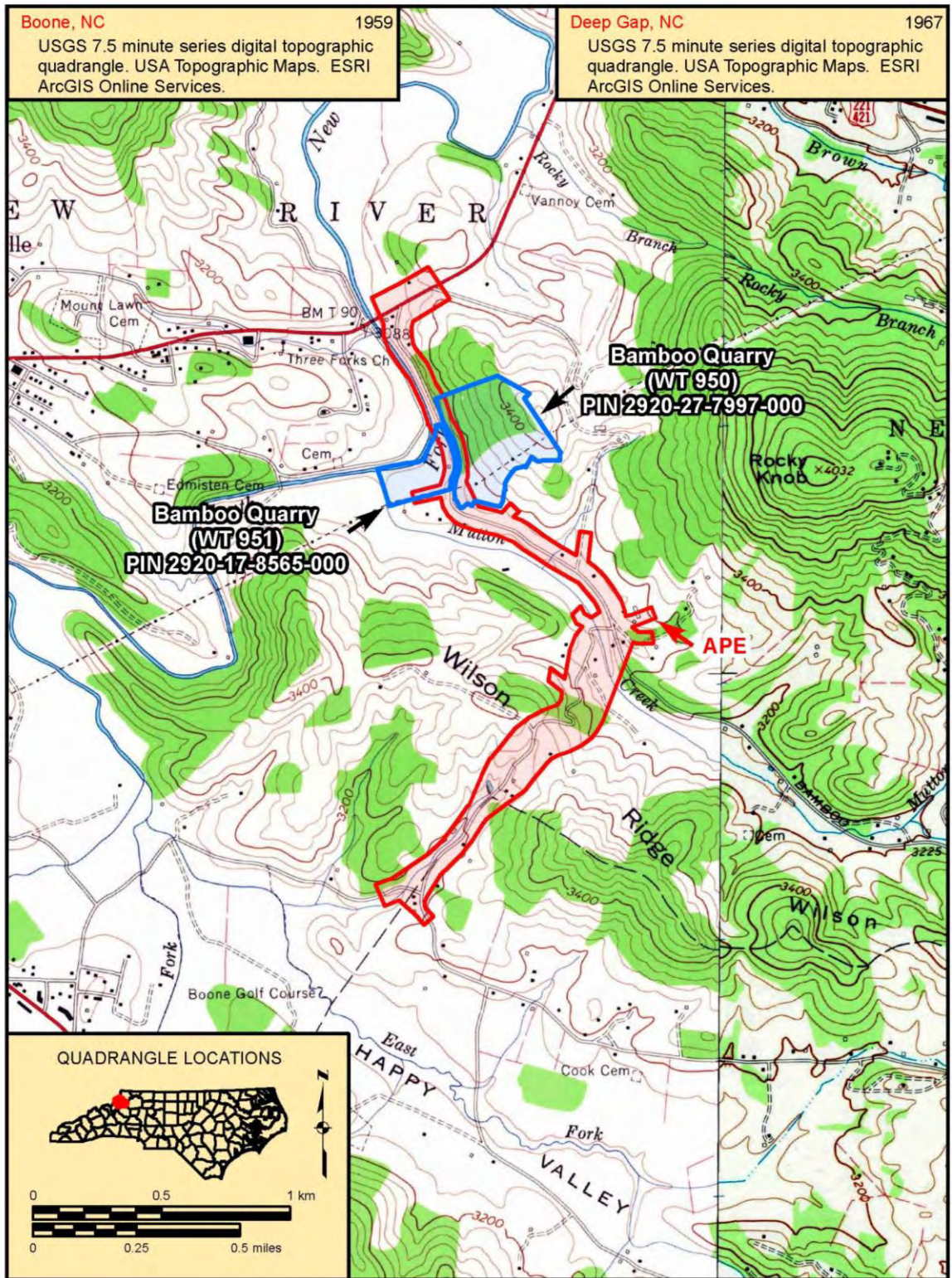


Figure 1: Portions of the 1959 Boone NC and 1967 Deep Gap NC USGS 7.5-minute quadrangles showing the APE and locations of WT950 and WT951

PROPERTY DESCRIPTION

5544 Bamboo Road, Bamboo Quarry and 5605-5665 Bamboo Road, Bamboo Quarry

Resource Name: 5544 Bamboo Road, Bamboo Quarry and 5605-5665 Bamboo Road, Bamboo Quarry

Site Survey #: WT950 and WT951

Address: 5544 Bamboo Road, Boone NC 28607 and 5606-5665 Bamboo Road, Boone NC 28607

PIN No.: 2920-27-7997-000 and 2920-17-8565-000

Construction Date(s): circa 1935 (house), improvements and quarry operations, circa 1970-1990

NRHP Recommendation: Not Eligible



Property Description:

Setting: The project area is located approximately 2 miles east of Boone, in New River Township, within southeastern Watauga County along SR 1514 (Bamboo Road) just south of US 421/US 221 and north of the intersection of SR 1514 and Brook Hollow Road. The project area is defined by Rocky Knob (also known as Rocky Mountain) to the east and the town of Boone to the west, and rests along the South Fork of the New River and SR 1514 in a small valley. The rural setting has been the subject of late 20th century residential and commercial development, and the quarry is now split by a heavily travelled road that is commercial in character to the north and transitions to residential towards the south. 5544 Bamboo Road, Bamboo Quarry (WT950) appears to predate the quarry infrastructure on 5605-5665 Bamboo Road, Bamboo Quarry (WT951), which was officially added to the quarry landholdings in 1969 (Figure 2). 5544 Bamboo Road, Bamboo Quarry sits immediately at the foot of Rocky Mountain with a small pull-off carved out of the steep terrain to accommodate several buildings, conveyor belts, and crushing machinery. There is a side drive to the south providing access to the quarry and a designated gravel pile to the north used to fill gravel orders by dump truck. A former residence, now office, sits on a small, elevated hollow to the south of the quarry. 5605-5665 Bamboo Road, Bamboo Quarry sits on a relatively level parcel along the South Fork of the New River. The properties are surrounded by trees that define parcel boundaries for adjacent development. The parcels both contain a combination of modern and historic buildings and structures.

