

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic name: Whittle's Mill Dam

Other names/site number: VDHR File #058-5199

Name of related multiple property listing:
N/A

(Enter "N/A" if property is not part of a multiple property listing)

2. Location

Street & number: 1793 Bridge Road

City or town: South Hill State: VA County: Mecklenburg

Not For Publication: N/A Vicinity: X

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this X nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property X meets does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

 national statewide X local

Applicable National Register Criteria:

X A B X C D

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Signature of certifying official/Title:	Date
<u>Virginia Department of Historic Resources</u>	<hr/>
State or Federal agency/bureau or Tribal Government	

In my opinion, the property <u> </u> meets <u> </u> does not meet the National Register criteria.	
<hr/>	
Signature of commenting official:	Date
<hr/>	<hr/>
Title :	State or Federal agency/bureau or Tribal Government

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4. National Park Service Certification

I hereby certify that this property is:

- entered in the National Register
- determined eligible for the National Register
- determined not eligible for the National Register
- removed from the National Register
- other (explain:) _____

Signature of the Keeper

Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

- Private:
- Public – Local
- Public – State
- Public – Federal

Category of Property

(Check only **one** box.)

- Building(s)
- District
- Site
- Structure
- Object

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Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
<u>0</u>	<u>0</u>	buildings
<u>1</u>	<u>0</u>	sites
<u>2</u>	<u>3</u>	structures
<u>0</u>	<u>0</u>	objects
<u>3</u>	<u>3</u>	Total

Number of contributing resources previously listed in the National Register 0

6. Function or Use

Historic Functions

(Enter categories from instructions.)

COMMERCE/TRADE/business
GOVERNMENT/public works/electric generating plant
AGRICULTURE/SUBSISTENCE/processing
INDUSTRY/PROCESSING/EXTRACTION/manufacturing facility/mill
INDUSTRY/PROCESSING/EXTRACTION/energy facility/hydroelectric dam

Current Functions

(Enter categories from instructions.)

RECREATION AND CULTURE/outdoor recreation/park
LANDSCAPE/park
LANDSCAPE/natural feature

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7. Description

Architectural Classification

(Enter categories from instructions.)

OTHER

Materials: (enter categories from instructions.)

Principal exterior materials of the property: EARTH, WOOD: Log, STONE: Limestone,
CONCRETE

Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

Whittle's Mill Dam, with its remaining wall and dam abutments from its original construction date of approximately 1756, is an excellent example of an evolved historic engineering structure on the Meherrin River and within the Southside Virginia region. The dam originally was constructed of cut stone blocks and wood beams, to serve a mill (rediscovered in the 1960s when the dam was being updated). These eighteenth-century materials are more intact at the lower levels of the structure. As currently configured, the dam today exhibits various construction materials and equipment related to its twentieth century use to generate hydroelectric power. Reinforced concrete was added to the dam during the 1960s by Town officials in order to create a stronger structure for power generation. Surviving dams that date to this early period in Southside Virginia are very rare despite the numerous mill complexes that once dotted the landscape. The structure exemplifies the craftsmanship and ingenuity of early European colonists in the area as well as evolving engineering methods as the dam's use changed during the twentieth century. The dam and its abutments, as well as the 1975 powerhouse, are grouped together and classified as a single contributing structure. A domestic archaeological site with some aboveground ruins survives as an area for potential archaeological investigation and is classified as a contributing site. There are also some historic road traces that date to the nineteenth century, and these are counted as a contributing structure. Noncontributing resources consist of the beach (a noncontributing site), a newer access road (a noncontributing structure), and a bridge (a noncontributing structure) that passes through the nominated property. Since ca. 1756, the Whittle's Mill Dam has seen continuous use, first as a mill for processing agricultural products, then for electrical power generation, and now as a historic site and park. The property

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has high integrity of location, association, design, materials, and workmanship, with modifications to the dam and powerhouse having been made to allow the property's continued use during its historic periods of significance. Integrity of setting has been compromised by loss of mill-related buildings; however, the site has been left undisturbed and the presence of at least two archaeological sites suggests that other sites related to the mill operations may be identified at a future date. The property's integrity of feeling is also compromised as it is currently presented as a public park with a beach, a small camping area, and some walking trails. The dam and powerhouse, however, are the park's focal point, and interpretive signage within the park provides visitors with a summary of the property's historical importance.

Narrative Description

Whittle's Mill Dam and Powerhouse, c. 1756-1975, Contributing Structure

The dam at the former site of Whittle's Mill spans the Meherrin River approximately 200 feet across, built on, and connecting to, an outcrop of metamorphic rock on the Lunenburg County side. The dam is built roughly on a north-south axis, with the river running east-west. The height of the dam has evolved since its original construction in the 1700s; the current height of the dam currently is nearly twenty feet. Even though most of the dam has been covered in cementitious material, there are exposed areas at the base that reveal large blocks of the indigenous cut stone from the early construction periods. Natural fracture planes of the resistant rock, that may be well over a billion years old according to geologists, provide flat surfaces when the rock becomes parted. This allowed the blocks of stone, each weighing several tons, to be stacked in construction, as seen on the dam.

