Agency Official 106 Effect Report

Replace Deficient Water Supply Well on the Chancellorsville Battlefield Spotsylvania County, Virginia

U.S. Department of the Interior National Park Service Fredericksburg and Spotsylvania County Battlefields Memorial National Military Park 120 Chatham Lane Fredericksburg, Virginia 22405

### Purpose

Fredericksburg and Spotsylvania County Battlefields Memorial National Military Park was authorized by an act of Congress on February 14, 1927 (44 Stat. 1091). The purpose of the park, as stated in the act, is "to commemorate the Civil War battles of Fredericksburg, Spotsylvania Court House, Wilderness, and Chancellorsville, including Salem Church ... to survey, locate, and preserve the lines of the opposing armies in said battles, to open, construct, and repair such roads, highways, paths, and other approaches as may be necessary to make the historical points accessible to the public and to students of said battles ... and together also with such additional land as the Secretary of War may deem necessary for monuments, markers, tablets, roads, highways, paths, approaches, and to carry out the general purposes of this Act." By Executive Order 6166 in 1933 the park was transferred to the Department of the Interior to be administered by the National Park Service.

The 25,000 gallon Chancellorsville Battlefield Water Tower was constructed ca1961 to serve three park residences and the Chancellorsville Battlefield Visitor Center, all of which began construction at that time. The water tower continues to serve those buildings. These structures were all part of the Mission-66 development and upgrade of park facilities.

At the time of the construction of the water tower, a well was dug to serve the tower and thus provide the water supply to the three park residences and the visitor center. The facilities continue to operate on off well water, as municipal water is not available.

#### Need

In the late fall of 2019, the 60-year old well at Chancellorsville failed. Since then, the three residences have been closed and the visitor center has been operating without water, using temporary restroom facilities ("Porta Potties.") In order for the residences to reopen and the visitor center to return to an adequate water supply, a new well must be dug at the base of the water tower.

The existing drilled well is nearly 60-years old and is too shallow at only 250 feet deep. The issue is that at the well's current depth it is only producing the minimal gallons per minute required for the buildings' operation. An average well should produce 35-40 gallons per minute. The effect on the park is that it must be monitored closely and can only pump so much water. The well cannot keep up with the water supply needed for the visitor center and the living quarters.

Deeper wells produce better water quality because spills and chemical residues are diluted with clean aquifer water. Deep wells, which are further below the water table, are not likely to go dry during an arid period and are drought -resistant. They also increase the storage space for larger volumes of water that spring underground.

# **Property Description**

## A. Major Physical Components

 Ranger Lane – as part of the Mission-66 program of facility development on the Chancellorsville Battlefield, the National Park Service constructed Ranger Lane, along which were built three park residences in 1961. The Chancellorsville Battlefield Visitor Center was built the following year and a few hundred yards to the south. A 25,000 gallon water tower was built ca1961 to serve both the residences and the visitor center. Additional structures include a 1990s water treatment building at the base of the tower, as well as a 1990s one-story garage used as a fire cache. The water facilities (tower, water treatment building and well) are surrounded by a chain-link fence erected in 2017.

## B. Historical Significance

- Ranger Lane The Ranger Lane development area is on the Chancellorsville Battlefield. In the morning of May 3, 1863, repeated Confederate attacks crossed and occupied this ground. The site was heavily fought over, which evidenced by nearby lines of trenches and other earthen defenses built by both armies. The development of the residences and water tower were part of the Mission-66 program to develop and improve facilities on the Chancellorsville Battlefield.
- C. Archeological Resources
  - Ranger Lane In advance of the installation of a chain-link fence, archaeological testing occurred at the site. A series of shovel test pits and a metal detector sweep of the perimeter were employed. While artifacts associated with the 1863 Battle of Chancellorsville were discovered, they represent the material consistent with our overall understanding of the site's involvement in the battle. As the data potential of the area appears to have been met as a result of this investigation, no additional archaeological work is recommended for the project. The results of the investigation are embodied in the report entitled *Phase I Archaeological Survey Fredericksburg-Spotsylvania National Military Park, Chancellorsville, Virginia* (2016). The report also recommended the "locus does represent a contributing element to this NRHP site; however, the date potential of the area appears to have been met as a result of the area as a result of the area as surveyed, additional archaeological work is recommended." For this reason, archaeological testing at the site of the new well will take place.

## D. Historic Structures

1. Ranger Lane – The project does not involve potential impacts to any historic structures.

- E. Cultural Landscape Resources
  - 1. Ranger Lane while the landscape has not been evaluated, the individual structures that make up the site's development, including three residences and the water tower, have been embraced as contributing structures under the draft update of the park's National Register documentation.

## **Proposed Action**

The project will replace the failed, insufficient, shallow-drilled well. The new well will be drilled to an approximate depth of 500-700 feet and will include one submersible pump, steel well casing, 40 lf. soil screens, 50 lf. of artificial packed gravel, concrete fill to seal and flow testing. This will include new well and tank sensors. The existing well will be abandoned and filled.

The new well will rectify water production and ensure the supply needed is always available. Excavation will involve the drilling of the new well vertically to a depth of 500 to 700 feet. The well will be drilled approximately 10 feet from the existing well house. A supply line will run from the new well to the well house, which will involve the excavation of a 12" wide ditch, 30" deep to accommodate a 2" supply pipe and associated wiring.

#### **Description of Mitigation Measures**

The park will engage an archaeologist to test and survey the site of the new well and the connecting line to the water treatment building.

## **Effect Analysis**

It is park's opinion that the preferred alternative will have "no adverse effect" on the historic properties of Chancellorsville.

#### **Park Consultation**

The proposal is being circulated to the park's Section-106 advisors for archaeology and cultural landscapes.

The proposal is going through a 30-day public comment and review period. During this time, the project will be placed on the NPS public website. The park will also contacted representatives of interested local organizations, such as the University of Mary Washington's Department of

Historic Preservation, the Rappahannock Valley Civil War Round Table, the Central Virginia Battlefields Trust, Spotsylvania County, and the Pamunkey Indian Tribe.

The project will go through a 30-day comment and review period with the Virginia SHPO.

## **Attached Supporting Documentation**

A. Park Map B. Photos

## Conclusion

At important historic sites, the proposed undertaking would foster fulfillment of the park's General Management Plan directives to protect cultural resources. It is the park's opinion that this project will have "no adverse effect" upon historic resources.

## **Report Prepared By**

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