The 27.19-acre parcel for 5544 Bamboo Road, Bamboo Quarry rests at the western foot of Rocky Knob and terminates at the center line of SR 1514 (Bamboo Road) and the 11.93-acre parcel for 5605-5665 Bamboo Road, Bamboo Quarry is on the west side of SR 1514 (Figures 3a and 3b). The northern and southern borders are defined by neighboring residential parcels. The northern property boundary is wooded until reaching the quarry that is centrally located on the property. There is a small, level pull-off for dump trucks along SR 1514 that accommodates quarry equipment including conveyor belts (one of which runs underneath SR 1514), a shed, two stone crushers with an operator observation shed, and a hopper that transfers rock from crusher conveyor belts to the system of belts underneath the road. The quarry walls and

gravel access road are visible from SR 1514; however, much of the quarry is obscured from view by woods along SR 1514. Separated from the quarry by woods to the north and fields to the east and south, a house sits near the intersection of SR 1514 and Brook Hollow Road. The former residence, now converted into offices for Radford Quarries of Boone, Inc., sits on a grassy yard that rises sharply in the rear (east) and to the south. A gravel drive and parking area connects the residence to SR 1514. A secondary gravel drive splits south from office's gravel drive just past the entrance from SR 1514. This secondary drive leads to the hill and elevated, grassy field along the southern parcel boundary (Figures 4 and 5). This field is used for equipment storage and parking, which can be accessed by residential streets to the south. This field was gated at the time of the survey and photographs were taken from the street.

The parcel for 5606-5665 Bamboo Road, Bamboo Quarry (WT951), west of 5544 Bamboo Road, Bamboo Quarry, functions as the quarry yard with two additional crushers and a truck weight scale. The parcel runs along the western side of Bamboo Road before curving sharply at the intersection with Brook Hollow Road and then continues to wrap westward along the northern side of Brook Hollow Road. The northern property boundary is defined by a line of trees and the South Fork of the New River. Along the eastern edge, there are two gravel driveways and a sparse line of trees dividing the property from SR 1514. The principal driveway leads to a truck weight scale to the south of two small, side-gable office buildings. South of the principal gravel drive, the conveyor belt that passes gravel from WT950 to this parcel exits the ground. The parcel sits slightly below the road's elevation, allowing for a gravel pile to safely deposit beside a large crusher and sorter with accompanying conveyor belts. A shed sits wedged between the road and the crusher. Belts from the crusher connect to a second sorter and crusher with belts that deposit various rock sizes into sorted piles. South of the crusher, there are two prefabricated sheds and two above-ground storage tanks. The southern edge is defined by a row of trees and Brook Hollow Road, while the western boundary is formed by a small creek that branches off from the South Fork. The majority of the parcel is level dirt and gravel with large open areas for maneuvering dump trucks and quarry equipment. The entire parcel sits below the elevation of both SR 1514 and Brook Hollow Road.

CRA examined property tax assessment records available online through the Watauga County Land Records and deed records at the Watauga County Register of Deeds. CRA also contacted the property owner for both parcels, Radford Quarries, Inc., to request access to both WT950 and WT951. Architectural historian Laura Purvis called Radford Quarries, Inc., on August 21, 2017 and followed with an email to the company President, D.J. Cecile. She also used the online contact form on the company's website as an additional point of contact. Purvis stopped by the company office on August 22, 2017 and briefly met with D.J. Cecile to tentatively schedule a tour for the late afternoon of August 23, 2017 or the morning of August 24, 2017. Purvis returned to the company office on August 24, 2017 and was asked to contact the company safety officer and lawyer regarding a tour. After Purvis left a voicemail with the safety officer, President D.J. Cecile indicated that only documentation from the road was possible. As a result, the architectural historian was unable to access the interior of buildings or provide additional views from the interior of each parcel. The property owner did not share additional information about the development of the site and declined other questions about the property.

United State Geological Survey (USGS) topographical maps and historic road maps were referenced in order to assess changes in the area. However, only the house that survives on WT950, now converted to an office, shows on these historic maps. The chain of title research for both WT950 and WT951 could not be traced back to the earliest Deed of Trust because of several trustee changes and lack of accompanying plat information. However, these records do indicate that WT951 was fully surveyed in 1970 following a change in trustees in 1969. WT950 was transferred from Radford Quarries, Inc., to Radford Quarries of Boone,

Inc., in March 1998. The deed gives all land and improvement assets from Radford Quarries, Inc., and Danny J. Cecile, Sr. to Radford Quarries of Boone, Inc., and D.J. Cecile, Jr. Based on assessor records, WT951 was added to the quarry operations on WT950 in 1969 (Watauga County DB 450:111 and 237:337).

CRA also completed extensive photographic documentation of all accessible portions of the two properties according to NC HPO standards and guidelines. Digital photographs were taken of each site as well as of the contextual setting and the exterior of all buildings and structures. Emphasis was placed on capturing building forms, character-defining features, and changes that have occurred throughout each property's history.



Figure 2: Overview of WT951 (mid-ground) and WT950 (background) with Rocky Knob in the distance.