The evolved milling sections, races and sluices that relate to the 18th century were repurposed during the 1960s. Harry Bailey (South Hill Town Manager during the refurbishment) built a wooden form closing the sides of breached areas. Thus, both the south end and north end of the dam are 1960s construction that consists of concrete poured over a rebar frame. There is a vertical face on the downstream side; a slanted upstream wall side was added to strengthen the overall structure. As part of the 1960s renovation, to avoid future flood damage as extensive as previous episodes, seven through-dam tunnels were installed, along with steel floodgates in the middle section of the dam. The gates could be opened, turning large screws placed at the top of the dam. A veneer of concrete was then poured over the entire dam and adjacent levee. Over time, this has slowly broken away and exposed areas of the base.¹

The hydroelectric power portion of the dam consists of multiple components, including a diversion channel, head-gates, turbine assembly, speed reduction gear, generator, control system, circuit breakers, and transformers. It was designed so that water would flow in to the diversion channel from the river, flow-through the head gates, and then continue down through the wicket gates and ultimately go into the turbine. The turbine would then spin; and run the generator

¹ Max B. Crowder, *Whittle's Mill: an American History*. (San Francisco, CA: Blurb Publishing, 2010), p. 145-148.

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through the speed reduction gear. The speed reduction gear allows the generator to rotate approximately seven times faster than the turbine.



Figure 1. November 11, 2015, Aerial View of Whittle's Mill Dam, camera facing west. Bridge Road/ Route 636 is at the lower left of the image (Image from Google Earth)

The rotating action generated electricity, which flowed from the generator to the transformer, then through the power lines into South Hill, Virginia, approximately seven miles to town center. The power was sold directly to Virginia Electric and Power Company (VEPCO), which would then re-sell the power to consumers connected to that electric distribution line. The generating facility was capable of producing approximately 50kW continuously; enough power for approximately fifteen houses annually.

Only one of the two generators was rebuilt in 2006. The effort consisted of several steps, including removing and rebuilding the turbine assembly, removing and rebuilding the generator, refurbishing the transformers, and re-wiring the control system. The other turbine and generator were left in place for possible rebuilding at a later date.

The powerhouse building has gone through several rebuilds based on natural occurrences, like flooding, that damaged or destroyed it. The current iconic red building version was constructed

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by the engineering firm Rockfish Corporation around 1975 when they were hired to inspect the turbines and facilities in order to begin the renewed energy generation.

The reservoir created by the Whittle's Mill Dam also served to provide water for the Town of South Hill. Initially, the intake for the Waterworks, located on Route 47, was downstream within a coffer-type structure. During intervals of low-flow of the Meherrin River, however, both water quantity and quality became an issue. The intake was moved (around 1980) to the Whittle's Mill reservoir, but utilized until the Roanoke River Service Authority commenced operation in 2002 and replaced this water source. The infrastructure for the old waterworks is still in place offsite, should the need arise for water treatment for a possible future business or municipal use.



Caretaker Cottage [Miller's House], c. 1920, Contributing Site

The site of a caretaker's cottage (at left) is located atop the hill that overlooks the dam. It is thought to have been a dwelling for a caretaker or possibly for the miller. Above-ground features include small sections of the concrete block foundation and frame structural members. Access to the site is limited due to the slope and natural growth surrounding it.



Historic Commercial Roadways, c. 1915, Contributing Structure

A faint trace of the original roadways associated with the historic milling operation are still visible in small sections. These were simple dirt roads with stone on the sides on some elevated areas (as shown at left). They are associated with the mill's commercial activity during the early twentieth century. The area of the remnants are uphill from the river and to the side of the powerhouse.

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Beach Area, c. 1965, Noncontributing Structure

This area was dredged and created by the Town of South Hill public works initially in the 1960s after construction work on the dam and powerhouse had been completed. Since 2013, additional sand has been brought to the site by the local public works department. The beach was established to provide local residents with an area for recreational use away from rock outcroppings and drops in elevation. The beach is non-contributing since it does not relate to the areas of significance.

Modern Roadways, c. 1960 and later, Noncontributing Structure

The crush-and-run roadway and parking lot area off of Route 636 is designed for visitors to have full access to the park. The Town of South Hill routinely upkeeps these thoroughfares and parking lots to accommodate routine wear-and-tear. The last addition of material was in 2013. The roadway also continues down to the canoe launch a short distance upriver from the dam and powerhouse. The modern roadways were developed for recreation access and do not support the areas of significance.

Bridge, 1942 and later, Noncontributing Structure

The bridge is part of Route 636 and is a steel beam, timber deck structure. It is recorded by the Virginia Department of Transportation under the structure number 6036, and has a federal structure number of 11625. The structure materials have been maintained and replaced where needed to continue operational functionality as weight loads have increased over time. Because it is not related to the Whittle's Mill Dam's significance, the bridge is classified as non-contributing.

Archaeology Potential

The parcel is large enough to encompass parts of the property that may have had buildings and other structures that supported the milling operation in the eighteenth and nineteenth century. While no extensive archaeological survey has been conducted, there is potential for related historic sites within the nomination boundary.

