



ENVIRONMENTAL ASSESSMENT FOR A COMFORT STATION AT THE BRAWNER FARM

Manassas National Battlefield Park



August 2011

**UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
ENVIRONMENTAL ASSESSMENT FOR A COMFORT STATION AT THE BRAWNER FARM**

Manassas National Battlefield Park, Virginia

Project Summary

The National Park Service (NPS), Manassas National Battlefield Park (the park), proposes to build a restroom facility near the Brawner Farm House contact station for the use of visiting public and staff. The park is located in Prince William County, Virginia. The proposed project site would be at the end of the access road to the Brawner Farm contact station, north of U.S. Route 29 (U.S. 29) and east of Pageland Road (VA Route 622), in the northwestern portion of the park. Figure 1 (“Chapter 1: Purpose and Need”) shows the park and the proposed location of the comfort station. The comfort station would serve an estimated annual 35,000 visitors and would accommodate the expected increase in visitation during the Sesquicentennial Celebration to take place August 2012. The facility would be compliant with the Americans with Disabilities Act (28 Code of Federal Regulations [CFR] Part 36), Architectural Barriers Act of 1968, and Accessibility Guidelines for Buildings and Facilities (ADA-ABA Accessibility Guidelines).

The purpose of the project is to provide a universally accessible comfort station and supporting infrastructure at the Brawner Farm, Manassas National Battlefield Park, in Virginia, for use by park visitors and employees. Currently there are two Porta-Johns (one handicap) at the site. Full restroom facilities are currently in service at the park headquarters (ADA accessible) and the Visitor Center, which are located 0.5 and 3 miles away from the Brawner Farm respectively. The project is needed because there is an anticipated increase in visitor use to the Brawner Farm and a lack of restroom facilities for visitors and staff in this area of the park.

This environmental assessment evaluates the impacts that would result from the implementation of two alternatives or the no action alternative:

- Alternative 1: No action. Under alternative A, the park would not take action to provide a comfort station at the Brawner Farm and current facilities would continue to be used at the park.
- Alternative 2 (preferred): Construction of an Accessible Comfort Station at the Brawner Farm with a Septic, Well, and Water Treatment System. Under alternative 2, the park would build a prefabricated restroom structure with gravel support pad, concrete building apron, and a sidewalk compliant with ADA-ABA Accessibility Guidelines connecting the building facility to the existing parking area.
- Alternative 3: Construction of an Accessible Vault Toilet Facility at the Brawner Farm. Under alternative 3, the park would build a prefabricated vault toilet facility with a sidewalk compliant with ADA-ABA Accessibility Guidelines connecting the building facility to the existing parking area. The facility would not include the construction of a septic, well, or water treatment system.

Note to Reviewers and Respondents: If you wish to comment on the environmental assessment, you may mail comments directly or submit them electronically. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Comments can be mailed to:

Manassas National Battlefield Park Headquarters
Attn: Brawner Farm Comfort station
12521 Lee Highway
Manassas, VA 20109

Comments can also be submitted online by following the appropriate links at: <http://parkplanning.nps.gov/MANA>
Click on: Develop Public Restrooms for Brawner Farm

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Acronyms

ABA	Architectural Barriers Act of 1968
ADA	Americans with Disabilities Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EA	Environmental Assessment
gpf	gallons per flush
GMP	general management plan
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act of 1966
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
PEPC	Planning, Environment, and Public Comment
SHPO	State Historic Preservation Office
USACE	United States Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	United States Fish and Wildlife Service
USC	United States Code
VDCR	Virginia Department of Conservation and Recreation
VDHR	Virginia Department of Historic Resources

CHAPTER 1: PURPOSE AND NEED

INTRODUCTION

The National Park Service (NPS), Manassas National Battlefield Park (the park), proposes to build a restroom facility near the Brawner Farm contact station for the use of visiting public and staff. The park is located in Prince William County, Virginia. The proposed project site would be at the end of the access road to the Brawner Farm contact station, north of U.S. Route 29 (U.S. 29) and east of Pageland Road (VA Route 622), in the northwestern portion of the park. Figure 1 shows the park and the proposed location of the comfort station.

The comfort station would serve an estimated annual 35,000 visitors and would accommodate the expected increase in visitation during the Sesquicentennial Celebration to take place August 2012. The facility will be compliant with the Americans with Disabilities Act (28 Code of Federal Regulations [CFR] Part 36), Architectural Barriers Act of 1968, and Accessibility Guidelines for Buildings and Facilities (ADA-ABA Accessibility Guidelines).

This environmental assessment (EA) evaluates the impacts that would result from the implementation of three alternatives:

- Alternative 1: No action. Under alternative 1, the park would not take action to provide a comfort station at the Brawner Farm and current facilities would continue to be used at the park.
- Alternative 2 (preferred): Construction of an Accessible Comfort Station at the Brawner Farm with a Septic, Well, and Water Treatment System. Under alternative 2, the park would build a prefabricated restroom structure with gravel support pad, concrete building apron, and a sidewalk compliant with ADA-ABA Accessibility Guidelines connecting the building facility to the existing parking area.
- Alternative 3: Construction of an Accessible Vault Toilet Facility at the Brawner Farm. Under alternative 3, the park would build a prefabricated vault toilet facility with a sidewalk compliant with ADA-ABA Accessibility Guidelines connecting the building facility to the existing parking area. The facility would not include the installation of a septic, well, or water treatment system.

This EA has been prepared in accordance with the *National Environmental Policy Act* (NEPA) of 1969 and implementing regulations, 40 CFR 1500–1508, and NPS Director's Order 12 and Handbook, *Conservation Planning, Environmental Impact Analysis, and Decision-making* (NPS 2001). Compliance with Section 106 of the *National Historic Preservation Act of 1966* (NHPA) has been conducted as part of the NEPA process but is not part of this NEPA document. Appendix A and the analysis in this document contain the results of all consultation.

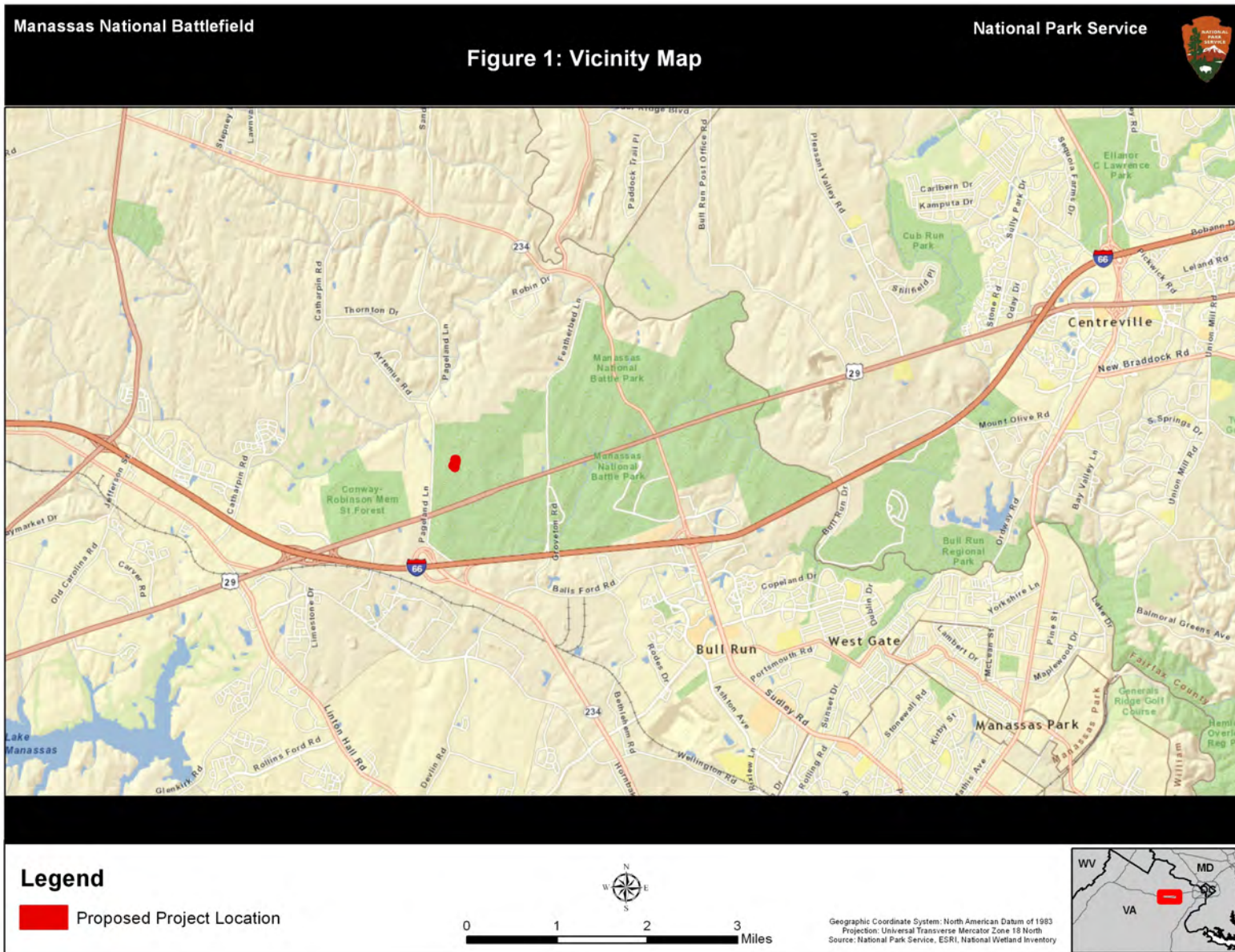


FIGURE 1: VICINITY MAP

PURPOSE OF AND NEED FOR ACTION

The purpose of the project is to provide a universally accessible comfort station and supporting infrastructure for the Brawner Farm contact station for use by park visitors and employees. Currently there are two Porta-Johns at the site. Full restroom facilities are located at the park headquarters (ADA accessible) and the Visitor Center. The project is needed because there is a lack of restroom facilities for visitors and staff within a reasonable distance from the Brawner Farm and in this area of the park.

PROJECT BACKGROUND

The park is located northwest of the city of Manassas in Prince William County, Virginia (figure 1). The park commemorates the location of two Civil War battles, The First Battle of Manassas (July 21, 1861) and The Second Battle of Manassas (August 28–30, 1862). The park comprises 5,071 acres and offers activities such as guided tours, hiking and horseback riding trails, and picnic areas. The Brawner Farm House was converted into a contact station and now serves as a visitor access point. There is a paved access point off of from Pageland Lane, leading to a paved parking lot. The Sesquicentennial Celebration commemorates the 150th anniversary of the Second Battle of Manassas and will take place in August 2012. During the celebration, the park is anticipating a large influx of visitors; up to 35,000 people are expected during this week. The Brawner Farm was a significant location during the Second Battle of Manassas and will be the first stop on a historic tour. Additionally, the park's general management plan (GMP) (NPS 2008a) specifically focuses on developing additional interpretation relating to the Second Battle of Manassas at the Brawner Farm. In general, the Second Battle of Manassas has received less emphasis than the First Battle of Manassas within the park. The preferred alternative in the GMP aims to provide a level of interpretation inclusive to both battles. Future development and management of the park would facilitate and deepen visitor understanding of the Civil War and the importance of both battles that occurred at Manassas. Currently, Stuart's Hill is the main visitor contact station for the Second Battle of Manassas; however, the GMP states this would be relocated to Brawner Farm, thus increasing overall visitor use in this area. As part of the GMP and Sesquicentennial Celebration, the Brawner Farm will be the first stop on a historical bus tour of the Second Battle of Manassas. To accommodate the increase in visitor use, the park is proposing to construction a comfort station compliant with ADA-ABA Accessibility Guidelines at the Brawner Farm adjacent to the current parking area.