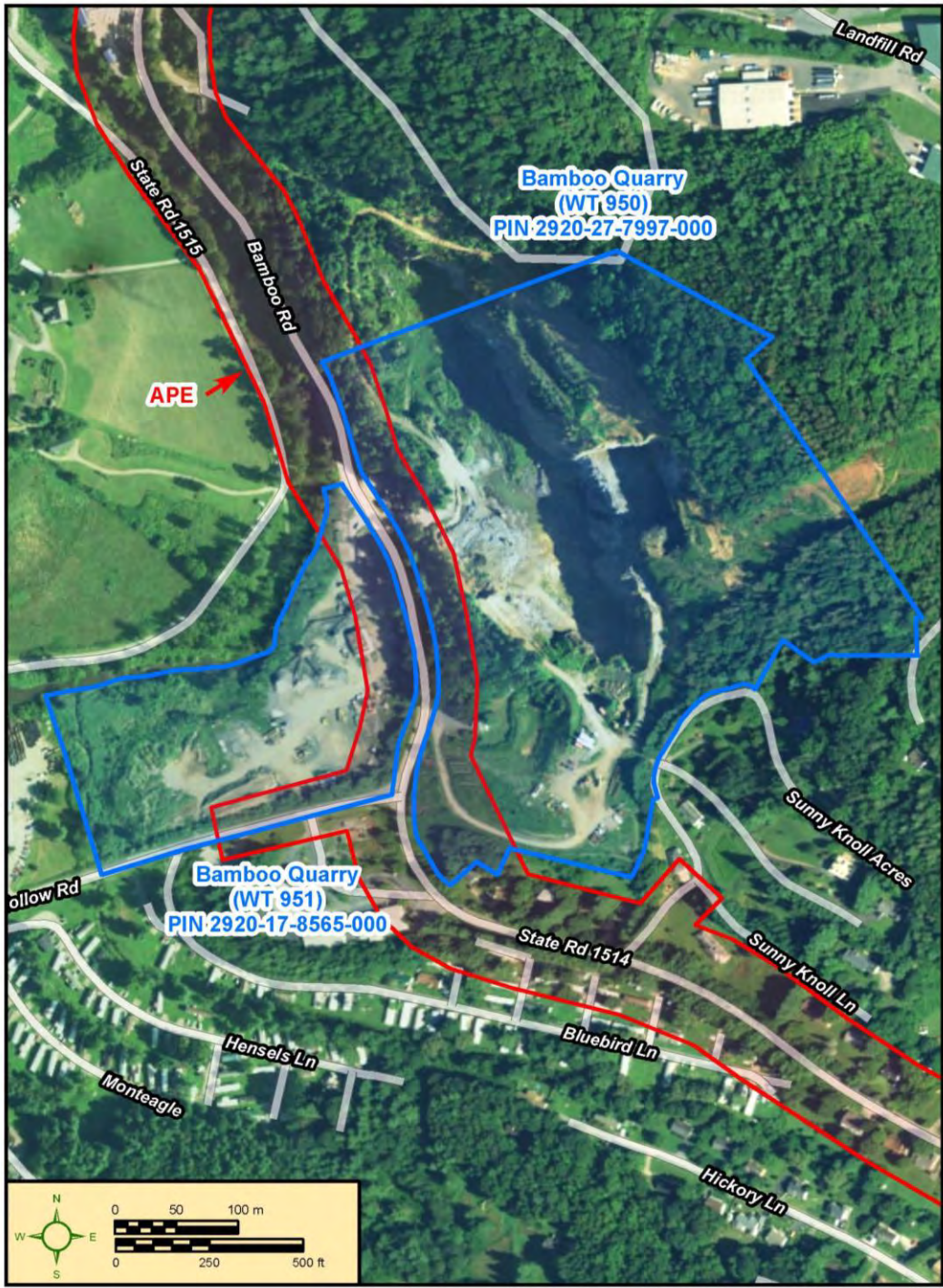


Figure 3a: Aerial showing the location and parcel boundaries of 5544 Bamboo Road, Bamboo Quarry (WT950), and 5605-5665 Bamboo Road, Bamboo Quarry (WT951).



Figure 3b: Site plans for both 5544 Bamboo Road, Bamboo Quarry (WT 950) and 5605-5665 Bamboo Road, Bamboo Quarry (WT 951).



Figure 4: Overview of the storage area on the southern portion of the parcel, looking north.



Figure 5: Overview of the storage area on the southern portion of the parcel, looking northwest towards Rocky Knob.

5544 Bamboo Road, Bamboo Quarry (WT950) Buildings and Structures

Quarry: The quarry occupies 14.72 acres at the center of the parcel. The north-south axis is approximately two-tenths of a mile and the east-west axis is approximately one-tenth of a mile with both measurements taken at the longest section of each axis. The quarry is roughly oval in shape and elongated at the north-south axis. Equipment located within the quarry was not visible from the road. However, the location of crushing equipment along SR 1514 indicates that there is a system of conveyor belts or dump truck access roads supporting the excavation activities within the quarry which transfer rock to crushers along SR 1514. USGS topographical maps indicate that the quarry transitions rapidly from nearly 3400 ft to 3200 ft in elevation east to west, respectively. As a result, excavation walls visible from the road are between 150 ft and 200 ft above SR 1514, with the quarry likely excavated below the roughly 3200 ft elevation of SR 1514. There are access roads encircling the quarry with a single gravel road connecting the quarry to SR 1514 and the rear of the crushing equipment and operator observation shed. Other details of the quarry, including additional equipment and any other access roads, were not visible from the ROW (Figures 2, 4, and 5).

Office: This c. 1935 one-story, frame residence, now converted into an office, has three bays (www/d/ww) and sits on an uncoursed stone foundation (Figure 6). The house features a projecting cross gable with the main entrance accessible by a stone stair with metal railings. The cross-gable roof is clad in asphalt shingles and the house is wrapped in vinyl siding. The roof is pierced by an interior-ridge, concrete block chimney. The north (side) elevation features a one-story, one-bay portico over a poured concrete pad, with the gabled hood supported by uncoursed random rubble masonry columns with raked joints (Figure 7). Windows throughout the house are one-over-one, double-hung vinyl replacement windows. The front (west) elevation has a large, modern bay window toward the northern end. The south (side) elevation features a single projecting bay, octagonal vinyl louvered vents, and basement windows puncturing the foundation. The elevation has three windows. There is a large, one-story shed roof addition situated on parged concrete at the rear (east) elevation (Figure 8).