Integrity Analysis

Whittle's Mill Dam has integrity of location, as a dam has been at this location since c. 1756 and some of the earliest sections of the dam remain incorporated in the evolved structure. The property's integrity of setting has changed considerably since the mid-1970s. Starting c. 1960-1965, the Town of South Hill dredged the area below the extant dam to create a small beach, built a new road and parking area, and established a small canoe launch a small distance upriver of the dam. These recreational uses are not related to the property's historic functions and significance. From the mid-eighteenth through the mid-twentieth centuries, a variety of commercial and industrial concerns were associated with Whittle's Mill that are no longer extant, which further compromises the property's historic setting. However, the dam retains integrity of design, workmanship, and materials, as the structure has evolved to meet changing industrial needs, including a transition from providing waterpower to operate mills to providing

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hydroelectric power for sale to a local utility company. The dam's current appearance and condition are most closely related to its use as a hydroelectric facility during the latter years of its period of significance.

The property has high integrity of association due to its direct linkage to some of the earliest, and sustained, industrial activity in the vicinity, which in turn contributed to local economic conditions that encouraged further settlement and creation of ancillary services, such as transportation of goods. The addition of electrical power generation during the early twentieth century reflected the adoption of new technology that allowed the dam's commercial operation to continue even though its original function to power mills dwindled steadily after 1900. The property also is directly associated with modern infrastructure development after World War II that brought modern municipal water and power supplies to South Hill. In 1975, the Town went to somewhat extraordinary lengths to keep both the hydroelectric plant and waterworks in operation. Even after the hydroelectric use ceased during the mid-1980s, Town officials preserved the property and likewise did the same with the offsite waterworks facility that closed in 2002. With regard to integrity of feeling, Whittle's Mill Dam is presented today as a historic site and recreational facility, with interpretive signage, walking trails, a public beach, canoe launch, and a commemorative marker. The principal focus of the property continues to be the dam and its small powerhouse, and retention of the power-generating equipment certainly heightens the property's integrity of feeling.

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8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

- A. Owned by a religious institution or used for religious purposes
- B. Removed from its original location
- C. A birthplace or grave
- D. A cemetery
- E. A reconstructed building, object, or structure
- F. A commemorative property
- G. Less than 50 years old or achieving significance within the past 50 years

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Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

Whittle's Mill Dam is a part of the current 14.81-acre Max B. Crowder Memorial Park owned by the Town of South Hill in Mecklenburg County, Virginia. The Whittle's Mill dam was built on top of a type of rock called Mill Quartzite, and has at least three stages of construction within its structure, with the earliest portion dating to c. 1756, and later sections dating to the twentieth century. Originally designed to deflect strong currents, the dam powered grain and saw mills, then was repurposed to generate hydroelectric power during the twentieth century. Extant sections of the original dam are visible on the Meherrin River just off from Bridge Road/Route 636. The site was once a part of a large homestead owned by prominent colonial-era figures Colonel William Davies and Fortescue Whittle. This property now serves as a public park in the Town, and includes a sand beach, campground site, and river channel.

The Whittles Mill Dam is a very rare surviving example of an evolved eighteenth-century work of engineering that was retained and modified for hydroelectric power during the twentieth century. It shows the ingenuity and persistence of local engineers. It is locally significant under Criterion C in the area of Engineering as it embodies distinctive characteristics of an evolved dam that originally was built of rough cut stone (later coated with concrete), and was modified during the 1960s with the rebuilt north and south ends consisting of concrete poured over a rebar frame and seven through-dam tunnels, along with steel floodgates, installed in the dam's middle section. The latter modifications were part of the dam's conversion to hydroelectric power generation, as well as to mitigate flooding hazards. The property is also locally significant under Criterion A in the area of Commerce because it marks the area that was a source of important commerce from the 1700s to well into the twentieth century. The property has three discrete periods of significance. The earliest coincides with the dam's construction c. 1756. The second period of significance, 1915-1940, is associated with the mill's operation during the ownership of A. W. Hankley. The third period of significance, 1951-1975, relates to the property's conversion by the Town of South Hill to a municipal hydroelectric power facility. Whittle's Mill Dam meets Criteria Consideration G, having achieved significance within the past 50 years, because of the property's exceptional local significance through the unusual use of historic equipment converted to provide a municipal power supply starting c. 1960 and ending in 1975, when the area housing the generator was renovated and a new enclosure was built.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

Historical Overview

Evidence of human occupation along the Meherrin River in Virginia begins at least 13,000 years ago. At the Whittle's Mill site, there is a cliff of solid rock which has a distinctive golden color. Geologists refer to this particular mineral quartzite as Mill Quartzite. It is one of the most

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resilient and dense materials.² Clovis projectile points composed of this material have been found in Virginia. In 2008, biologists from the Virginia Department of Environmental Quality visiting the site found a projectile point with distinctive side notches that dates to the Archaic era.³ The Meherrin Tribe, though currently centered in Hertford County, North Carolina, lived in the Meherrin River's vicinity for generations and used the natural resources of the Meherrin River and other nearby waterways to thrive.

Since the mid-eighteenth century, there have been multiple uses of the Whittle's Mill site. Intermittently, these uses have been primarily as a mill and a power generation station, but in various stages and sizes. Surrounding the mill were small businesses of many types as well as a post office. Evidence of roadways in conjunction with these uses, as well as other small outbuildings, highlight the fact that the site once bustled with activity. Because the lands here have been left largely undisturbed, there is the potential for intact archaeological deposits related to the historic uses and buildings that once dotted the rural landscape. Future investigations could yield information about how the small milling community functioned, as both residential and commercial uses from the early colonial period through the twentieth century are documented in the historic record. Though much of this evidence is located outside of the area being nominated, it relates to the understanding of the site as a whole. Within the nominated area, remains of roadways and a few foundations are all that survive of this time.