BRAWNER FARM

George Tennile acquired several parcels totaling more than 629 parcels before his death in 1840. Upon the death of his wife, George A. Douglas (Tennille's grandson) acquired 326.5 acres of the estate. The house became known as Bachelor's Hall in 1850. In 1854, seven acres of land were sold to the Manassas Gap Railroad, located at the northern edge of the project area. Upon Douglas' death in 1856, his wife rented the property to John Brawner. Brawner, his wife Jane, and their five children (only the youngest was still a minor at 19) were recorded as residing on the farm in the 1860 census. Meanwhile, Henry Dogan acquired the adjacent Peach Grove property between 1800 and 1810. After his death in 1823, his son William Henry Dogan continued to live on the estate, acquiring approximately 700 acres.

During the First Battle of Manassas, the Brawner and Dogan farms played no role in the engagement. However, both farms witnessed substantial fighting during the Second Battle of Manassas, August 28–30, 1862, including action on all three days of the battle. During the war, both families remained in their homes despite damages to the properties. After the war, the Brawner's moved out of the rented property, and the Douglas family sold the property to William M. Davis in 1895. In the 1970s, the NPS opened a

small vista in the Deep Cut area to allow visitors to view the historic monument and small portion of the slope where the federal attack on Jackson's position crested on August 30, 1862.

Today, both the Brawner Farm and the Deep Cut area of the Dogan farm are major interpretive sites on the Second Manassas battlefield. Interpretive trails connect significant battle positions in these areas and cross the proposed vista restoration at multiple locations. The Brawner Farm House has been converted into a contact station, but currently there are no permanent restroom facilities for staff or the visiting public. This project proposes to build a facility near the current parking lot for the use of visiting public and staff.

PURPOSE AND SIGNIFICANCE OF MANASSAS NATIONAL BATTLEFIELD PARK

The initial desire to preserve the Civil War battlefield area included within the park came from the vision of George Carr Round, a Union veteran, who settled in the small Manassas community after the Civil War. Round recognized the need for people to visit the landscape on which the battles took place, and he began efforts to get the federal government to legally acquire the battlefield. These efforts were furthered in 1921 when the Sons of Confederate Veterans established the land as Confederate Park, and 14 years later the Franklin D. Roosevelt administration included Confederate Park in a New Deal recreational demonstration area (Zenzen 1998). Finally, on May 10, 1940, the Secretary of the Interior, in accordance with authority of Public Law 74-292, designated the area the Manassas National Battlefield Park due to its historical importance as the site of the Battles of First and Second Manassas.

Subsequent congressional legislation preserved the most important historic lands relating to the two battles of Manassas. The legislation that brought Stuart's Hill into the park boundary was authorized on November 10, 1988, with enactment of Public Law 100-647. This act vested in the United States all rights, title, and interests to approximately 558 acres of private property near the park.

The Manassas National Battlefield Park was ultimately created to preserve the historic landscape that encompasses the buildings, objects, and views relating to the historical significance of the Battles of First and Second Manassas. The park is one of the only Civil War parks that includes actual battlefields. Visitors can see the areas where troops formed, fought, and died (NPS 2008a). The park also provides important cultural landscapes and the historic features that lie within. As stated in the GMP, the purpose and significance of the park are as follows.

Park Purpose: Manassas National Battlefield Park was established to preserve the historic landscape containing historic sites, buildings, objects, and views that contribute to the national significance of the Battles of First and Second Manassas, for the use, inspiration, and benefit of the public.

Park Significance: Manassas National Battlefield Park is nationally significant because it includes the locations of the Battles of First and Second Manassas. Many park resources contribute to this national significance, the public's appreciation of the battlefield events, and its understanding of the social and economic impacts of the Civil War. The park contains cultural landscapes from the period of the battles (1861–1862) that contain historic features of the battles, as well as woodlands, fields, streams, rolling hills, and certain views or vistas that are representative of the physical setting that existed at the time of the battles. The park also contains cultural landscapes from the period after the battles (1865–1940) that commemorate the battles with monuments and other objects erected in memory of soldiers who fought there.

RELATIONSHIP TO LAWS, EXECUTIVE ORDERS, POLICIES, AND OTHER PLANS

APPLICABLE FEDERAL AND STATE LAWS

National Park Service Organic Act of 1916

By enacting the NPS *Organic Act of 1916*, Congress directed the U.S. Department of the Interior and the NPS to manage units “to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such a means as will leave them unimpaired for the enjoyment of future generations” (16 USC 1). Despite this mandate, the *Organic Act* and its amendments afford the NPS latitude when making resource decisions that balance resource preservation and visitor recreation.

Because conservation remains predominant, the NPS seeks to avoid or to minimize adverse impacts on park resources and values. However, the NPS has discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of a park (NPS 2006). While some actions and activities cause impacts, the NPS cannot allow an adverse impact that would constitute impairment of the affected resources and values (NPS 2006). The *Organic Act* prohibits actions that permanently impair park resources unless a law directly and specifically allows for the actions (16 USC 1a-1). An action constitutes an impairment when its impacts “...harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values” (NPS 2006). To determine impairment, the NPS must evaluate “...the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts” (NPS 2006).

Clean Water Act

Section 404 of the *Clean Water Act* regulates the placement of dredged and fill material into waters of the United States. The act authorizes the issuance of permits from the U.S. Army Corps of Engineers (USACE) for such discharges as long as the proposed activity complies with environmental requirements specified in Section 404(b) (1) of the Act. To grant a permit, the USACE must weigh the need to protect aquatic resources against the benefits of the proposed development. The USACE policy requires applicants to avoid impacts on waters of the United States and wetlands to the extent practicable, then minimize the remaining impacts, and finally take measures to compensate for unavoidable impacts.

Section 401 of the *Clean Water Act* requires that any applicant for a Section 404 permit also obtain a Water Quality Certification from the state. The purpose of the certification is to confirm that the discharge of fill materials will be in compliance with the state’s applicable water quality standards.

The National Pollutant Discharge Elimination System is a permitting system regulating discharge from wastewater treatment plants, industry, stormwater, and other discharges into waters of the United States. The National Pollutant Discharge Elimination System permits place limits on chemical pollutants, microbial pollutants, and other parameters such as temperature.

National Parks Omnibus Management Act of 1998

The *National Parks Omnibus Management Act* (16 USC 5901 et seq.) underscores NEPA and is fundamental to NPS park management decisions. Both acts provide direction for articulating and connecting the ultimate resource management decision to the analysis of impacts, using appropriate

technical and scientific information. Both also recognize that such data may not be readily available and provide options for resource impact analysis should this be the case.

The *National Parks Omnibus Management Act* directs the NPS to obtain scientific and technical information for analysis. The NPS Handbook for Director's Order 12 states, "if such information cannot be obtained due to excessive cost or technical impossibility, the proposed alternative for decision will be modified to eliminate the action causing the unknown or uncertain impact or other alternatives will be selected" (NPS 2001).

Redwood National Park Act of 1978, As Amended

All national park units are to be managed and protected as parks, whether established as a recreation area, historic site, or any other designation. This act states that the NPS must conduct its actions in a manner that would ensure no "derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress" (NPS 1978).

Historic Sites Act of 1935

This act declares as national policy the preservation for public use of historic sites, buildings, objects, and properties of national significance. It authorizes the Secretary of the Interior and the NPS to restore, reconstruct, rehabilitate, preserve, and maintain historic or prehistoric sites, buildings, objects, and properties of national historical or archeological significance.

Federal Noxious Weed Act, 1975

The *Federal Noxious Weed Act* (7 USC 2801–2814, January 3, 1975, as amended 1988 and 1994) provides for the control and management of non-indigenous weeds that injure, or have the potential to injure, the interests of agriculture and commerce, wildlife resources, or the public health.

National Historic Preservation Act of 1966, as Amended

Section 106 of the *National Historic Preservation Act of 1966* requires federal agencies to consider the effects of their undertakings on properties listed or potentially eligible for listing in the National Register of Historic Places (NRHP). All actions affecting the park's cultural resources must comply with this law, which is implemented through 36 CFR 800.

International Building Code

The International Building Code is a model building code developed by the International Code Council. The first International Building Code was published in 2000 and addresses standards in building codes and compliance. This code focused fire prevention in regards to construction and design. Parts of the code reference other codes including the International Plumbing Code, the International Mechanical Code, the National Electric Code, and various National Fire Protection Association standards. By adopting the International Building Code, the referenced sections of the above codes are also adopted.

National Electric Code

The National Electric Code is a United States standard for the safe installation of electrical wiring and equipment. It is part of the National Fire Code series published by the National Fire Protection Association. The National Electric Code is developed by National Fire Protection Association's

Committee on the National Electrical Code, which consists of 19 code-making panels and a technical correlating committee. The National Electric Code is approved as an American national standard by the American National Standards Institute.

Architectural Barriers Act of 1968 (42 USC § 4151)

The Architectural Barrier Act (ABA) requires that facilities designed, built, altered, or leased with funds supplied by the United States federal government be accessible to the public. This act was one of the first federal actions developed to ensure federally funded buildings and facilities are designed and constructed to be accessible to people with disabilities.

Americans with Disabilities Act (28 CFR Part 36)

The purpose of this part is to implement title III of the *Americans with Disabilities Act of 1990* (42 USC 12181), which prohibits discrimination on the basis of disability by public accommodations and requires places of public accommodation and commercial facilities to be designed, constructed, and altered in compliance with the accessibility standards.

Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities

These guidelines provide technical requirements for accessibility to buildings and facilities by individuals with disabilities under the ADA of 1990. These scoping and technical requirements are to be applied during the design, construction, and alteration of buildings and facilities covered by titles II and III of the ADA to the extent required by regulations issued by federal agencies, including the Department of Justice and the Department of Transportation, under the ADA.

EXECUTIVE ORDERS AND NATIONAL PARK SERVICE DIRECTOR'S ORDERS

Executive Order 11593, Protection and Enhancement of the Cultural Environment

This executive order directs the NPS to support the preservation of cultural properties and to identify and nominate to the NRHP cultural properties within the park and to “exercise caution to assure that any NPS-owned property that might qualify for nomination is not inadvertently transferred, sold, demolished, or substantially altered.”

Director's Order 28, Cultural Resource Management

NPS Director's Order 28 (NPS 1998) directs the NPS to protect and manage cultural resources in its custody through effective research, planning, and stewardship in accordance with the policies and principals contained in the *NPS Management Policies 2006*. This director's order is carried out through the NPS 28 Cultural Resource Management Guideline that provides the fundamental concepts of cultural resource management for the NPS.

Director's Order 77-1, Wetland Protection

NPS Director's Order 77-1 (NPS 2002) directs NPS to establish policies, requirements, and standards for implementing Executive Order 11990: “Protection of Wetlands” (42 Fed. Reg. 26961). Executive Order 11990 was issued by President Carter in 1977 in order “...to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative...”

National Park Service Management Policies 2006

The NPS *Management Policies 2006* (NPS 2006) is the basic NPS-wide policy document, adherence to which is mandatory unless specifically waived or modified by the NPS Director or certain departmental officials, including the U.S. Secretary of the Interior. Actions under this EA are in part guided by these management policies. Section 8.2.5.1, “Visitor Safety,” is particularly relevant to this project.

The NPS strives to protect human life and provide for injury-free visits. As a result, the NPS will apply national safety codes and standards to prevent injuries or recognizable threats to visitor safety and will reduce or remove known hazards. Examples of visitor safeguards include the installation of artificial lighting or paved walking surfaces (NPS 2006).

MANASSAS NATIONAL BATTLEFIELD PARK PLANS, POLICIES, AND ACTIONS

Manassas National Battlefield Park: Final General Management Plan/Environmental Impact Statement, April 2008

Within the GMP, the NPS proposed alternatives to promote the continued longevity, enjoyment, and historic preservation of the park. These alternatives considered the natural environment (including air quality, soundscapes, vegetation, wildlife, and water resources); cultural environment (including historic structures, cultural landscapes, and archeological resources); transportation and traffic (including roadway characteristics, traffic counts, level of service, safety, and emergency response); socioeconomic environment (including population, economy, employment, per capita income, and poverty); recreation; visitor experience (including visitation use and patterns, visitor profile, and projection of future use); and park operations and maintenance. This GMP does not describe how projects should be carried out or prioritized and is not intended to be a substitute for more detailed plans, nor does it dictate precisely what other plans must cover. Rather, it is the one document that encompasses all topics and is broad in its focus. The GMP looks at the “big picture” of how the park can be changed and maintained for the future. To this end, the selected alternative of the GMP proposed a future condition at the park that focused on interpreting the two battles of Manassas and distinct military events. The visitor center at Henry Hill would orient visitors to the park as a whole and focus on the First Battle of Manassas. A separate visitor contact station at the Brawner Farm would focus on the events of the Second Battle of Manassas.