Figure 6: Façade of the former residence, looking east.



Figure 7: Corner view of the former residence, looking southeast.



Figure 8: Rear view of the former residence, looking northwest.

Office Shed #1: A c. 1950-1970 frame, front-gable shed is located approximately 57 ft northeast of the residence's northeastern corner. The concrete block structure has a v-crimp metal roof and central single-leaf door with six lights and a single wood panel. The door is flanked by fixed, twelve-light windows over a narrow, rectangular wood panel. There is an opening in the gable-end that likely accommodated a window or door at one time (Figure 9).

Office Shed #2: Approximately 42 ft east of the residence is a one-story, front-gable c.1950-1970 shed that may be a pump house or storage shed. The concrete block structure has a single latched entry and the roof is clad in asphalt shingles (Figure 9).



Figure 9: View of sheds associated with the former residence, looking northeast.

Gravel Conveyor Belt System with Hopper: Four large conveyor belts transfer various sizes of crushed rock from the quarry (not visible from the ROW) to the crushers located on this site. The belt system ultimately dumps rock to form a gravel pile to the north that is then used to load dump trucks. Meanwhile, another conveyor belt transfers gravel to a hopper serving the conveyor belt that passes underneath SR 1514 to a gravel pile on the WT951 parcel. The conveyors feature heavy rubber belts with supporting rollers spaced approximately every two feet at the apex of the truss support running along each steel beam. The beams are held by vertical steel posts that are often modular in design. The gears and motor that generate the power for the belt are mounted above these posts, which often form an H- or U-shaped pattern. The hopper appears to date from the same period as the conveyor belts. While it is difficult to date equipment that has no maker marks or other identifying features, these belts likely date from c. 1970 to c.1990 (Figure 10).



Figure 10: View of quarry machinery with Cedarapids jaw crusher, hopper, conveyor belts, and operator observation shed, looking east.

Cedarapids Crusher with Operator Observation Shed: This gravel crusher with steel I-beam super structure is manufactured by Terex Mineral Processing Systems under the Cedarapids brand (Terex Corporation 2017). This jaw crusher appears to be a relatively recent replacement. However, the steel support structure pre-dates the crusher and is likely from c. 1970 to c. 1980. Jaw crushers function by rapidly lifting a ridged die near a fixed, ridged steel plate. The plates create a wedge with a small opening at the bottom allowing crushed stone to fall to conveyor belts below. Stones are dropped in the opening and the vertical action of the die lifts the stone repeatedly, forcing it against the ridged steel plate, cracking the stone to the desired size until falls through the bottom opening. Large gears on either side of the crusher are belt-driven to provide power to the die (Figures 10 and 11).

Sitting on a steel frame above the jaw crusher, and accessible by a steel platform with metal railing, there is a one-story, pre-fabricated c. 1990 shed with plate glass windows and slightly overhanging eaves. The structure is wrapped in T1-11 siding and has an asphalt shingle roof. The structure appears to sit

partially on a steel retaining wall and partially on stone. The joists are not supported on the corners visible from the ROW.

Shed: This one-story, front-gable shed faces north towards the gravel pile and loading area just off SR 1514. The shed is approximately 20 ft east of SR 1514 and forms the first of three main structures within this section of the quarry. The shed is wrapped in weatherboard siding that has significantly deteriorated, revealing plywood sheathing underneath. The building is set on a pier foundation of either stone or concrete block, which is obscured by grass and fallen siding. The building is marked with high voltage signs indicating that it could house electrical service for the large crushing equipment and conveyor belts. The gable roof is clad in asphalt shingles and has exposed rafter ends that are further exposed by deterioration along the roof's eaves. The gable ends are filled with plywood and there is a single-leaf entry door. The windows, largely missing their glass panes, were originally two-over-two, double-hung wood sashes (Figures 11 and 12).



Figure 11: Detail view of sheds, looking southeast.



Figure 12: Overview of WT950 quarry machinery as visible from the ROW, looking southeast.

Machine Shed: A c. 2000, front-gable prefabricated shed is located immediately to the east of the quarry shed. The roof and sides are clad in v-crimp metal and there is a single entry on the façade (north). The foundation is not visible from the ROW (Figures 11 and 12).

5605-5665 Bamboo Road, Bamboo Quarry (WT951) Buildings and Structures

Log Office Building: This c. 2010 prefabricated log building sits approximately 77 ft southwest of SR 1514 between the primary gravel drive and the South Fork of the New River. This one-story, front-gable building has machined-flat logs set into corner posts over a poured concrete slab foundation. The gable roof with overhanging eaves is clad in v-crimp metal. There is a pedimented entrance with oversized brackets on the east elevation. The building features bands of three one-over-one, double-hung vinyl windows and several smaller one-over-one windows with snap-in grids mimicking four lights (Figure 13).



Figure 13: Log and frame offices located at the principal driveway to WT951, looking north.

Frame Office Building: The c. 1990-2000 side-gable, frame structure houses a second office on the property. The two-bay (d/w) building sits on a poured concrete foundation and is wrapped in vinyl siding. The gable roof is clad in asphalt shingles and has overhanging eaves. There is a single-leaf door on the south elevation. Windows throughout the structure are one-over-one, double-hung vinyl sashes with screens. This building likely monitors the weight scale immediately to the south (Figure 13).

Truck Weight Scale: The truck weight scale consists of two pressure-sensitive plates that assist in measuring the weight of trucks both entering and exiting the facility. The two office buildings sit to the north of these plates, and large concrete barriers sit to the south and define the scale area from the rest of the driveway. The rest of the scale mechanism is below ground and not visible from the ROW (Figure 14).