John Brooks' Mill Construction/c. 1756

The Whittle's Mill dam, originally constructed of logs and later with cut stone blocks that were over a cubic yard in size and weighing 2-3 tons, is located where the (west to east flowing) Meherrin River has a broad meander on the north (Lunenburg County) side. Because water velocities are highest on the outside of a meander, the dam was designed as a sinuous curve to deflect the flowing water to the south (Mecklenburg County) side. The flowing water along the millpond dam continued moving into a sluiceway and through a waterwheel.

The first record of business on the site begins with John Brooks' occupation in 1756. Mecklenburg County records contain a legal agreement for a water grist mill's construction and operation on the waters of the Meherrin River in the Whittle's Mill Dam's location. Wording included in the agreement states "for the benefit and advantage of constructing a grist mill on the Meherrin River."⁴ Though there is nothing specific that indicates the precise construction dates, there is evidence that the original version of the dam was created with logs, earth, and cut stone, and visible sections of the dam's oldest materials today remain within the current dam. A

² Keith Frye, *Roadside Geology of Virginia*, (Missoula: Mountain Publishing Company, 1986), p. 297. Virginia Division of Geology and Mineral Resources, *Geologic Map of Virginia*, (Charlottesville, Department of Mines, Minerals and Energy, 1990), p. 2.

³ Max B. Crowder, *Whittle's Mill: an American History*. (San Francisco, CA: Blurb Publishing, 2010), p. 46.

⁴ Mecklenburg County Deed Books, 1750-1819, Mecklenburg County Courthouse, Boydton, Virginia.

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wooden "undershot" wheel was likely used to provide power to the mill, based on comparable regional examples. This version existed for twenty years (1756-1775) until the parcel was sold.⁵

The mill building(s) were always located at the south end of the dam, on the Mecklenburg County side of the river. As milling technology progressed, the undershot wheel probably was replaced with a vertically-mounted, overshot waterwheel, which would have been designed with the sinuous curve of the dam and sluiceway to maximize water speed and efficiency. The overshot waterwheels that appeared in the late 18th century were more efficient than earlier waterwheels in output of power to the wooden gears and ultimately to the grinding stones during the early years of operation at Whittle's Mill.

Pines Ingram built what has been referred to as the Miller's Cabin in 1775 using lumber sawed at his mill, purchased from Brooks. Little other information is known about this dwelling. Although it was extant in 1933 when a Works Progress Administration survey of the property, today nothing remains but some foundation sections. This site is not located within the nominated property. The cabin ruins are documented with the Virginia Department of Historic Resources as an archaeological site in the Virginia Cultural Resource Information System.⁶

Captain Thomas Bedford Ownership/1788-1796

In 1788, deed records of Lunenburg County reflect the sale of the mill property to Captain Thomas Bedford, a Revolutionary War officer from Goochland County. He improved the mill and dam, but the specific details of those modifications are not known. The Otter Creek Plantation, built by Bedford for his family, was reportedly constructed from lumber cut by the whipsaw in the mill.⁷ An image of that dwelling exists on record at the Library of Virginia from the Works Progress Administration survey.

Colonel William Davies Ownership/ 1796-1809

When Bedford sold the property to Revolutionary War Colonel William Davies in 1796, records enumerated four roadways, sixteen perches, houses, and all other woods, profits, improvements, and advantages that would be transferred to the new owner.⁸ Davies expanded the plantation home and the grist mill for his family. His remains were given a memorial and the location is in the Meherrin Forest just above the Whittle's Mill property.⁹

⁵ Crowder, *Whittle's Mill*, p. 52-53.

⁶ *Ibid*, p. 53-54.

⁷ Fitzpatrick, John C., Ed. *The Writings of Washington from the Original Manuscript Sources, 1745-1799*, 39 vols. Washington, DC: Government Printing Office, 1931-1944.

⁸ Mecklenburg County Deed Books

⁹ Crowder, p. 74.

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Fortescue Whittle Ownership/1809-c. 1865

William Davies gave the property to Fortescue Whittle in October 1809¹⁰ when he married one of Davies's daughters. Whittle used large blocks of quartzite to improve the dam's stability, and essentially entombing the dam's earlier materials. The design was a sinuous shape to deflect substantial water flow when necessary. Milling technology had continued to progress. The existing waterwheel was replaced with a horizontal tub wheel. The "stone dam," as called by locals describing this version, is thought to be among the oldest manmade structure of its scope in Mecklenburg County.¹¹ Whittle's improvements positioned the milling operation to expand rapidly into a large scale business that included a mercantile store, post office, and associated small businesses.¹² Whittle also built Millbank Plantation, whose remains are gone aside from the stone basement. No known images exist (the site is outside of the nominated property).