The GMP addresses proposed actions to guide decision making and problem solving to protect the natural and cultural integrity of the park and proposes alternatives to address the current needs of the park. Since the acquisition of Stuart’s Hill, the park has been able to offer a more comprehensive interpretation of the Second Battle of Manassas now that the government owns both sides of the battlefield.

Goals within the GMP that relate to the proposed construction of a comfort station include the following:

- The historic landscape is maintained in a way that gives visitors an understanding of the events of the two battles.
- All park uses and visitor experiences are conducted in a manner that is compatible with the park’s purpose.
- Modern intrusions into the historic landscape are minimal.
- The park cooperates with local, state, and other national groups to protect resources and tell the stories of the battles of Manassas.
- The rural and agrarian character of views outside the park is maintained.

Management Summary Archeological Survey Brawner Farm Landscape Treatment Plan: Manassas National Battlefield Park

This study evaluates archeological resources in the area of potential effects for the Brawner Farm Landscape Treatment Plan in which the locations of screen plantings, cluster plantings, and clump plantings of trees and/or shrubs were surveyed. The location of the comfort station was also included as part of this report. Ultimately, no additional archeological sites or cultural surface/subsurface features or deposits relating to the Brawner Farm Site or the Civil War era battles were identified during the shovel testing or metal detecting in any of the areas.

Brawner Farm Landscape Plan

The Brawner Farm Landscape Plan was written over a period of four years and was finalized in February 2005. This plan accounts the long history of the Brawner Farm and the role it played during the Civil War. The farm is approximately 319 acres and is located in the northwestern corner of the park. The report aims “to investigate and record the site’s historic and existing landscape conditions, to assess the integrity of the current landscape and to make treatment recommendation for its future development and interpretation” (NPS 2005). This plan details the historic landscape characteristics of the farm and was referenced for background information on the cultural landscape analysis. A comfort station was not suggested as part of the landscape plan or recommended for future development at the Brawner Farm; however, knowing the past and future uses of the landscape is important to consider as part of the proposed project.

Environmental Assessment: Dominion Virginia Power Electric Power Transmission Upgrade Manassas National Battlefield Park (March 2009)

An EA was completed in March 2009 to evaluate the potential impacts to the human, natural, and cultural environment of the new transmission configuration proposed for the existing transmission lines on park property. Dominion Virginia Power, in cooperation with the NPS, proposed to upgrade and reconfigure the existing structures within the corridor from the Gainesville Substation north to the Loudoun Substation as double-circuit structures. The line reconfigurations are located on the western border of the park in the vicinity of the Stuart’s Hill Center and Brawner Farm. Upon the approval of the construction permit and signing the Finding of No Significant Impact, approximately 1.8 miles of transmission lines were rebuilt within park boundaries. Construction for this project was completed in the spring of 2011.

Manassas National Battlefield Park Bypass Environmental Impact Statement (Battlefield Bypass Study), Federal Highway Administration and National Park Service

This study evaluated a variety of transportation improvement alternatives in the vicinity of the park to alleviate traffic and congestion within the park. The study area for the project covers portions of Prince William, Loudoun, Fairfax, and Fauquier counties, the cities of Manassas and Manassas Park, and the town of Haymarket. These efforts would improve circulation and visitor experience within the park by removing commuter and truck traffic from the state and federal highways in the park (NPS 2008a). Because these actions could be occurring the same time as the proposed project within the park, this study would be considered during this EA process.

Comprehensive Interpretive Plan for Manassas National Battlefield Park

The park staff is in the process of building on the recommendations developed in the 1994 interpretive prospectus for Manassas National Battlefield Park. The park staff reaffirmed the park significance

statements and interpretive themes. Based on this work, park staff and their partners have developed an array of desired visitor experience goals that will guide the development of interpretive media, exhibits, and facilities (NPS 2008a). The proposed project would consider this plan to ensure that actions are consistent with this plan.

Manassas National Battlefield Park Visitor Study (NPS 1995a)

This report summarizes the results of visitor surveys and helps the park staff refine visitor services, facilities, and interpretation. The results of this study would be considered when planning construction and maintenance activities for the proposed project, to take into account when and where visitation occurs.

SCOPING PROCESS AND PUBLIC PARTICIPATION

On January 4, 2011, an interdisciplinary team from the park met to discuss potential impacts related to the proposed comfort station and to identify potential issues through the completion of an environmental screening form. The issues identified are discussed below.

The public scoping process was initiated on February 16, 2011, when the NPS sent out 308 public scoping letters to the park mailing list, which included state and county regulatory departments, nearby residents, and community organizations. The public scoping meeting was also announced on the NPS Planning, Environment, and Public Comment (PEPC) website. Appendix B contains public scoping letters and announcements.

The public scoping period began on February 16, 2011, and concluded on March 18, 2011, as announced in a public scoping letter (appendix B). During the public scoping comment period, the NPS received seven comments via email and four comments through PEPC. Comment topics were generally positive and in support of the construction of a comfort station at the Brawner Farm. Prince William County would have no objections to the project as long as all Virginia Erosion and Sediment Control measures are installed and maintained. The Virginia Department of Conservation and Recreation (VDCR) stated that if the project includes more than 2,500 square feet, a Virginia Stormwater Management Program permit and a complete Stormwater Pollution Prevention Plan would be required. The VDCR suggested surveys for the marsh hedgenettle and indicated that the current activity will not affect any documented state-listed plants or insects. VDCR files did not indicate the presence of any State Natural Area Preserves under VDCR jurisdiction in the project vicinity. Additional comments included local community support of the project.

ISSUES AND IMPACT TOPICS

Issues describe problems or concerns associated with current impacts from environmental conditions or current operations, as well as problems that may arise from the implementation of any of the alternatives, and result in the development of impact topics. Potential issues associated with this project were identified by the public, park staff, and input from other agencies consulted. This input contributed to the identification of the following impact topics, which are discussed in “Chapter 3: Affected Environment” and analyzed in “Chapter 4: Environmental Consequences.” These potential issues or impact topics include soils, vegetation, visitor use, historical structures and landscapes, and park operations. These issues represent resources of concern that could be beneficially or adversely affected by the actions proposed under each alternative and were developed to ensure that the alternatives are evaluated and compared based on the most relevant resource topics. These impact topics were identified based on the following: issues rose during scoping, federal laws, regulations, executive orders, NPS *Management Policies 2006*, and NPS knowledge of limited or easily impacted resources.

IMPACT TOPICS ANALYZED IN THIS ENVIRONMENTAL ANALYSIS

SOILS

Activities associated with the construction of a comfort station compliant with ADA-ABA Accessibility Guidelines would include grading of the site to accommodate a gravel support pad, concrete building apron, and a sidewalk compliant with ADA-ABA Accessibility Guidelines connecting the building facility to the existing parking area. Under alternative 2, construction of the comfort station would include the installation of a septic system with two drip fields (one installed and one reserve) and a well/water treatment system. Under alternative 3, construction would only include the installation of the vault toilet facility. Construction activities under the action alternatives would involve ground disturbance and could result in the loss of soil productivity, creation of long-lasting tire ruts, and an increased potential for soil erosion and loss of topsoil. In addition, some grading and filling would be required under the action alternatives. Because of potential impacts on soils from the proposed action alternatives, this topic was carried forward for analysis in this EA.

VEGETATION

Actions directly related to the comfort station construction (under alternatives 2 and 3) would require selective clearing, trimming and/or removal of brush, low growing vegetation and manicured lawn areas. Surveys were conducted for a state rare species, marsh hedgenettle (*Stachys pilosa* var.), as requested by VDCR. The species was not found at the project site and is further described under “Impact Topics Dismissed from Further Analysis.” Since there would be a loss of vegetation at the site, this impact topic was carried forward for analysis in this EA.

VISITOR USE AND EXPERIENCE AND RECREATION RESOURCES

Manassas National Battlefield Park had a documented 612,490 recreational visitors in 2010. Construction activities would affect the visual experience for visitors to the park in this area and may affect visitor access to this location. Once completed, the restroom facilities would provide a beneficial impact to visitor use and experience by providing a comfort station within a reasonable distance of the Brawner Farm. Because of the potential adverse and beneficial impacts on visitor use and experience, this topic was carried forward for analysis in the EA.

CULTURAL RESOURCES – CULTURAL LANDSCAPES

The NHPA (16 USC 470 et seq.), NEPA, Organic Act, NPS Management Policies 2006 (NPS 2006), Director’s Order 12, and Director’s Order 28 require the consideration of impacts on any cultural resources on park lands that might be affected. NHPA, in particular, addresses impacts on cultural resources either listed in, or eligible to be listed in, the NRHP. As defined by NPS, cultural resources include archeological resources, museum objects, ethnographic resources, historic *districts* and structures, and cultural landscapes. For this study, efforts to identify cultural resources included a review of information provided by the park, supplemented by interviews with park staff and other published and unpublished sources, including the listings of the NRHP. As a Civil War battlefield, cultural landscapes are an integral part of the park. Although portions of the former battlefield have become wooded, portions of the park retain their wartime appearance. Maintenance of these remaining areas provides a sense of place and contemplative atmosphere for visitors to the park (NPS 2008a). The introduction of any new element, including a comfort station, has the potential to impact these landscapes. Due to their importance to the park and the visitor experience, the topic of cultural landscapes was carried forward for further analysis in this EA.

PARK OPERATIONS AND MANAGEMENT

Implementation of the proposed action would require the construction of a new comfort station for visitors and park staff. The comfort station would be maintained and cleaned by park staff, requiring additional park resources to operate. Currently there are no permanent restrooms facilities close by for staff use; the construction of a permanent facility could improve the overall quality of life for workers at the Brawner Farm site. Additionally, the construction of a full comfort station would alleviate the need and cost of continued rental and maintenance of the Porta-Johns at the site. As a result, the topic of park operations and management was carried forward for further analysis in this EA.

IMPACT TOPICS DISMISSED FROM FURTHER ANALYSIS

GEOLOGY, GEOLOGIC HAZARDS, AND TOPOGRAPHY

There are no known geohazards located within the proposed project area. The proposed action would not require excavation or grading in a way that would disrupt geological or topographical resources because the proposed location is relatively flat. As a result, the impacts from the proposed alternatives on geology, geologic hazards, and topography were dismissed from further consideration in this EA.

WATER QUALITY

Alternative 2 would include activities associated with the installation of well system to provide the facility with water, a water treatment system, and the installation of a septic system incorporating two designated drip fields (one installed and one reserve) with their inherent percolation capacities to meet the septic system demand. Alternative 3 would not include the installation of a well system and would not have an impact on water quality. The design and construction of facilities under alternative 2 would be completed in accordance with Prince William County water and sewage standard specifications as well as the latest edition of Waterworks Regulations and Sewerage Regulations, Virginia Department of Health, Commonwealth of Virginia, and any other local, state, or federal agencies having jurisdiction. Because these guidelines would be followed, no impacts on water quality are expected. As a result, the impacts from the proposed alternatives on water quality were dismissed from further consideration in this EA.

WETLANDS AND WATERWAYS

The NPS classifies wetlands based on the USFWS *Classification of Wetlands and Deepwater Habitats of the United States*, also known as the Cowardin classification system (Cowardin et al. 1979). Based on this classification system, a wetland must have one or more of the following attributes:

- The habitat at least periodically supports predominately hydrophytic vegetation;
- The substrate is predominately undrained hydric soil; or
- The substrate is non-soil and saturated with water, or covered by shallow water at some time during the growing season.