Figure 14: View of truck weight scale and offices, looking west.

Gravel Conveyor System: A series of rubber conveyor belts supported by steel beams create a network connecting WT950 and WT951 underneath SR 1514. Belts then connect from the crusher immediately adjacent to SR 1514 to a second crusher and sorter. From there, sorted crushed rock is deposited into separate piles for transport. These belts appear to date from c.1970 to c.1990 and feature steel I-beam posts supporting trussed beams with rollers that allow the belt to carry the weight of the crushed rock and sand (Figure 15).



Figure 15: View of the belts connecting both crushers, looking west.

Prefabricated Shed: A c. 2005 prefabricated shed sits immediately to the south of the principal driveway between SR 1514 and the large crusher. This one-story, gambrel shed has flared overhanging eaves, T1-11 siding, and an asphalt shingle-clad roof. Windows throughout are one-over-one, double-hung vinyl sashes. The foundation is not visible from the ROW (Figure 16).



Figure 16: View of the prefabricated shed and crusher, looking north.

MVP Cedarapids Crusher and Sorter #1: While much of the machinery may pre-date the crusher, the MPV Cedarapids cone crusher likely dates from 2005-2010 and replaced an earlier crusher. Cone crushers typically feature a central steel cone wrapped by a second steel plate with a small opening at the bottom of each piece to allow sized crushed stone to fall to screens or conveyor belts below. The top of the machine has an opening to feed larger rocks into the crusher. The cone typically rotates along the plate (although the plate can be rotating in some models), crushing stone by impact while opening the opposite side so crushed stone can fall below the machine. This machine also contains a sorter for sizing rock that has been crushed (Figures 16 and 17).



Figure 17: View of the crusher, looking southwest. The red lettering in the image is the Cedarapids logo.

Crusher and Sorter #2: A second crusher and sorter are located approximately 300 ft southwest of SR 1514 with supporting steel I-beams and an accompanying system of conveyor belts. The model of the crusher and other details are not visible from the ROW (Figure 18).



Figure 18: Northwestern view of second crusher, looking northwest.

Tank #1: South of the main crusher and immediately adjacent to SR 1514, there is a c. 1980 large steel tank, approximately 14 ft in length, surrounded by a low concrete block wall (Figure 19).

Tank #2: Immediately south of Tank #1, this c.1980 steel tank is similarly enclosed by a low concrete wall and is approximately 14 ft in length (Figure 19).

Shed: Approximately 3 ft southeast of the tanks is a c. 1990 one-story, front-gable parged concrete block shed. The roof has overhanging eaves and is clad in asphalt shingles. There is a single-leaf entry on the south elevation (Figure 19).



Figure 19: Northwestern view of both tanks and the concrete block shed, looking northwest.

Equipment Building: Approximately 100 ft west of SR 1514 and 260 ft south of the South Fork of the New River, there is a one-story c.2010 prefabricated building. This metal panel building features a v-crimp metal roof, metal panel siding, and large metal garage doors on the south and east elevations. There is a single-leaf entry door on the north elevation. The west elevation and foundation are not visible from the ROW (Figures 20 and 21).



Figure 20: Overview of the western section of the property with dump trucks alongside the equipment building, looking northeast.



Figure 21: Western view of the equipment building, looking northeast.

Prefabricated Outbuilding: Approximately 80 ft south of the concrete block shed, there is a one-story, front-gable outbuilding wrapped in T1-11 siding. The side bays are articulated by vertical boards and the north elevation has a single-leaf entry. The gable roof is clad in asphalt shingles with a central roof cap and plywood in the gable ends. Windows throughout the building are single-light fixed aluminum windows or three-light, fixed aluminum windows. The foundation is not visible from the ROW (Figure 22).



Figure 22: Northwestern view of the prefabricated outbuilding, looking northwest.

Historic and Architectural Context

Mining activities have served a significant role in the development of western North Carolina. While the majority of historic mining operations, including coal, iron, kaolin, mica, and gold, have been relatively well documented by historians, the development and land use patterns surrounding rock, sand, and crushed stone quarries remain understudied (Hardy 2007 and Eller 1982). Through the course of this survey, the architectural historian located five comparable examples to provide context for the Bamboo Quarry (WT905 and WT951). Of those five examples, only the NRHP-listed North Carolina Granite Corporation (SR0003) has been previously surveyed. Research and site visits revealed that sand and crushed stone quarries are a common feature of the western North Carolina landscape that have supported both road development and construction throughout the region.

The architectural historian visited four of the six quarries: North Carolina Granite Corporation (Figures 23 and 24), Grove Stone and Sand Quarry (Figures 25 and 26), Glendale Springs Quarry, and Table Rock



Figure 23: North Carolina Granite Corporation quarry office building constructed in 1928, looking west.



Figure 24: Overview of North Carolina Granite Corporation quarry, looking north.



Figure 25: View of Grove Sand and Stone Quarry office building with stone masonry former residence in the rear, looking north.



Figure 26: Northwestern view of Grove Stand and Stone Quarry and office building from the main entrance.

Quarries. Balfour Quarry, located in Hendersonville, was outside of driving range during the project, but has been included based on discussions with the staff at the Western Historic Preservation Office and the Hendersonville Planning Department. The architectural historian was not permitted to take photographs at Glendale Springs Quarry, also owned by Radford Quarries of Boone, Inc., but visually inspected the site from the ROW. All sites except Balfour Quarry and Town Mountain Road Quarry are currently operational. Balfour Quarry is an abandoned granite mine owned by the city of Hendersonville that was originally part of the small Balfour community founded in the late nineteenth century (Henderson 2017). Town Mountain Road Quarry, associated with Grove Park Inn, is an abandoned quarry no longer visible from aerial views that was recommended as a comparable resource by the staff at the Western Historic Preservation Office. While it did not return in the HPO Web search, it is included here as a fitting comparable example. Of these comparable resources, Grove Stone and Sand, Glendale Springs, and Table Rock share the most similarities in activity and design with Bamboo Quarry (WT905 and WT951) and, collectively, all six properties demonstrate the variety present in quarries located in western North Carolina (Table 2).