Many of Whittle's twelve children who grew up at the mill site became significant figures in the history of the nation and the state of Virginia. Commodore William Conway Whittle served in the Mexican-American War. James Murray Whittle became a Virginia State Senator in 1861 and collaborated on a railroad lines project during that period. Two sons practiced medicine - Dr. Conway Davies Whittle and Dr. John Samuel Whittle, the later serving in the United States Navy as a surgeon for many years. Whittle's tenth son, Bishop Francis McNeice Whittle, had a significant impact on the growth and development of the Episcopal Church in the area. He is responsible for the appointment of Dr. James Solomon Russell as missionary to the Brunswick and Mecklenburg counties, later founding St. Paul's College in Lawrenceville, Virginia.¹³ The youngest son, Colonel Powhatan Bolling Whittle, served in the Confederate Army and participated in multiple battles of the Civil War.¹⁴

Reflecting the economic upheavals across Virginia after the Civil War, the property at Whittle's Mill had a succession of owners in the last decades of the nineteenth century. During this time, however, two patents were submitted and obtained through the United States Patent and Trademark Office by businessmen who owned property and businesses in the commercial district that had grown around Whittle's Mill (an area much larger than the tract owned by the Town of South Hill today). One patent was a tobacco transplanter submitted by Sidney Neblett in 1883 (#275,253) and the other a calculating balance proffered by Benjamin Ogburn in 1868 (#80,003).¹⁵

¹⁰ Crowder, p. 74. Mecklenburg County Deed Book 15, p. 427.

¹¹ Hazlewood, W. interview by Lisa Jordan, January 12, 2018. Personal Interview

¹² Crowder, p. 85-86.

¹³ Arnold, Roberta. "The life story of James Solomon Russell," 1991, Retrieved February 2009 from www.saintpauls.edu/about/SPC/JamesSolomonRussell.htm

¹⁴ Conway Whittle Papers, 1773-1911, Mss. 76 W61, William & Mary Earl Gregg Swem Library Special Collections Database, The College of William & Mary, Williamsburg, Virginia.

¹⁵ Neblett, Sidney S. "Transplanter for tobacco and other plants." United States Patent 275,253, issued April 3, 1883.

Ogburn, Benjamin W. "Calculating balance." United States Patent 80,003, issued July 29, 1868.

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A.W. Hankley Hydroelectric Mill Conversion/1915-1920

The next round of improvements were completed by A. W. Hankley. He is responsible for laying a five-foot addition to the top of Whittle's Dam made up of cobblestones and concrete, completed between the initiation of the project in 1915 and 1920.¹⁶

In 1915, the steel turbines replaced the wooden wheel. Each turbine had large, curved blades from a central axis with circular steel heads encapsulating it. Vertical gates were constructed and used to direct water and transfer energy to the copper wire coil surrounded by magnets. Water turbines, which are still in use today, are ten to twenty times more compact than the waterwheel previously in use and generally convert over 85% of the water's kinetic energy into mechanical power. But instead of using the direct power for grinding meal, Hankley installed a hydroelectric generator to convert the mechanical energy into electricity. A levee was also added on the south bank of the river to expand that section as well. The hydroelectric enhancements were viewed as technological marvels when they were introduced, as rural electrification was still many years in the future. Hankley built a new mill on higher ground; it was powered by electricity generated by the hydroelectric dam until 1940, when it was destroyed in a flood. Hankley built another version of the mill building, also a wood frame building, but it too was destroyed, this time by fire, in 1955.¹⁷

Town of South Hill Projects/1951-Present

The last set of adaptations to Whittle's Mill Dam was made by the Town of South Hill. The June 1951 minutes of the Council of the Town of South Hill document an ordinance to issue a bond to finance the Whittle's Mill municipal water project.¹⁸ Shortly after, officials constructed a new system to draw water away from the Meherrin River. This intake station was built on the riverbank further downstream from Whittle's Mill, while the water main was buried between the river and a filtration plant, which is located on Highway 47. In 1962 the Whittle's Mill Dam failed. With only a breach in the center, the dam was rebuilt to be both thicker and higher. Formal ownership by the Town of South Hill of the site was completed in 1963. This is significant because it marks the Town's first use of a municipal bond for project payment. The system remained for twenty years before the dam failed due to unseasonably cold winter seasons in succession, sending sediment downstream, which undermined or breached the dam at times, as well as clogging turbines. The power was interrupted by weather events and subsequent obstructions. Despite dredging, the town realized that this was not the best solution. Harry Bailey, town manager of South Hill, initiated a repair to the dam that enclosed the breach on both sides by pouring concrete into a rebar frame and slanting the upstream side to strengthen its position. A reinforced vertical face on the dam for strength was completed, and seven tunnels of steel flood gates installed. This means that at least three versions of the dam survive within the current structure.

¹⁶ Crowder, p. 130-135.

¹⁷ Ibid, p. 136-138.

¹⁸ Town of South Hill Council Meeting Records, 1950-1960, Town of South Hill Town Hall, South Hill, Virginia.

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During the mid-1970s, with Town officials discovering that the water turbines were still operable, the hydroelectric plant was put back in operation, and sold electricity through the 1980s. There followed a break in operations until 2010 when the Town of South Hill approved the Whittle's Mill Hydroelectric Project to restart. In 2010, South Hill engineer Steve Jones refurbished Hankley's original 1920 turbines. At that time, the machines generated 20,000 kilowatt hours per month and fed into the Dominion Energy grid. The plant again began generating electricity for sale in 2011, but ceased in 2013. The hydroelectric power portion of the dam today consists of a diversion channel for water to flow into a dual system, each consisting of head-gates, turbines assemblies, speed reduction gears, and generators. To operate, the water would flow into the diversion channel from the river, through the head gate, down through the wicket gates and through the turbine. The turbine and shaft would spin and transfer that energy to the generator through the speed reduction gear. The speed reduction gear allowed the generator to rotate approximately seven times faster than the turbines of the 1920s period. This rotating action generates electricity that would flow from the generator, through the transformer and power lines to South Hill.