A wetland delineation of the site was conducted in 2004 during the installation of the parking lot and access road for the Brawner Farm. Additionally, wetland delineations and field surveys were conducted during the upgrade of the transmission lines in 2009. Neither of these delineations identified wetlands in the proposed project location (NPS 2004, 2009); therefore, wetlands were dismissed from further consideration in this EA.

AIR QUALITY

The 1963 Clean Air Act, as amended (42 United States Code [USC] 7401 et seq.), requires federal land managers to protect air quality in national parks. During construction, local air quality would be temporarily affected by dust and vehicle emissions. Hydrocarbons, nitrogen oxide, and sulfur dioxide emissions would be rapidly dissipated by air drainage because air stagnation is uncommon at the project site. The park's current level of air quality would not be measurably affected by the proposed project under either action alternative. As a result, the impacts from the proposed alternatives on air quality were dismissed from further consideration in this EA.

ARCHEOLOGICAL RESOURCES

An archeological survey was completed on September 27 through October 13, 2010, to provide a complete inventory of all archeological resources within the proposed comfort station project area and an evaluation of those sites did not contain intact deposits at the Brawner Farm. The scope of this survey included the proposed comfort station location for the action alternatives as well as the two drainage areas under alternative 2. The results of this survey concluded,

“No additional archeological sites or cultural surface/subsurface features or deposits relating to the Brawner Farm Site (44PW0452) or the Civil-War era battles were identified during the shovel testing or metal detecting in any of the areas. The recovery of historic artifacts during the shovel testing and metal detecting was expected due to the proximity of the APE to the Brawner Farm House and historic lines of the 2nd Battle of Manassas.

However, no contributing cultural features or deposits to either the house site or the battle were identified. Berger recommends that the plantings and construction of the bathroom facility with associated drainfields and the fence be allowed to commence.” (LBG 2010)

The location of the facility and drip fields, for the action alternatives, was moved after the completion of the above fieldwork. Consultation with the Virginia State Historic Preservation Office (SHPO) concurred with the NPS that there would be no adverse impact on archeology at the proposed facility location (appendix A). Therefore, additional archeology work was not performed, and no impacts on archeology would be expected. As a result, the impacts from the proposed alternatives on archeology were dismissed from further consideration in this EA.

HISTORIC STRUCTURES

Within the park, there are 40 classified structures including buildings, roads, monuments, and a bridge. The GMP provides for the planning efforts related to these structures, including the appropriate level of stabilization or rehabilitation. A viewshed analysis was conducted to show the potential visual impacts that the installation of the facility would have on views from the Brawner Farm House structure.

Figure 5 (in “Chapter 4: Environmental Consequences”) shows the results of the viewshed analysis. The facility was assumed to be 10 feet tall based on preliminary designs of the proposed facility. The yellow areas represent areas where the comfort station would be visible, and the green areas represent those areas that would be visible if tree cover were removed. Due to intervening tree cover, it is not likely that the comfort station would be visible from the Brawner Farm House. As a result, the impacts from the proposed alternatives on historic structures were dismissed from further consideration in this EA.

MUSEUM COLLECTIONS

Currently the park does not have any museum collections at the Brawner Farm; therefore, the implementation of any alternative would have no effects upon museum collections (historic artifacts, natural specimens, and archival and manuscript material). As a result, the impacts from the proposed alternatives on museum collections were dismissed from further consideration in this EA.

ETHNOGRAPHIC RESOURCES

There are no known ethnographic populations associated with the park that would be impacted by construction of a comfort station. As a result, the impacts from the proposed alternatives on ethnographic resources were dismissed from further consideration in this EA.

HEALTH, SAFETY, AND ACCESSIBILITY

In general, construction activities have the potential to increase the risk to health and safety, and limit visitor access in a given area. Heavy equipment would be present in the parking area when the prefabricated facility is delivered and assembled and during construction of the septic and well system (alternative 2 only). For this project, the access point from Pageland Lane would remain open during construction and visitors would still be allowed to visit the Brawner Farm. Due to the nature of a construction zone, potential risks may be present, however, appropriate mitigation measures would be in place to maintain a safe environment, as well as reduce and prevent potential accidents in the construction zone. Mitigation measures are further described at the end of “Chapter 2: Alternatives.” Mitigation measures include the use of appropriate signage, flaggers, fencing, etc. at all times during construction. Due to the implementation of mitigation measures there would be negligible adverse long-term impacts to health, safety, and visitor access; therefore, this topic was dismissed from further consideration in this EA.

FLOODPLAINS

Executive Order 11988 (Floodplain Management) requires an examination of impacts on floodplains and the potential risk involved in placing facilities within floodplains. The NPS *Management Policies 2006*, Section 4.6.4, “Floodplains”; and Director’s Order 77-2 (NPS 1993), provide guidelines on developments proposed in floodplains. The construction site would be located in an “X” designated Federal Emergency Management Agency floodplain. According to the Federal Emergency Management Agency, “X” designated areas are outside the 500-year floodplain with less than 0.2 percent annual probability of flooding. Due to the topography of the area, the proposed project area is not located within either a 100- or 500-year floodplain (FEMA 1985). Therefore, the proposed site would not likely be prone to flooding. The action alternative and no action alternative would have no long- or short-term adverse impacts associated with the occupancy and modification of floodplains and would avoid direct or indirect support of floodplain development. As a result, the impacts from the proposed alternatives on flood plains were dismissed from further consideration in this EA.

ENVIRONMENTAL JUSTICE

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. Guidelines for implementing this executive order under NEPA are provided by the Council on

Environmental Quality (CEQ) (CEQ 1997). According to the U.S. Environmental Protection Agency, environmental justice is:

“The fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies. The goal of this “fair treatment” is not to shift risks among populations, but to identify potentially disproportionately high and adverse effects and identify alternatives that may mitigate these impacts” (EPA 1998).

There are minority and low-income populations in the general vicinity of the park. However, environmental justice was dismissed as an impact topic for the following reasons:

- NPS staff actively solicited public participation as part of the planning process and gave equal consideration to input from all persons, regardless of age, race, income status, or other socioeconomic or demographic factors;
- Impacts associated with implementation of the preferred alternative would not disproportionately affect any minority or low-income populations or communities;
- Implementation of the preferred alternative would not result in any identified effects that would be specific to any minority or low-income populations or communities; and
- NPS staff does not anticipate that any adverse impacts on public health or the socioeconomic environment would fall appreciably more severely or result in disproportionately high and adverse impacts on minority or low-income populations or communities in the area.

As a result, the impacts from the proposed alternatives on environmental justice were dismissed from further consideration in this EA.

WILDLIFE AND WILDLIFE HABITAT

A variety of habitats, which support different types of wildlife are present in the vicinity of the proposed comfort station location. Construction could cause a temporary disruption or displacement of wildlife species; however, this area has previously been disrupted through clearing and installation of the parking facility. Wildlife and wildlife habitat returned to baseline conditions after the construction of the Brawner Farm access road and parking lot; this scenario would also be expected after the construction of the comfort station. It is expected that the action alternatives would have negligible effects on wildlife; as a result, the impacts from the proposed alternatives on wildlife and wildlife habitat were dismissed from further consideration in this EA.

THREATENED AND ENDANGERED SPECIES

The U.S. Fish and Wildlife Service (USFWS) was consulted by letter regarding a transmission corridor (reply received on September 28, 2006, by Burns and MacDonald) in the vicinity of the project. This consultation examined the project area inclusive of this site in Prince William County. At this time, the USFWS did not identify any state or federal threatened or endangered species in this area. Because consultation with the USFWS occurred recently and it is not expected that the outcome has changed, the

area of the proposed action would still be expected to have no federally listed as threatened and endangered species.

During the public scoping process for this planning effort, a letter was received from the VDCR on March 17, 2011, recommended an inventory for the rare plant, marsh hedgenettle (*Stachys pilosa* var.) within the study area. Based on this consultation, surveys for the marsh hedgenettle were completed on June 13, 2011, with no species or populations being found. Consultation with VDCR regarding methodology and results is on-going at this point in the project. Appendix A contains this correspondence. As a result, the impacts from the proposed alternatives on threatened and endangered species were dismissed from further consideration in this EA.

IMPAIRMENT

According to NPS *Management Policies 2006*, an action constitutes an impairment when an impact "...would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values" (NPS 2006). Whether an impact meets this definition depends on the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts. "An impact to any park resource or value may... constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance" (NPS 2006)

Impairment findings are not necessary for visitor use and experience, visitor and employee safety, park operations and management, or socioeconomics because impairment findings relate back to park resources and values. These impact areas are not generally considered to be park resources or values according to the *Organic Act*, and cannot be impaired the same way an action can impair park resources and values. An impairment determination for the NPS preferred alternative is provided in appendix C of this document.

CHAPTER 2: ALTERNATIVES

INTRODUCTION

NEPA requires that federal agencies explore a range of reasonable alternatives. The alternatives under consideration must include the no action alternative as prescribed by 40 CFR 1502.14. Project alternatives may originate from the proponent agency, local government officials, or members of the public at public meetings or during the early stages of project development. Alternatives may also be developed in response to comments from coordinating or cooperating agencies. The alternatives analyzed in this document, in accordance with NEPA, are the result of design scoping and internal scoping.

The NPS explored and evaluated three alternatives in this EA:

- Alternative 1: No action. Under alternative 1, the park would not take action to provide a comfort station at the Brawner Farm and current facilities would continue to be used at the park.
- Alternative 2 (preferred): Construction of an Accessible Comfort Station at the Brawner Farm with a Septic, Well, and Water Treatment System. Under alternative 2, the park would build a prefabricated restroom structure with gravel support pad, concrete building apron, and a sidewalk compliant with ADA-ABA Accessibility Guidelines connecting the building facility to the existing parking area.
- Alternative 3: Construction of an Accessible Vault Toilet Facility at the Brawner Farm. Under alternative 3, the park would build a prefabricated vault toilet facility with a sidewalk compliant with ADA-ABA Accessibility Guidelines connecting the building facility to the existing parking area. The facility would not include the installation of a septic, well, or water treatment system.

DESCRIPTIONS OF ALTERNATIVES

ALTERNATIVE 1: NO ACTION

The no action alternative serves as the baseline by which all other alternatives are compared. Under the no action alternative, a comfort station would not be built at the Brawner Farm parking area. The existing two Porta-Johns (one handicap) would remain at the site, and existing full restroom facilities within other areas of the park would continue to be used. Currently, the closest ADA accessible public comfort station is located 0.5 mile south of the Brawner Farm parking area at Stuart Hill Park Headquarters across Lee Highway, off Pageland Lane. This facility includes men's and women's restroom facilities and was built in 1996. Both restrooms are at the end of a short sidewalk connecting to two accessible parking spots. The current number of restrooms would remain the same under this alternative.

ALTERNATIVE 2 (PREFERRED): CONSTRUCTION OF AN ACCESSIBLE COMFORT STATION AT THE BRAWNER FARM WITH A SEPTIC, WELL, AND WATER TREATMENT SYSTEM

Under alternative 2, the park would install a prefabricated, precast concrete, three-room restroom building compliant with ADA-ABA Accessibility Guidelines, including plumbing, electrical, and mechanical systems. The comfort station would be located directly west of the existing parking area and within the parking circle. Photos of the proposed site are shown in figure 2. A 3-foot-wide sidewalk would encompass the building and a 5-foot-wide sidewalk would be constructed along the edge of the parking

area. The overall footprint of the building would be between 420 square feet (minimum) and 575 square feet (maximum).

The facility would also include a septic system incorporating two designated drip fields (primary and reserve), which would be located to the north of the parking area. The primary drip field would be for immediate use, and the reserve drip field would be for future use. Each drip field would be 60 feet by 114 feet. New electric service to the facility would provide operation of the lights, well system, heating system, and water treatment system. The facility site plan under alternative 2 is shown in figure 3.