Table 2: Resources comparable to Bamboo Quarry located on HPO Web.

Comparable Resource	Date	County	Address	Site Survey Number
North Carolina Granite Corporation	c. 1889	Surry	151 Granite Quarry Trail, Mt. Airy NC 27030	SR0003
Balfour Quarry	c. 1895	Henderson	99 Balfour Road, Hendersonville NC 28792	n/a
Town Mountain Road Quarry	c.1912-1913	Buncombe	Town Mountain Road, Asheville NC, 28804	BN0010

Hedrick Industries, Grove Stone & Sand Quarry	c. 1954	Buncombe	842 Old US Highway 70, Black Mountain NC 28711	n/a
Radford Quarries of Boone, Glendale Springs Quarry	c. 1980-1990	Ashe	1073 Glendale School Road, West Jefferson NC 28694	n/a
Table Rock Quarries	c. 2000	McDowell	938 U.S. 70 West, Marion NC 28751	n/a

Only two deeds directly related to the parcels of Bamboo Quarry (WT950 and WT951) could be located in the Watauga County Register of Deeds office. The architectural historian followed earlier deed references and researched index pages to locate additional related deeds, but none could be located through independent research or assistance from the deed office. As a result, the early history of land transfer along this section of the South Fork of the New River could not be assessed. In 1994, Jennie W. Hollar (widow) sold a section of the land to Radford Quarries of Boone, Inc., that, according to Watauga County Land Records, became part of the WT950 tract (Watauga County DB 273:337). Similarly, a 1998 deed shows the dissolution of Radford Quarries, Inc. and the transfer of its land holdings to Radford Quarries of Boone, Inc. (Watauga County DB 450:111). The property for WT951 was surveyed in December 1970. These land transfers suggest that quarry activity had begun by the 1970s or 1980s. The quarry may be older based on interviews with local librarians and members of the planning department; however, aerial maps available from USGS Earth Explorer suggest that the quarry was not present in 1964, but clearing may have started by 1976. Equipment on site could not be examined closely in order to assess age. The owners of Radford Quarries of Boone, Inc. declined to share historic information about the mining operation or the evolution of their company. Their website states that they have been in business since 1980 (Radford Quarries 2017). The Appalachian State University Library and Watauga County Public Library did not have additional documentation related to quarries or the development of the Bamboo Quarry.

Due to the lack of standard historic documentation for Bamboo Quarry and its land parcels, comparable resources, records from the North Carolina Digital Collections and the Western Regional North Carolina State Archives, and mining history websites were used to create an overall history that aided in the assessment of structures and features for WT950 and WT951. North Carolina has a long history of mining both pre- and post-European contact. The first historic documentation of mining in the western North Carolina region relates to Hernando de Soto’s gold explorations in the 1540s (Hardy 2007). However, medium and large scale mining development parallel the region’s industrialization and growth of the railroad network during the nineteenth century (Eller 1982). While mining for coal and iron depended on transportation networks to send these materials to distant markets, rock and crushed stone quarries remained uniquely local in their focus and scale.

Modern rock crushing and sorting equipment derives from the nineteenth century as well. Both jaw crushers (WT950) and cone crushers (WT951) have their origins in crushing machines patented in the 1830s (D. Michaud 2015). The Blake jaw crusher, invented by Eli Whiney Blake in the 1850s, is the earliest version its type, while cone crushers (also known as gyratory crushers) did not earn patents until the 1860s and 1870s (LD Michaud 2015). The crushers installed at Bamboo Quarry are Cedarapids brand equipment produced by Terex Corporation. Cedarapids was originally founded as Iowa Manufacturing Company in 1923 (Terex 2017). Howard Hall and John Jay, prominent figures in the manufacturing community of Cedar Rapids, Iowa, saw increased opportunity for machines supporting road building during the Good Roads movement and grew Iowa Manufacturing Company from a smaller business, Bertschey Engineering

Company. The company grew to be a national supplier of highway and rock crushing equipment as a result of New Deal programs and the establishment of the national highway system under President Eisenhower (Bruce more 2017). The company changed its name to Cedarapids in 1985 and was purchased by Terex Corporation in 1999 (Bruce more 2017 and Terex 2017). All manufacturing was removed from its original Cedar Rapids location in 2009 and the Cedarapids name became a product brand within the Terex Minerals Processing Systems division (Terex 2017). The equipment located at WT950 and WT951 appear to be from the period of transition to Terex Corporation ownership, judging from the logos visible from the ROW along SR 1514. While much of the machinery likely pre-dates the installation of this modern equipment, it was not possible to assess from the ROW. Moreover, information regarding the manufacture origins of the conveyor belt system is difficult to trace as no manufacturer marks were visible from the ROW.

Boom-bust cycles predominate many towns founded on mining industries in western North Carolina. Communities were first dependent on coal and iron, which eventually transitioned to kaolin (a clay for the production of porcelain) and mica (first used for windows in stoves before other uses were discovered for ground mica). Throughout western North Carolina, communities who grew as one product became an important industrial material waned or transitioned to another mined product as industrialization and other competitive markets continued to drive down prices for those products (Hardy 2007). Comparatively, sand and crushed rock quarries may serve as local places of employment, but their closure or relocation is typically driven by local, rather than regional or national, economies. Sand and crushed stone quarries have had a consistent role in providing materials for the road building campaigns dating from the 1920s Good Roads movement in North Carolina and the construction of the Blue Ridge Parkway (Whisnant 2006). Many crushed stone quarries, such as the Hedrick Industries Grove Sand and Stone Quarry near Black Mountain, continue this connection to the transportation industry and advertise their products as conforming to NCDOT specifications (Hedrick 2017). However, Bamboo Quarry does not advertise as meeting these specifications for its products, although they may still be available by customer request, and there are no known associations with large-scale transportation projects.