Only one of the two 1920s systems was rebuilt. This consisted of removing sediment from the pit, rebuilding the turbine assembly and generator, refurbishing the transformers, and rewiring the control system (the other turbine and generator was left in place and could later be rebuilt). The generating facility produced approximately 50 kW continuously, enough to power fifteen houses. Efforts in 2008 to rehabilitate the property were an integral part of the regional Meherrin River Blueway Initiative.

The area now functions as a public park owned by the Town of South Hill. A major initiative to preserve and to improve the historic site by making it more visitor friendly and including put-in/out-take facilities for canoe and kayak enthusiasts has taken place in the last eight years (since 2010). The park today features a sandy beach and calm waters. The large sandbars and rock outcrops are ideal for swimming, canoeing, fishing, hiking, camping, picnicking and lollygagging by the old millpond as people have for generations. The park is open for picnicking and tent camping year-round. There are currently no restroom facilities or hookups for RV camping.

In 2012, The Virginia Department of Conservation and Recreation conducted a report concluding that the Meherrin River, including a distance of approximately 17.8 miles, was eligible to be a component of the Virginia Scenic River System. Their findings suggested that the designation is warranted due to both aesthetic and recreational qualities of the river section, including its environs, the unique flora and fauna, and its historic setting.

The 2013 dedication of the park honors the memory of historian Max Bagley Crowder of South Hill who served for many years as Curator of the Virginia Farm Life Museum. His research, writing, and public speaking greatly heightened interest in the Meherrin River, the legacy of the Whittle family and the history of the old mill. His was a leading voice in obtaining Virginia Scenic River designation for the Meherrin River.

Whittle's Mill Dam
Name of Property

Mecklenburg County, VA
County and State

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

Arnold, Roberta. "The life story of James Solomon Russell," 1991, Retrieved February 2009 from www.saintpauls.edu/about/SPC/JamesSolomonRussell.htm

Barnes, Susan M. Works Progress Administration Report VHIR/17/0517, 1937, Richmond: Library of Virginia.

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Conway Whittle Papers, 1773-1911, Mss. 76 W61, William & Mary Earl Gregg Swem Library Special Collections Database, The College of William & Mary, Williamsburg, Virginia.

Crowder, Max B. *Whittle's Mill: an American History*. San Francisco, CA: Blurb Publishing, 2010.

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Frye, Keith. *Roadside Geology of Virginia*, Missoula: Mountain Publishing Company, 1986.

Hazlewood, W. interview by Lisa Jordan, January 12, 2018. Personal Interview.

Hinzman, Stephen. Whittle's Mill Photographs (South Hill). 2018. Collection, Twin Cedar Images Fine Art and Nature, Virginia.

Lewis Neale Whittle Papers, 1826-1919, (#00777 Bulk 1834-1872, The Southern Historical Collection at the Louis Round Wilson Special Collections Library, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

Mecklenburg County Deed Books, 1750-1819, Mecklenburg County Courthouse, Boydton, Virginia.

Nanney, Frank L., Jr. *South Hill, Virginia: A chronology of the first 100 years*. 2001. South Hill, Virginia.

Whittle's Mill Dam
Name of Property

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County and State

Neblett, Sidney S. "Transplanter for tobacco and other plants." United States Patent 275,253, issued April 3, 1883.

Ogburn, Benjamin W. "Calculating balance." United States Patent 80,003, issued July 29, 1868.

Town of South Hill Council Meeting Records, 1950-1960, Town of South Hill Town Hall, South Hill, Virginia.

Virginia Division of Geology and Mineral Resources, *Geologic Map of Virginia*, Charlottesville, Department of Mines, Minerals and Energy, 1990.

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____
- recorded by Historic American Landscape Survey # _____

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository: Virginia Department of Historic Resources, 2801 Kensington Avenue, Richmond, Virginia 23221; Town of South Hill, Virginia

Historic Resources Survey Number (if assigned): DHR No. 058-5199

10. Geographical Data

Acreage of Property 14.81

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates (decimal degrees)

Datum if other than WGS84: _____

(enter coordinates to 6 decimal places)

1. Latitude: 36.802210

Longitude: -78.170700

Whittle's Mill Dam
Name of Property

Mecklenburg County, VA
County and State

- | | |
|------------------------|-----------------------|
| 2. Latitude: 36.802080 | Longitude:-78.168670 |
| 3. Latitude: 36.800970 | Longitude: -78.166560 |
| 4. Latitude: 36.799820 | Longitude: -78.166630 |
| 5. Latitude: 36.800600 | Longitude: -78.170310 |

Or

UTM References

Datum (indicated on USGS map):

NAD 1927 or NAD 1983

- | | | |
|----------|-----------|-----------|
| 1. Zone: | Easting: | Northing: |
| 2. Zone: | Easting: | Northing: |
| 3. Zone: | Easting: | Northing: |
| 4. Zone: | Easting : | Northing: |

Verbal Boundary Description (Describe the boundaries of the property.)