The comfort station interior would include

Men's Room

- One waterless urinal
- One 1.6 gallons per flush (gpf) low flush toilet
- One sink

Women's Room

- Two 1.6 gpf low flush toilets
- One sink
- Two sanitary napkin disposal bins

Both restrooms would include vitreous china fixtures, auto flush with manual override control, on-demand water control for sinks, mirrors, baby changing table, toilet paper dispensers, wastepaper baskets, electric hand dryers, soap dispenser, skylights, motion sensor lighting, and heating and ventilation system. The walls would have applied coating to concrete, and the floors would be slip resistant with textured finish applied to concrete.

A utility room (minimum size of 4 feet by 12 feet) would be part of the prefabricated building and located between the two restrooms. The utility room would have the following features:

- Service chase: a space where the plumbing and electric lines would be visible and serviceable by maintenance staff. The service chase would be separate from the restrooms and accessible by a separate exterior door
- 30-gallon water heater (tank-less water heaters preferred)

FIGURE 2: PHOTOS OF FACILITY AND DRIP FIELD LOCATIONS



2a: Comfort Station, Looking South



2b: Drip Fields, Looking North

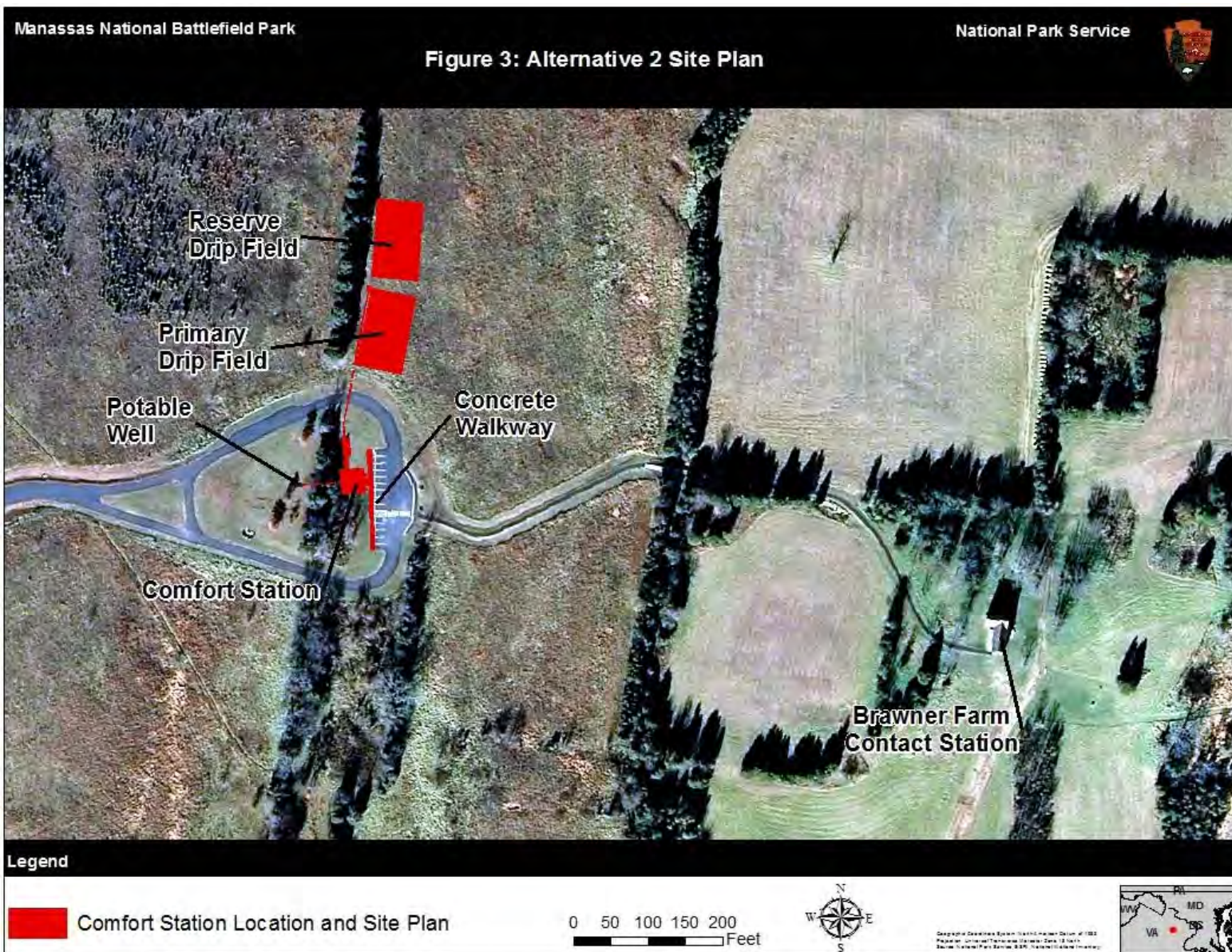


FIGURE 3: ALTERNATIVE 2 SITE PLAN

The comfort station exterior would include

- Privacy wall screens
- Gable roof: concrete construction with textured “cedar shake” style roofing (gray)
- Flush galvanized painted steel doors and frames
- Windows for natural light
- ADA frost-proof drinking fountain
- Frost-proof hose bib with locking/security box
- Horizontal lap siding (tan) with natural or cultured stone base (two-tone tan)

Additional items would include

- Large commercial roll toilet paper dispenser
- Pressure tank in utility room (well water)
- Water treatment system
- Electric panel for all pumps, pressure tank and well, and a pressure switch for the well

The finish/color options above are suggested and would be agreed upon and approved by NPS staff for use at this location at a later date.

ALTERNATIVE 3: CONSTRUCTION OF AN ACCESSIBLE VAULT TOILET FACILITY AT THE BRAWNER FARM

Under alternative 3, the park would install a prefabricated, precast concrete, vault toilet facility compliant with ADA-ABA Accessibility Guidelines. The comfort station would be located in the same area described under alternative 2. A septic system, well, and water treatment system would not be included as part of construction; as such, drip fields and well installation would not be necessary for this alternative. A waste collecting vault would be installed below ground level and would be made of 4-inch thick reinforced concrete. A 3-foot-wide sidewalk would encompass the building and a 5-foot-wide sidewalk would be constructed along the edge of the parking area. The overall footprint of the building would be between 420 square feet (minimum) and 575 square feet (maximum). Photos of the proposed facility site are shown above in figure 2.

Typical prefabricated vault toilet facilities include one stall for the women’s and men’s restroom; because the park wishes to install two stalls for men and women, two prefabricated facilities would be placed side-by-side. Figure 4 shows the site plan for this facility.



FIGURE 4: ALTERNATIVE 3 SITE PLAN

The comfort station interior would include

Men's Room

- Two vault toilets (with optional urinals)
- Two hand sanitizer dispensers
- Two wastepaper baskets

Women's Room

- Two vault toilets
- Two hand sanitizer dispensers
- Two wastepaper baskets

Both restrooms would include toilet paper dispensers, hand sanitizer dispensers, large gable mounted windows, and a ventilation system. The walls would have applied coating to concrete, and the floors would be a slip resistant with textured finish applied to concrete.

A chase would be between the two restrooms and part of the prefabricated building. The chase would serve as a place to store any maintenance or cleaning materials for the restroom and would be serviceable by maintenance staff. The chase would be separate from the restrooms and accessible by a separate exterior door.

The comfort station exterior would include

- Privacy wall screens
- Gable roof: concrete construction with textured "cedar shake" style roofing (gray)
- Flush galvanized painted steel doors and frames
- Windows for natural light
- Horizontal lap siding (tan) with natural or cultured stone base (two-tone tan)

The finish/color options above are suggested and would be agreed upon and approved by NPS staff for use at this location at a later date.

CONSTRUCTION STAGING FOR THE ACTION ALTERNATIVES

Delivery and staging would be determined at the purchase date. Storage may be required by the manufacturer during the site construction phase. If staging were required, materials would be stored in areas that are currently paved with asphalt. If the site is not properly prepared prior to the delivery of the prefabricated facility, for either action alternative, it may need to be staged at the site or at an offsite-paved location.

MITIGATION MEASURES OF THE ACTION ALTERNATIVES

The NPS places a strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts. To help ensure the protection of natural and cultural resources and the quality of the visitor experience, the following protective measures would be implemented as part of the action

alternatives. The NPS would implement an appropriate level of monitoring throughout the construction process to help ensure that protective measures are being properly implemented and are achieving their intended results.

SOILS

- Use silt fencing and other standard erosion control methods during construction.
- Use washdown stations to avoid the spread and transfer of invasive species during construction.

VEGETATION

- Minimize cutting trees whenever possible, and retain as much tree cover as possible.

HEALTH, SAFETY, AND ACCESSIBILITY

- Install appropriate barriers, safety fencing, and/or signs as appropriate, prior to initiating construction activities on NPS properties. The objective of these measures would be to protect visitors and allow safe passage across or around the area of construction.
- The site would be open to visitors during construction, however when appropriate and as a safety precaution, safety zones may be established within which visitors would not be allowed. The contractor would post personnel along safety zones to inform visitors of ongoing construction.

CULTURAL RESOURCES

- Construct the facility in a location that would have minimal effect on the cultural landscape of the park.
- If during construction, archeological resources are discovered, halt all work in the immediate vicinity of the discovery until the resources can be identified and documented and an appropriate mitigation strategy developed. If necessary, consultation with the DC Historic Preservation Officer, NPS, and/or the NPS Regional Archeologist will be coordinated to ensure that the protection of resources is addressed. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (25 USC 3001) of 1990 would be followed.

ALTERNATIVES CONSIDERED BUT DISMISSED

Other alternatives or alternative elements were identified during the design process and internal and public scoping. These were determined to be unreasonable options and were therefore not carried forward for analysis in this EA.

ALTERNATIVE LOCATIONS

Alternative locations were considered for the placement of the comfort station. The location described under alternatives 2 and 3 is considered ideal due to the proximity to the drip fields (for alternative 2) and the parking lot (for alternatives 2 and 3). Originally, the area to the south of the parking lot was considered because it best conceals the facility from the view of the house. However, the southern location was deemed not viable because the soils to the south are not conducive for a septic field, while

the northern fields tested viable for a septic field. Additionally, a comfort station in the southern location would increase the length of the underground utilities, resulting in a greater change in slope that would require larger pumping equipment and lines to the northern field; this would result in more ground-disturbing activities. A location adjacent to the house (east of the parking area) was also considered; however, this location was considered too far from the parking area. The comfort station is intended to be for all park visitors and not only for those visiting the Brawner Farm. Because the location described under alternative 2 and alternative 3 would best serve all visitors while minimizing impacts on the park's resources, all other locations were dismissed from further consideration in this EA.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The NPS is required to identify the environmentally preferable alternative in its NEPA documents for public review and comment (Director's Order 12 Handbook, Sec. 4.5 E (9) (NPS 2001)). The environmentally preferable alternative is defined by the CEQ in its *NEPA's Forty Most Asked Questions* as: "The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA Section 101. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources" (Q6a).

After completing the environmental analysis, the NPS identified alternative 2 as the environmentally preferable alternative in this EA because it best meets the definition established by the CEQ. Alternative 2 would best protect and enhance the historical resources of park while minimizing disruption to the natural environment, while still meeting the project purpose and need.

Alternative 1 would not provide a comfort station at the Brawner Farm, resulting in an adverse effect on visitor use and experience within the park. Alternatives 2 and 3 would provide a comfort station; however, alternative 2 would have a greater beneficial impact to visitor use and experience by providing a facility with flushable toilets, running water (including a water fountain), electricity, and heat. Alternative 3 would not include any of these amenities. Additionally, alternative 2 would have less of an impact on park operations and maintenance due to fewer maintenance requirements when compared with a vault toilet option. Implementation of the GMP and proposal to convert the Brawner Farm into the main contact station for the Second Battle of Manassas would meet the need for a full restroom facility at this location. Given the intention to make the Brawner Farm an area of higher use within the park, alternative 2 would have a greater beneficial impact to visitor use and experience as well as park operations and management with the construction of a full restroom facility. There are no measureable differences between impacts to soils and vegetation when compared between alternatives 2 and 3. The greatest impacts under alternatives 2 and 3 would occur during the installation of the building structure. Alternative 2 would have additional impacts during the construction of the septic and well system; however, these are expected to be temporary impacts.