Other stone quarries in the region specialized their operations for architectural products as industrialization and tourism grew markets through the late nineteenth and early twentieth centuries. The increasing tourist industry not only required the increased access provided by better roads, but also building materials befitting the scale of these resorts and summer houses. These quarries, such as the North Carolina Granite Corporation (SR0003) in Mt. Airy, Surry County, Balfour Quarry in Hendersonville, Henderson County and the little documented quarry off of Town Mountain Road in Asheville, Buncombe County, associated with the construction of the Grove Park Inn (BN0010), either reach a regional or national market for their products or relate specifically to one local building project. North Carolina Granite Corporation is the most famous of these, specializing in granite for both architecture and sculpture that is distributed nationwide. It is the state's official stone. Balfour Quarry supplied granite for the construction of Biltmore Estate, for example, while the Town Mountain Road quarry supplied stone for Grove Park Inn (Henderson 2017). As a result, there appear to be two quarry sub-types in western North Carolina: architectural stone and crushed stone and/or sand.

In contrast to the architectural stone quarries, Grove Stone and Sand Quarry, Glendale Springs Quarry, and Table Rock Quarries, Inc., are crushed stone and sand quarries with products similar to those of Bamboo Quarry. These quarries all feature stone crushers and sorters with conveyor belt systems. Grove Sand and Stone Quarry in Black Mountain, Buncombe County, appears to show a similar progression in land use as a c. 1930-1950 residence has been converted to office space (Figure 25). Meanwhile, Glendale Springs Quarry only has one visible pre-fabricated shed serving as an office building next to the truck weight scales,

but located immediately within the quarry itself in a rural setting that likely matches the original setting surrounding Bamboo Quarry prior to increased residential and commercial development. Table Rock Quarries, Inc. is a newer quarry with similar equipment, demonstrating the continued use of the crusher-conveyor belt model seen at Bamboo Quarry. Each of these examples also feature their own on-site quarry with a yard or equipment storage area. The depth of each quarry appears similar in both aerial views and from site visits to the Glendale Springs Quarry and Grove Sand and Stone Quarry, while the Table Rock quarry is significantly more shallow. As a result, the Bamboo Quarry is not unique in the way that quarry excavation is occurring onsite or in the structures or buildings present.

Based on comparative examples, site investigations, and research into both the mining industry and mining equipment, Bamboo Quarry, comprised of 5544 Bamboo Road, Bamboo Quarry (WT950), and 5605-5665 Bamboo Road, Bamboo Quarry (WT951), is a common example of a crushed rock and sand quarry located in western North Carolina. Bamboo Quarry contains the typical elements of this industry: a quarry, a quarry yard, crushers, sorters, a conveyor belt system, truck weigh scales and pre-fabricated buildings for both operational and administrative use. These elements are neither distinctive nor hold high levels of integrity as a result of deterioration, equipment replacement, and upgrades. As a result, Bamboo Quarry represents a common feature of the mining landscape in western North Carolina.

NRHP ELIGIBILITY EVALUATION

NRHP Recommendation: CRA recommends that 5544 Bamboo Road, Bamboo Quarry (WT950) and 5605-5665 Bamboo Road, Bamboo Quarry (WT951) are not eligible under Criterion A, B, C, or D.

Integrity:

The quarry has a moderate level of integrity, retaining integrity of location, materials, and feeling.

Location – The quarry, while having expanded from the time excavations began between 1970 and 1980, has not shifted location over time. Buildings and structures associated with the quarry have remained at their original locations, including the c. 1935 former residence now used as an office and its associated sheds. The quarry yard, while having expanded from the time excavations began between 1970 and 1980, has not shifted location over time. Buildings and structures associated with the quarry yard appear to have remained at their original locations, including the structure holding the MVP Cedarapids crusher and sorter #1 and the conveyor belt running underneath SR 1514.

Design – The quarry has been altered over time, diminishing its integrity of design. The crushers and other equipment associated with processing crushed rock have been upgraded or replaced with new components. However, it does appear that the plan of the property has remained relatively consistent. The pull-off area immediately next to SR 1514 likely functioned as both a crushing and loading location from when the quarry was first opened. The quarry yard has been altered over time, diminishing its integrity of design. The crushers and other equipment associated with processing crushed rock have been upgraded or replaced with new components. No historic documents could be located revealing the earliest configuration of equipment on the property, but the site visit suggests that the crushers remain in their original locations. Google Earth aerials from the 1990s show the crushers in their current location.

Setting – The quarry has impacted the topography of the area over time, especially Rocky Knob on its western side. The surrounding area, largely rural in 1976 USGS aerials that appear to show a clearing in the area that is now the quarry, has changed significantly as Boone, North Carolina has grown in population. Residential and business development now surrounds the quarry. There are still areas of woods bordering the quarry along Rocky Knob and trees create a buffer to both adjacent parcels and SR 1514. However, the quarry has suffered a loss of setting due to continued development in the area. The quarry yard has been cleared and leveled so that both Brook Hollow Road and SR 1514 are elevated above the current grading of the property. The surrounding area, largely rural in 1976 USGS aerials that appear to show a clearing in the area that is now the quarry, has changed significantly as Boone, North Carolina has grown in population. Industrial and commercial development surrounds the property to the south and west, while a large residential development is located to the north across the South Fork of the New River.