The historic boundary encompasses three tax parcels recorded by Mecklenburg County as 28-((A))-1 Parcel A, 28-((A))-1 Parcel B, and 28-((A))-1 Parcel C, which together comprise about 14.81 acres. The true and correct historic boundary is shown on the attached Boundary Survey Map.

Boundary Justification (Explain why the boundaries were selected.)

The historic boundary is drawn to include the Whittle's Mill Dam and land associated with the historic milling operation, and encompasses the property's historic setting as well as all known historic resources and areas with good archaeological potential. Whittle's Mill Dam is situated on the Meherrin River, which flows under the nearby Bridge Road/Route 636. The land within the historic boundaries consists of acreage historically associated with Whittle's Mill, the hydroelectric power equipment, and property owned by the Town of South Hill since 1963. The historic boundary includes all of the acreage now within the Max B. Crowder Park. The full extent of the park is included because it retains the remains of the many roadways dating to the mill's use as well as the ruins of the caretaker/manager's home. The electric powerhouse using the original turbine and featuring its original mechanisms remains situated on the dam to the side accessible via the town road. Due to the relatively undisturbed character of the property, its potential for intact archaeological deposits is very good.

Whittle's Mill Dam
Name of Property

Mecklenburg County, VA
County and State

11. Form Prepared By

name/title: Lisa Vaughan Jordan
organization: Town of South Hill
street & number: 901 West High Street
city or town: South Hill state: Virginia zip code: 23970
e-mail lisa.jordan@southside.edu
telephone: (804) 605-0034
date: August 05, 2018

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

The following information is common to all photographs:

Name of Property: Whittle's Mill Dam

City or Vicinity: Town of South Hill

County: Mecklenburg

State: Virginia

Photographer: Stephen Hinzman, Twin Cedar Images Fine Art and Nature

Date Photographed: August 2018

Description of Photograph(s) and number, include description of view indicating direction of camera:

Photo 1 of 9: VA_MecklenburgCounty_Whittle'sMill_0001

Whittle's Mill Dam
Name of Property

Mecklenburg County, VA
County and State

Image of the Max Bagley Memorial Park Entry Signage with Dam in Background_ViewNW.

Photo 2 of 9: VA_MecklenburgCounty_Whittle'sMill_0002
Dam and Powerhouse_ViewNW.

Photo 3 of 9: VA_MecklenburgCounty_Whittle'sMill_0003
Context View of Dam Structure_ViewNW.

Photo 4 of 9: VA_MecklenburgCounty_Whittle'sMill_0004
Dam and Powerhouse from Beach Level (Lower Elevation)_ViewW/NW.

Photo 5 of 9: VA_MecklenburgCounty_Whittle'sMill_0005
Dam and Powerhouse_ViewN.

Photo 6 of 9: VA_MecklenburgCounty_Whittle'sMill_0006
View of Powerhouse Gear Box and Generator_ViewW.

Photo 7 of 9: VA_MecklenburgCounty_Whittle'sMill_0007
View of Dam_View NW.

Photo 8 of 9: VA_MecklenburgCounty_Whittle'sMill_0008
Closeup of Powerhouse Base_ViewSW.

Photo 9 of 9: VA_MecklenburgCounty_Whittle'sMill_0009
Powerhouse Foundation Channel Detail from Parking Lot Area_View W/NW.

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management, U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

Whittle's Mill Dam
Name of Property

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Mill Turbine During 2010 Refurbishing Project

Whittle's Mill Dam
Name of Property

Mecklenburg County, VA
County and State



Debris Removal from Diversion Channel on Upriver Side of Dam in 2010

Whittle's Mill Dam
Name of Property

Mecklenburg County, VA
County and State



Generator being Hoisted into 1975 Powerhouse during 2010 Renovation

LOCATION MAP

Whittle's Mill Dam

Mecklenburg County, VA

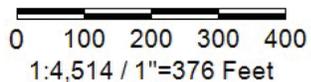
DHR No. 058-5199

Latitude/Longitude Coordinates

- 1. Latitude: 36.802210
Longitude: -78.170700
- 2. Latitude: 36.802080
Longitude: -78.168670
- 3. Latitude: 36.800970
Longitude: -78.166560
- 4. Latitude: 36.799820
Longitude: -78.166630
- 5. Latitude: 36.800600
Longitude: -78.170310



Feet



Title:

Date: 3/18/2019

DISCLAIMER: Records of the Virginia Department of Historic Resources (DHR) have been gathered over many years from a variety of sources and the representation depicted is a cumulative view of field observations over time and may not reflect current ground conditions. The map is for general information purposes and is not intended for engineering, legal or other site-specific uses. Map may contain errors and is provided "as-is". More information is available in the DHR Archives located at DHR's Richmond office.

Notice if AE sites: Locations of archaeological sites may be sensitive the National Historic Preservation Act (NHPA), and the Archaeological Resources Protection Act (ARPA) and Code of Virginia §2.2-3705.7 (10). Release of precise locations may threaten archaeological sites and historic resources.