Although alternatives 2 and 3 would result in some impacts on the biological and physical environment, those impacts would be localized and minor, with available and feasible mitigation options. Changes to the natural environment would be more than balanced by the ability to provide benefits to visitor use and experience within the park.

Table 1 is a summary of environmental consequences of the alternatives. The full analysis of alternatives is included in "Chapter 4: Environmental Consequences."

TABLE 1: SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Impacted Resource	Alternative 1: No Action	Alternative 2 (preferred): Construction of an Accessible Comfort Station at the Brawner Farm with a Septic, Well, and Water Treatment System	Alternative 3: Construction of an Accessible Vault Toilet Facility at the Brawner Farm
Soils	Implementation of the no action alternative would not result in impacts on soils in the project area because there would be no modifications to these resources. There would be no cumulative impacts.	Construction of a new comfort station, septic system, and well under alternative 2 would disturb, modify, and expose soils as the result of grading and other construction activities, including utility trenching, and would result in short-term negligible to minor adverse impacts on soils. The loss, modification, and disturbance of soils from the construction of a new comfort station would increase potential for stormwater runoff and erosion and result in long-term minor adverse impacts on soils due to the localized nature of the impacts. The construction of the septic system and the requirements placed on soils by the drip fields would result in localized long-term negligible to minor adverse impacts. Cumulative impacts on the soils would be long-term negligible to minor adverse.	Construction of a new restroom structure under alternative 3 would disturb, modify, and expose soils as the result of grading and other construction activities and would result in short-term negligible to minor adverse impacts on soils. The loss, modification, and disturbance of soils from the construction of the vault toilet facility would increase potential for stormwater runoff and erosion and result in long-term minor adverse impacts on soils. Cumulative impacts on the soils would be long-term negligible to minor adverse.
Vegetation	Continued landscaping maintenance activities in the area under alternative 1 would have negligible long-term adverse impacts on vegetation. Cumulative impacts would be short and long-term negligible to minor adverse.	Alternative 2 would have short-term negligible adverse impacts due to continued lawn manicuring at the site and long-term negligible to minor adverse impacts due to the loss of vegetation at the facility site. Cumulative impacts would be short- and long-term negligible to minor adverse.	Alternative 3 would have long-term negligible to minor adverse impacts on vegetation due to the permanent loss of vegetation at the comfort station site and sidewalk. Cumulative impacts would be short- and long-term negligible to minor adverse.

Impacted Resource	Alternative 1: No Action	Alternative 2 (preferred): Construction of an Accessible Comfort Station at the Brawner Farm with a Septic, Well, and Water Treatment System	Alternative 3: Construction of an Accessible Vault Toilet Facility at the Brawner Farm
Visitor Use and Experience and Recreation Resources	Implementation of the no action alternative would result in long-term minor adverse impacts on visitor use and experience as a result of the lack of restroom facilities within a reasonable distance of the Brawner Farm. Long-term beneficial cumulative impacts would occur under the no action alternative.	Implementation of alternative 2 would result in long-term beneficial impacts on visitor use and experience as a result of ADA-accessible restroom facilities within a reasonable distance from the Brawner Farm. There also would be some short-term minor adverse impacts from construction noise. Long-term beneficial cumulative impacts would occur under alternative 2.	Implementation of alternative 3 would result in long-term beneficial impacts to visitor use and experience as a result of accessible restroom facilities within a reasonable distance from the Brawner Farm. There also would be some short-term minor adverse impacts during construction. However, this alternative would not have the same restroom amenities as alternative 2, such as flushing toilets, hand-washing sinks, or water fountains. Long-term beneficial cumulative impacts would occur under alternative 3.
Cultural Landscapes	Because the Brawner Farm and surrounding area would remain in the current conditions, implementation of the no action alternative would result in no impacts and no adverse effects. There would be no cumulative impacts.	Alternative 2, as currently proposed, would have negligible to minor impacts on the cultural landscape, resulting in no adverse effects. The current design has been developed in consultation with the park and SHPO to minimize impacts on historic resources. Cumulative impacts under alternative 2 would be long-term negligible to minor impacts, which would be considered to have no adverse effects to cultural landscapes under the NHPA.	Alternative 3, as currently proposed, would have long-term negligible to minor impacts on the cultural landscape, resulting in no adverse effect. The current design has been developed in consultation with the park and SHPO to minimize impacts on historic resources. Cumulative impacts under alternative 3 would be long-term negligible to minor impacts with no adverse effect to cultural landscapes.
Park Operations and Management	Implementation of alternative 1 would result in no impact on park operations and management from the continuation of current maintenance and staffing. Cumulative impacts would be long-term and short-term minor adverse impacts would result from the implementation of the GMP and the Sesquicentennial Celebration.	Implementation of alternative 2 would result in short-term minor adverse impacts and long-term beneficial and negligible to minor adverse impacts on park operations and management. Cumulative impacts on park operations and management would be long-term minor and adverse.	Implementation of alternative 3 would result in short-term minor adverse impacts during construction and long-term minor to moderate adverse impacts due to increased staffing and maintenance of the facility. Long-term beneficial impacts would occur due to the convenience of the comfort station to park staff working at the Brawner farm. Cumulative impacts on park operations and management would be long term minor to moderate adverse.

CHAPTER 3: AFFECTED ENVIRONMENT

This chapter describes existing environmental conditions in the areas potentially affected by the alternatives evaluated. This chapter describes the following resource areas: soils; vegetation; visitor use and experience and recreational resources; cultural landscapes; and park management and operations. Potential impacts are discussed in “Chapter 4: Environmental Consequences.”

SOILS

Soils are classified by a complex taxonomy that includes soil associations, series, and phases. Soil associations represent the largest and most general classification. A soil association is a landscape that has a distinctive proportional pattern of soils and has been named for the major soil types that it represents. It normally consists of one or more major soil series and at least one minor soil series. A soil series is a collection of soils that have major layers similar in thickness, arrangement, and other important characteristics, but may differ in surface layer texture. Each soil series is named for a town or other geographic feature near the location where the series was first observed and mapped. Soil phases are more detailed classifications that differentiate soils of the same series based on characteristics that affect the use of the soils, such as the texture of the surface soil, slope, or stoniness (USDA 1999).

The information presented below, which describes soils within the study area, is taken from the Web Soil Survey of Prince William County, Virginia, part of the National Cooperative Soil Survey conducted by the Natural Resources Conservation Service. Table 2 presents general soils characteristics in the project area.

TABLE 2: SOILS IN THE PROJECT AREA

Soil Type	Slope (%)	Drainage	Permeability	Flooding Hazard	Runoff	Depth
Arcola silt loam	2-7	Well drained	Moderate	None	Medium to rapid	Moderately deep
Panorama silt loam	2-7	Well drained	Moderate	None	Medium	Deep

The park and the project area are in the Triassic formation of the Northern Virginia Piedmont physiographic province, which is underlain by intrusive volcanic diabase, a sedimentary calcareous siltstone, sandstone, and metasiltstone rock, which provides the parent material for diabase soils (NPS 2009). Specifically, the project area is located on the western edge of the park along Pageland Lane and near the Brawner Farm in Prince William County, Virginia. The project area overlies the Arcola and Panorama silt loam general soil types (figure 5).

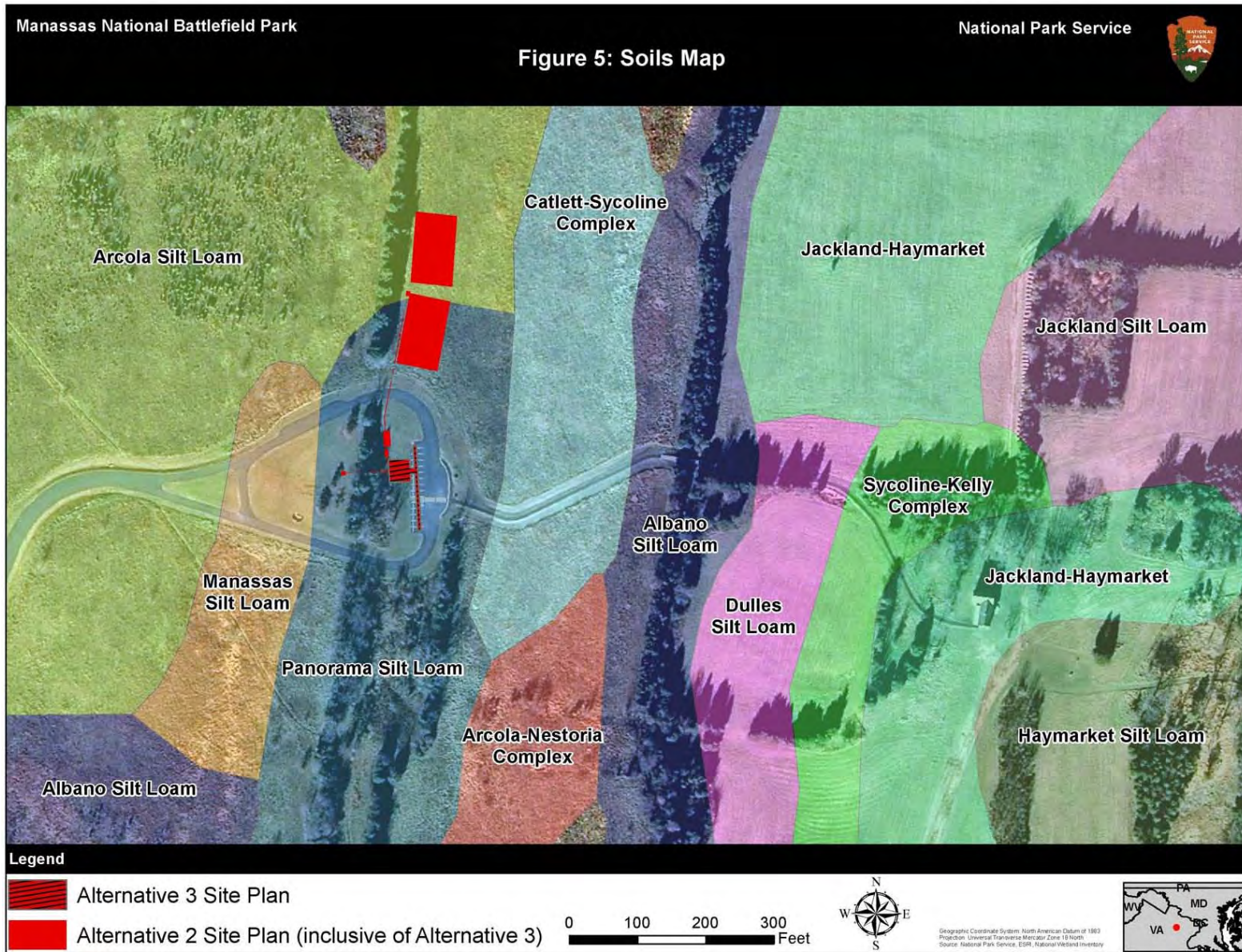


FIGURE 5: SOILS MAP

Arcola silt loam consists of moderately deep, well drained, gently sloping soils that formed in residuum weathered from siltstone and sandstone. Permeability of these soils is moderate with medium to rapid runoff and no frequency of flooding. These soils are typically used for cropland and pasture and are located on hill slopes (USDA NRCS 2011).

Panorama silt loam soils are deep, well-drained, gently sloping soils formed in predominantly in residuum from interbedded siltstones and fine-grained sandstones. These soils have no flooding potential, with medium runoff and moderate permeability. Most of this soil is cleared and used for row or hay crops, with the remainder being natural woodlands found at drainage divides (USDA NRCS 2011)

Both of these soil types are slightly to moderately erodible (USDA NRCS 2008).

VEGETATION

Vegetation at the park is an assortment of open fields and forest in a range of successional stages, as well as stream and wetland habitat. Fields are maintained by agricultural leases, as well as mowing by park personnel. The forests, approximately 50 percent of the park, are primarily deciduous, and include stands of oak/hickory, pine/cedar, mixed pine/hardwood, and bottomland hardwood. Many of the open areas contain native communities of grassland. Throughout the park, more than 700 taxa of vascular plants can be found, 124 of which were classified as exotic, invasive species (NPS 2008a).