Materials – The quarry retains structures and buildings from the quarry's opening in c.1970-1980. The supporting structures for the crusher and several of the conveyor belt systems likely date from this period. However, much of the equipment has significantly rusted making assessment difficult from the ROW. Larger equipment, such as the jaw crusher (WT950) and cone crusher (WT951), has been replaced. The quarry yard likely retains structures and buildings from the quarry's opening in c.1970-1980. The supporting structures for the crusher and several of the conveyor belt systems likely date from this period. However, much of the equipment has significantly rusted making assessment difficult from the ROW.

Workmanship – The quarry itself has been mined to safety standards that demonstrate modern mining guidelines; however, the buildings and structures do not demonstrate a high level of workmanship. Buildings are largely pre-fabricated or in poor condition and the structures have significantly deteriorated, diminishing the integrity of their original components. The quarry yard buildings and structures do not demonstrate a high level of workmanship. Buildings are largely pre-fabricated or in poor condition and the structures have significantly deteriorated, diminishing the integrity of their original components.

Feeling – The quarry retains a high level of feeling despite modifications and changes impacting design, setting, and workmanship. The conveyor belts running throughout the property connecting the crusher and sorter retain the industrial character of a mining operation. Large equipment for crushing rock dominates the view from SR 1514 towards the quarry. The quarry yard retains a high level of feeling despite modifications and changes impacting design, setting, and workmanship. The conveyor belts running throughout the property connecting the crusher and sorter retain the industrial character of a mining operation. Large equipment for crushing rock dominates the view from SR 1514 west towards the yard.

Association – The quarry continues to function in its original industrial capacity and is strongly associated with the Cecile family who owns the business. However, the qualities of design, setting, and workmanship have been so diminished over time as to impact association. There is no documentation regarding the history of the quarry beyond a single deed that could be located over the course of research (Watauga County DB 273:337). The architectural historian was not able to closely inspect the machinery to examine welds, manufacturer’s marks, or other keys to the age of individual pieces of equipment comprising the crushers, sizers, and conveyor belts. Moreover, there have been frequent additions of sheds and office facilities that further diminish the integrity of the site. The quarry continues to function in its original industrial capacity and is strongly associated with the Cecile family who owns the business. However, the qualities of design, setting, and workmanship have diminished over time as to impact association. There is no documentation regarding the history of the quarry beyond a single deed that could be located over the course of research (Watauga County DB 450:111). The architectural historian was not able to closely inspect the machinery to examine welds, manufacturer’s marks, or other keys to the age of individual pieces of equipment comprising the crushers, sizers, and conveyor belts. Moreover, there have been frequent additions of sheds and office facilities that further diminish the integrity of the site.

Criterion A:

For a property to be eligible for significance under Criterion A, the property must retain integrity and must be associated with events that have made a significant contribution to the broad patterns of our history, either at the local, state, or national level. While sand and crushed rock quarries have historically served an important role in road building and other infrastructure projects, research has not shown that this quarry is associated with a particular event or explicit pattern of events that would warrant eligibility under Criterion A. Moreover, the quarry is similar to other properties in the region including Grove Stone and Sand Quarry, Glendale Springs Quarry, and Table Rock Quarries. It features a large open-pit mine, structures for crushing stone, conveyor belts to move crushed stone, and pre-fabricated buildings for both maintenance and administrative activities. All of these features are relatively standard among the comparable rock quarries where equipment for crushing rock dominates the property and buildings that require little to no on-site construction are preferred. Any residences previously constructed on parcels associated with quarries are typically either demolished or repurposed for office space, the latter of which occurs on this property. In addition, rock quarries were built at regular intervals to accommodate the cost of transporting crushed rock and sand (Earnhardt 2013). They are a common property type in western North Carolina and this particular property is undistinguished as an example of late twentieth century crushed stone quarry operations.

Therefore, 5544 Bamboo Road, Bamboo Quarry, and 5605-5665 Bamboo Road, Bamboo Quarry are not eligible for listing under Criterion A.

Criterion B:

For a property to be eligible for significance under Criterion B, it must retain integrity and be associated with the lives of persons significant in our past, either at the local, state, or national level. Research has not revealed any associations with persons significant in our past. Therefore, 5544 Bamboo Road, Bamboo Quarry and 5605-5665 Bamboo Road, Bamboo Quarry are not eligible for listing under Criterion B.

Criterion C:

For a property to be eligible for significance under Criterion C, it must retain integrity and embody distinctive characteristics of a type, period, or method of construction, or represent the work of a master, possess high artistic values, or represent a distinguishable entity whose components may lack individual distinction. Structures and buildings throughout the property are common pre-fabricated or mass-produced examples that can be found in quarries throughout the region. While the structures supporting the jaw crusher may be unique to the site, they do not possess high artistic value or represent the work of a master engineer or builder. The quarry yard is comprised of pre-fabricated buildings and industrial equipment that are common throughout western North Carolina (and the country). The quarry, with its associated buildings and structures, does not represent a significant property type illustrating significant or innovative site planning or operations layout that influenced other operations of this type. Grove Stone and Stand Quarry, Glendale Springs Quarry, and Table Rock Quarries all feature similar buildings and structures, including conveyor belts and crushing equipment, which evidence the standard plan for sand and crushed stone quarries in the region. Thus, 5544 Bamboo Road, Bamboo Quarry, and 5605-5665 Bamboo Road, Bamboo Quarry, are not eligible for listing under Criterion C.

Criterion D:

For a property to be eligible for significance under Criterion D, it must either have yielded or be likely to yield information important in history of prehistory at the local, state, or national level. Late-twentieth century crushed gravel quarries and industrial complexes are relatively common in this region (and the country as a whole). As a result, the quarry complex is not likely to yield any important historical information regarding industrial development and mining technology of the period not readily available from other sources. 5544 Bamboo Road, Bamboo Quarry, and 5605-5665 Bamboo Road, Bamboo Quarry, are, therefore, ineligible for listing in the NRHP under Criterion D.

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