SKETCH MAP

Whittle's Mill Dam

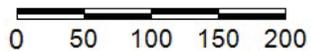
Mecklenburg County, VA

DHR No. 058-5199

1. Whittle's Mill Dam and Powerhouse (Contributing Structure)
2. Caretaker Cottage [Miller's House], Contributing Site
3. Historic Commercial Roadways, Contributing Structure
4. Beach Area, Noncontributing Structure
5. Modern Roadways, Noncontributing Structure
6. Bridge, Noncontributing Structure



Feet



1:2,257 / 1"=188 Feet



Title:

Date: 3/18/2019

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Virginia Cultural Resource Information System

PHOTO KEY

Whittle's Mill Dam

Mecklenburg County, VA

DHR No. 058-5199

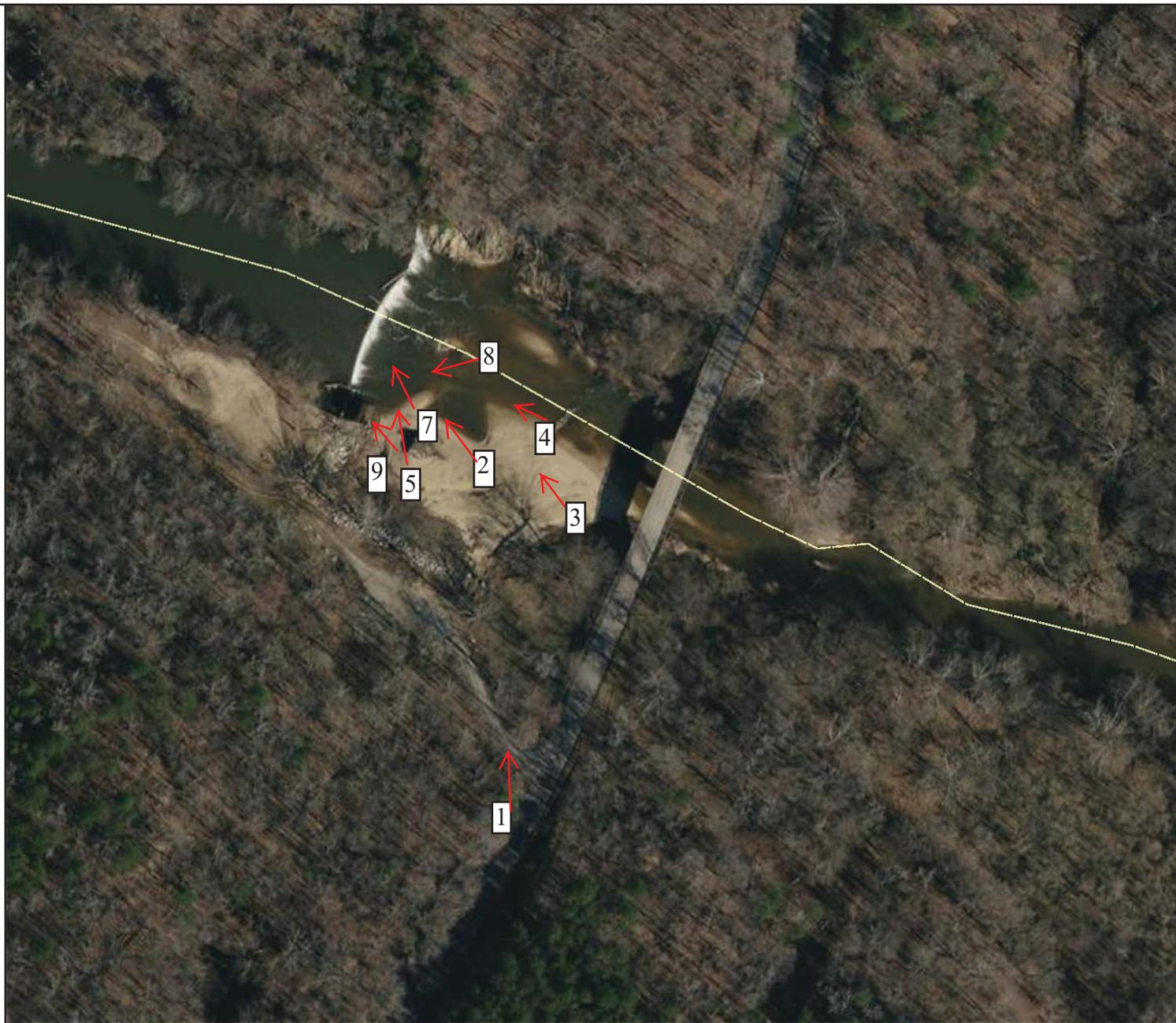
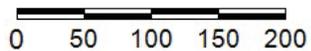


Photo Locations
(Photo 6 is an interior view)



Feet



1:2,257 / 1"=188 Feet

Title:

Date: 3/18/2019

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AERIAL VIEW

Whittle's Mill Dam

Mecklenburg County, VA

DHR No. 058-5199



Feet



1:2,257 / 1"=188 Feet

Title:

Date: 8/21/2018

DISCLAIMER: Records of the Virginia Department of Historic Resources (DHR) have been gathered over many years from a variety of sources and the representation depicted is a cumulative view of field observations over time and may not reflect current ground conditions. The map is for general information purposes and is not intended for engineering, legal or other site-specific uses. Map may contain errors and is provided "as-is". More information is available in the DHR Archives located at DHR's Richmond office.

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