The proposed site is composed of mostly a manicured lawn set in the middle of the existing parking circle, bordered by trees on the west side. The surrounding area includes a number of native grasses and other plants, such as eastern grama grass (*Tripsacum dactyloides*); Indian grass (*Sorghastrum nutans*); switch grass (*Panicum virgatum*); big and little bluestem (*Andropogon gerardii* and *Schizachyrium scoparium*); and native forbs, such as purple coneflower (*Echinacea purpurea*). A letter was received from the VDCR on March 17, 2011 recommending an inventory for the rare plant, marsh hedgenettle (*Stachys pilosa* var.) because the proposed site is within a Manassas Diabase Uplands Conservation Site and could contain the natural heritage resource, Under direction of this letter, surveys for the marsh hedgenettle were completed on June 13, 2011, with no species or populations being found. Consultation with VDCR regarding methodology and results is on-going at this point in the project.

VISITOR USE AND EXPERIENCE AND RECREATION RESOURCES

The project area is located within Manassas National Battlefield Park, which encompasses 5,071 acres of land in and around Manassas, Virginia. The park preserves the site of two key American Civil War battles including the First Battle of Manassas (also known as the First Battle of Bull Run) on July 21, 1861, and the Second Battle of Manassas (also known as the Second Battle of Bull Run) on August 28 to 30, 1862. Visitors to the park have the opportunity to learn more about the Civil War and these battles by participating in a variety of activities, taking in the scenic vistas, and viewing the historical sites throughout the park (NPS 2011a).

Visitor use resources at Manassas National Battlefield Park include one visitor center, one visitor contact station, a picnic area, 5,071 acres of the park, 12 miles of tour road, 150 interpretive park signs, 21 miles of hiking trails, and 23 miles of bridle trails (NPS 2011a). The park is open between 8:30 a.m. and 5:00 p.m. daily and closed on Thanksgiving and December 25 (NPS 2011b).

In the past 10 years, visitation to the park has decreased almost 45 percent from 1,025,826 visitors in 1997 to 584,926 visitors in 2007. Since 2007, visitation reached a 42-year low of 584,926 visitors in 2009, but has since increased to 612,490 visitors in 2010 (NPS 2011c). Visitation is expected to

drastically increase in 2012 due to the Sesquicentennial Celebration in August, which commemorates the 150th anniversary of the Second Battle of Manassas (NPS 2011a).

Although Manassas National Battlefield Park is open year round, visitation varies seasonally, with the lowest level of use in the winter and the highest level of use in the summer. This was seen in 2010 when visitation ranged from 51,592 to 95,702 between March and August, and dropped to 18,225 to 38,526 from December to February (NPS 2011d). During periods of high visitation, most occurs on the weekends (NPS 2009). In general, there are three categories of visitors to Manassas National Battlefield Park:

- **General visitors:** These people usually have limited specific interests in, or knowledge of, the battles. They visit the park to gain a general understanding of the park's significance. These visitors usually spend less than two hours in the park, mostly at the visitor center and the Henry Hill area.
- **Historical visitors:** These individuals have a good understanding of the overall significance of the battles, and they are seeking to examine and understand the actions and details of the two battles. They will spend about five hours in the park touring the battle sites.
- **Recreational visitors:** These people are seeking recreational experiences such as cross-country skiing, fishing, hiking, horseback riding, jogging, nature study, picnicking, and sledding. They usually visit the park on spring, summer, and fall weekends and holidays (NPS 2009).

The project area is specifically located near the Brawner Farm, which in 2009 was renovated to be a visitor contact station, specifically related to the interpretation of the Second Battle of Manassas (NPS 2008a). The facility includes a limited amount of interpretive displays and museum items relevant to the second battle, as well as basic visitor services providing orientation and information (NPS 2009). Visitation for the Brawner Farm location varies by time of year. At the Brawner Farm, there are approximately 200 visitors per week in the winter, 500 visitors per week in the spring/fall, and 750 to 1,000 visitors per week in the summer months. The only exception is the last week in August, when the summer month's number of visitors typically doubles.

CULTURAL RESOURCES: CULTURAL LANDSCAPES

Background Information: Second Battle of Manassas

Manassas National Battlefield Park was established on May 10, 1940, to preserve the historic landscape that encompasses the buildings, objects, and views relating to the Battles of First and Second Manassas. The boundary expansion that brought the Brawner Farm and Stuart's Hill into the park boundary was authorized on November 10, 1988, with enactment of Public Law 100-647. This act vested in the United States all rights, title, and interests to approximately 558 acres of private property near the park.

Two of the Civil War's key battles occurred in Prince William County, and it was a traumatic period for the general region as well. Because there were a limited number of railroads in the south, the Orange and Alexandria and the Manassas Gap lines played important roles in the movement of troops and supplies during the Civil War. In 1861, the war's first major land battle was the Battle of Bull Run, where the Union and the Confederacy fought for control for the railroads that ran through Manassas Junction. A second battle occurred at the same site 13 months later. Both battles were won by the Confederacy, and the second, bloodier battle, considered to be General Robert E. Lee's greatest success in the war, paved the way for invasion of the North (NRHP 2006).

A portion of the existing right-of-way crosses the western edge of the Manassas National Battlefield Park in the vicinity of Stuart's Hill, Stony Ridge, and the Brawner Farm. Much of the first day of fighting

during the Second Battle of Manassas took place on the Brawner Farm property, while Stony Ridge was the site of Confederate batteries later in the battle. Stuart's Hill served as the headquarters for General Robert E. Lee (Hennessy 1990, 1993). The following summary was developed from primary sources (Official Records of the War of the Rebellion; Gibbon 1928) and secondary sources (Hennessy 1990, 1993; Early and Fanning 2002).

On the evening of August 28, Union troops marching east toward Centreville, following the Warrenton Turnpike, were fired on by Confederate artillery. Union Brigadier General John Gibbon, commander of the "Black Hat" Brigade, sent his 2nd Wisconsin regiment up the hill just east of the Brawner Farm to silence the guns. Instead of one Confederate battery, they found a line of Confederate infantry coming at them across the open fields. This was the Stonewall Brigade, the lead unit of six brigades that Jackson would eventually bring into the fight. Gibbon hurriedly brought the rest of his men into line. On his left was the 19th Indiana, their left flank anchored on the Brawner Farm House. For about 90 minutes, until darkness fell, two lines of infantry stood 70 to 80 yards apart and shot it out in what Gibbon said was the most intense small-arms fire he saw during the entire war. He later wrote, "The left of my line rested at the Douglas House, and from that point as darkness came on, I could see the enemy's line extending far to my left. Should the enemy get possession of the house, and yard full of trees, he would entirely flank my line and enfilade¹ it" (Gibbon 1928). Toward the close of the fighting Virginia troops under William Taliaferro did take the farm, and the Indiana men fell back toward Brawner's woods. Taliaferro later recalled the fighting thus:

A farm-house, an orchard, a few stacks of hay, and a rotten "worm" fence were the only cover afforded the opposing lines of infantry; it was a stand-up combat, dogged and unflinching, in a field almost bare... Twice our lines were advanced until we reached a farmhouse and orchard on the right of our line and were within about 80 yards of a greatly superior force of the enemy... Our troops held the farmhouse and one edge of the orchard, while the enemy held the orchard and enclosure next to the turnpike. To our left was no cover, and our men stood in the open field without shelter of any kind [Earley and Fanning 2002].

After nightfall, the fighting moved away from the farm. However, the house and the high ground surrounding it continued to play some part in the battle. A battery of Pennsylvania light artillery occupied the site the following morning, and Confederate guns massed all along this ridge (Stony Ridge) in the afternoon of August 29 and during the day of August 30. By mid-morning on August 29, Jackson's forces were entrenched in a strong defensive position that stretched nearly two and a half miles. As General Robert E. Lee noted in his June 1863 report on the battle: "The troops were disposed in rear of Groveton along the line of the unfinished branch of the Manassas Gap Railroad, and extended from a point a short distance west of the turnpike toward Sudley Mill" (Official Records of the War of the Rebellion).

Union troops, under the ultimate command of Major General John Pope, with corps led by Major General Franz Sigel and Major General Samuel P. Heintzelmann, assaulted Jackson's line throughout the morning, but were unable to breach it before the armies of Lee and Major General James Longstreet arrived on scene to secure Jackson's right flank. Lee established his headquarters from the vantage point of Stuart's Hill, where it would remain until late afternoon on August 30. By mid-afternoon, the Confederate army was now arrayed along the Independent Line to the north, the crossroads of the Warrenton Turnpike and Pageland Lane, and the Brawner Farm tract to the west, while the Union forces

¹ gunfire directed along an enemy line from a flanking position.

occupied Governor's Woods, Dogan's Ridge, and the intersection of Lewis Lane and Warrenton Turnpike to the east and southeast. The two armies clashed throughout the day, with heavy casualties to both sides. Several Union forays pressed Jackson's line, and Brigadier General Cuvier Grover's brigade actually broke through the Confederate line, but was forced to retreat due to a lack of support. Meanwhile, Lee ordered a substantial portion of Brigadier General John B. Hood's division to establish a forward base to the east of the Confederate positions. By midnight, this "reconnaissance in force," after successfully repulsing a Union division at the crossroads, had advanced the Confederate line well east of the crossroads, mere yards from Pope's main army. However, Lee, deciding the forward troops were too exposed, halted the attack and ordered Hood's forces to withdraw.

The morning of the final day of battle, Pope, erroneously believing that the Confederate army was retreating from the field (and apparently unwilling to acknowledge that Longstreet's sizable force stretched south of the turnpike), focused his attack along the Turnpike and the Sudley Haymarket Road. Unfortunately for Pope, Confederate forces massed south of the Turnpike succeeded in turning the Union left flank, while Longstreet's army and heavy artillery fire from Brawner Farm caused the Union attack to collapse. The Union forces were forced to retreat to Chinn Ridge, where several Union brigades managed to halt the Confederate advance temporarily and allow the rest of the Union Army to regroup at Henry Hill and make a final stand that ended the battle. Ultimately, Pope would withdraw his army back into the defenses of Washington.

While Pope was directing his unsuccessful attack, Major General Fitz John Porter, still operating on orders issued by Pope on the previous day, was advancing on Jackson's position on the unfinished line, in the vicinity of the Deep Cut. By mid-afternoon, Union troops had again managed to overrun sections of the Confederate defenses, and some Confederate troops, completely out of ammunition, were forced to use rocks pulled from the unfinished railroad grade as projectiles. Once again, however, the Union forces assaulting Jackson's troops were denied reinforcements, and were unable to press their advantage, in part due to a deadly barrage from Confederate batteries as the Union troops crossed the open battlefield. Eventually, Porter's forces were repulsed, and forced to retreat with the rest of the Union Army.

Although the Confederate army was unable to capitalize on its victory by overwhelming the Union army completely, they clearly controlled the entire battlefield by the evening of the final day, and historians acknowledge the Confederate victory as "the decisive battle of the Northern Virginia Campaign" (ABPP 2008). Although mistakes were made by the commanders of both armies during the engagement, those committed by Pope proved to be the most costly, and within a few weeks he was relieved of his command (Sifakis 1988).

All observers agreed that the Manassas battlefield was devastated by the fighting. A reporter for the Washington Star wrote in 1865:

From Alexandria to the battlefield is one wide area of desolation. Fences are utterly swept away. Here and there a dilapidated farmhouse shelters a few squalid inmates and occasionally a small patch of wheat or corn is passed, but the whole face of the country is changed [Earley and Fanning 2002].

An examination of the maps depicting troop movements during the Second Battle of Manassas reveals that Confederate forces retained firm control of the terrain on which the existing right-of-way is situated for the entire course of the battle (Hennessy 1990). During the first day, the bulk of the fighting centered on the Brawner Farm House, located to the east of the existing right-of-way. However, elements under Taliferro's command did occupy ground within the existing right-of-way during the evening of August 28, and other small Confederate forces moved through the area, particularly in the vicinity of the unfinished railroad line (Site 44PW0299). By midday on August 29, the bulk of Lee and Longstreet's

forces were concentrated on Stuart's Hill and the surrounding vicinity, including the existing right-of-way, and Lee would set up his main headquarters southeast of the Pageland Lane-Warrenton Turnpike crossroads on the eastern portion of Stuart's Hill, with elements of his army occupying the area that includes the existing right-of-way. Minor troop movements crossing this area would continue throughout the day to the north of Lee's command center, though by late afternoon Jackson's right flank appears to have shifted south and east, just outside of the existing transmission line corridor. For the most part, the overall position occupied by Confederate forces within the existing right-of-way remained largely unchanged during August 30, though the specific positions of individual elements shifted throughout the day, as units and divisions moved around on Stuart's Hill. By late afternoon on August 30, Lee had decamped from his headquarters, his army was on the march, advancing in conjunction with Longstreet against Pope's forces to the east, and only one element of the Confederate army remained within and around the existing right-of-way, along Pageland Lane to the north of the crossroads. By early evening on the 30th, all of the Confederate forces were in pursuit of the Union army.

Manassas National Battlefield Park includes cultural landscapes, as discussed below.

DESCRIPTION OF CULTURAL LANDSCAPES

Cultural landscapes are the result of the long interaction between people and the land, and reflect the influence of human beliefs and actions over time upon the natural landscape. Shaped through time by historical land use and interpretation practices, as well as politics and property laws, levels of technology, and economic conditions, cultural landscapes provide a living record of an area's past and a visual chronicle of its history. The dynamic nature of modern human life, however, contributes to the continual reshaping of cultural landscapes, making them a valuable source of information about specific times and places on one hand, but rendering their long-term preservation a challenge on the other.

For a cultural landscape to be listed in the NRHP, it must possess significance (the meaning or value ascribed to the landscape) and retain the integrity of those features necessary to convey its significance as well as meet one or more of the NRHP criteria (36 CFR 63). The character-defining features of a cultural landscape include spatial organization and land patterns; topography; vegetation; circulation patterns; water features; and structures/buildings, site furnishings, and objects. Individual features of the landscape are never examined alone but only in relationship to the overall landscape. The arrangement and interrelationships of a cultural landscape's organizational elements and character-defining features provide the key to determining the potential impacts and effects of proposed undertakings on a cultural landscape (Birnbaum 1996).

Cultural landscapes, as defined by *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, consist of "a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein) associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values (NPS 1995b)." As part of its ongoing efforts to identify and properly manage its significant cultural resources, the NPS has initiated the identification, documentation, and appropriate treatment of cultural landscapes at Manassas National Battlefield Park. As part of these efforts, in 1996, the National Capital Region of the NPS conducted three cultural landscape inventories of different parts of the park. These inventories did not include the Stuart's Hill tract, which had previously been studied by the University of Georgia, School of Environmental Design. The 1996 effort produced a cultural landscape rehabilitation report. Each study included a reconnaissance section that identified the scope of the cultural landscape, what is known about the resource, and future research needs. Each study also contained an analysis and evaluation section, which provided a site history of the landscape development, defined the characteristics that contribute to the historic character of the landscape, and identified the individual features associated with those characteristics.

The historic battlefield landscape constitutes the park's most important resource and provides the setting for understanding the events of the Civil War battles fought here. Although the ground cover has changed in some areas, the terrain remains largely unaltered, and key landscape features survive. Within the battlefield landscape are numerous resources that contribute to the park's significance, including historic buildings, archeological sites and ruins, remnants of historic fence lines, cemeteries and burial sites, traces of wartime roads and farm lanes, the reconstructed Stone Bridge, and the graded bed of the unfinished railroad.

PARK OPERATIONS AND MANAGEMENT

Manassas National Battlefield Park staff is organized into six operating divisions: interpretation, law enforcement, maintenance, resource management, management, and administration (Fogelman pers. comm. 2011). Currently, the park has 27 permanent employees and 19 seasonal or temporary employees for a full-time equivalent of 33.69 employees annually. Within the maintenance division there are 10 full time and six seasonal staff. In fiscal year 2010, the operating budget was \$3,157,000 (Fogelman pers. comm. 2011).

In the Brawner Farm vicinity, routine park maintenance includes checking the conditions of the existing staff and visitor Porta-Johns, checking the grounds for litter and trash, mowing and trimming turf around the Brawner Farm House and yard as well as the pedestrian path and parking lot, tree damage clean-up as needed, and other grounds care activities (Thompson pers. comm. 2011).

CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

The “Environmental Consequences” chapter analyzes both beneficial and adverse impacts that would result from implementing any of the alternatives considered in this EA. This chapter also includes definitions of impact thresholds (e.g., negligible, minor, moderate, and major), methods used to analyze impacts, and the analysis methods used for determining cumulative impacts. As required by the CEQ regulations implementing NEPA, table 1 provides a summary of the environmental consequences for each alternative (“Chapter 2: Alternatives”). The resource topics presented in this chapter and the organization of the topics correspond to the resource discussions in “Chapter 3: Affected Environment.”

GENERAL METHODOLOGY FOR ESTABLISHING IMPACT THRESHOLDS AND MEASURING EFFECTS BY RESOURCE

The following elements were used in the general approach for establishing impact thresholds and measuring the effects of the alternatives on each resource category:

- general analysis methods as described in guiding regulations, including the context and duration of environmental effects;
- basic assumptions used to formulate the specific methods used in this analysis;
- thresholds used to define the level of impact resulting from each alternative;
- methods used to evaluate the cumulative impacts of each alternative in combination with unrelated factors or actions affecting park resources; and
- methods and thresholds used to determine if impairment of specific resources would occur under any alternative.

These elements are described in the following sections.

GENERAL ANALYSIS METHODS

The analysis of impacts follows CEQ guidelines and Director’s Order 12 procedures (NPS 2001) and is based on the underlying goal of preserving the historic landscape containing historic sites, buildings, objects, and views that contribute to the national significance of the Battles of First and Second Manassas, for the use, inspiration, and benefit of the public. This analysis incorporates the best available scientific literature applicable to setting and the actions being considered in the alternatives.

The NPS convened an interdisciplinary team to provide important input for the impact analysis. For each resource topic addressed in this chapter, the applicable analysis methods are discussed, including assumptions and impact intensity thresholds.

ASSUMPTIONS

Several guiding assumptions were made to provide context for this analysis. These assumptions are described in the following sections.

Analysis Period

The analysis period for this assessment is the expected period needed to construct the prefabricated comfort station and associated sidewalks, drip fields, and water well. Pending funding, construction

would begin in November 2011 and would be completed by March 2012. The analysis period for some resource areas may extend beyond the period of construction. The specific analysis period for each impact topic is defined at the beginning of each topic discussion.

Geographic Area Evaluated for Impacts (Area of Analysis)

The geographic study area (or area of analysis) is the area of the proposed comfort station at the Brawner Farm contact station. The facility would be between 420 (minimum) and 575 (maximum) square feet, with a 3-foot-wide sidewalk surrounding the facility and bordering the parking lot. Additional areas to be evaluated are the drip fields (under alternative 2), which would require an area of 60 feet by 114 feet. Construction and installation of the facility would be in the area immediately surrounding the Brawner Farm parking lot off Pageland Lane under alternatives 2 and 3. The area of analysis is contained within park boundaries for all cumulative impact assessments. The specific area of analysis for each impact topic is defined at the beginning of each topic discussion.

IMPACT THRESHOLDS

Determining impact thresholds is a key component in applying NPS *Management Policies 2006* and Director's Order 12. These thresholds provide the reader with an idea of the intensity of a given impact on a specific topic. The impact threshold is determined primarily by comparing the effect to a relevant standard based on applicable or relevant/appropriate regulations or guidance, scientific literature and research, or best professional judgment. Because definitions of intensity vary by impact topic, intensity definitions are provided separately for each impact topic analyzed in this document. Intensity definitions are provided throughout the analysis for negligible, minor, moderate, and major impacts. In all cases, the impact thresholds are defined for adverse impacts. Beneficial impacts are addressed qualitatively.

Potential impacts of all alternatives are described in terms of type (beneficial or adverse); context; duration (short- or long-term); and intensity (negligible, minor, moderate, major). Definitions of these descriptors include

Beneficial—A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.

Adverse—A change that declines, degrades, and/or moves the resource away from a desired condition or detracts from its appearance or condition.

Context—The affected environment within which an impact would occur, such as local, parkwide, regional, global, affected interests, society as whole, or any combination of these. Context is variable and depends on the circumstances involved with each impact topic. As such, the impact analysis determines the context, not vice versa.

Duration—The duration of the impact is described as short-term or long-term. Duration is variable with each impact topic; therefore, definitions related to each impact topic are provided in the specific impact analysis narrative.

Intensity—Because definitions of impact intensity (negligible, minor, moderate, and major) vary by impact topic, intensity definitions are provided separately for each impact topic analyzed.

CUMULATIVE IMPACTS ANALYSIS METHOD

The CEQ regulations to implement NEPA require the assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7). As stated in the CEQ handbook, “Considering Cumulative Effects” (CEQ 1997), cumulative impacts need to be analyzed in terms of the specific resource, ecosystem, and human community being affected and should focus on effects that are truly meaningful. Cumulative impacts are considered for all alternatives, including the no action alternative.

Cumulative impacts were determined by combining the impacts of the alternative being considered with other past, present, and reasonably foreseeable future actions. Therefore, it was necessary to identify other ongoing or reasonably foreseeable future projects and plans at Manassas National Battlefield Park and, if applicable, the surrounding area. Table 3 summarizes the actions that could affect the various resources at the park, along with the plans and policies of the park and surrounding jurisdictions, which were discussed in “Chapter 1: Purpose and Need.”

The analysis of cumulative impacts was accomplished using four steps:

Step 1—Identify Resources Affected: Fully identify resources affected by any of the alternatives. These include the resources addressed as impact topics in chapters 3 and 4 of the document.

Step 2—Set Boundaries: Identify an appropriate spatial and temporal boundary for each resource. The temporal boundaries are noted in table 3, and the spatial boundary for each resource topic is listed under each topic.

Step 3—Identify Past, Present, and Reasonably Foreseeable Future Actions: Determine which past, present, and reasonably foreseeable future actions to include with each resource. These are listed in table 3 and described below.

Step 4—Cumulative Impact Analysis: Summarize impacts of these other actions (x) plus impacts of the proposed action (y), to arrive at the total cumulative impact (z). This analysis is included for each resource.

CUMULATIVE IMPACT PROJECTS

Installation of the Access Road and Parking Lot

In 2004, a paved access road and parking lot was installed to provide access to the Brawner Farm House. The installation of the access road and parking lot has provided quicker and more convenient access to the historic site and as a result, has increased visitor use in the area.

Manassas National Battlefield Park: Final GMP/Environmental Impact Statement - April 2008

The GMP addresses proposed actions to guide decision-making and problem solving to protect the natural and cultural integrity of the park and proposes alternatives to address the current needs of the park. Since the acquisition of Stuart’s Hill, the park has been able to offer a more comprehensive interpretation of the Second Battle of Manassas. The GMP is described in more detail in “Chapter 1: Purpose and Need.”

Second Battle of Manassas Sesquicentennial Celebration

The NPS is inviting the public to commemorate the 150th anniversary of the Second Battle of Manassas, through participating in a variety of special programs and activities at Manassas National Battlefield Park in August 2012.

Environmental Assessment: Dominion Virginia Power Electric Power Transmission Upgrade Manassas National Battlefield Park (March 2009)

Dominion Virginia Power, in cooperation with the NPS, proposed to upgrade and reconfigure the existing structures within the corridor from the Gainesville Substation north to the Loudoun Substation as double-circuit structures. The line reconfigurations are located on the western border of the park in the vicinity of the Stuart's Hill Center and Brawner Farm. Upon the approval of the construction permit and signing the Finding of No Significant Impact, approximately 1.8 miles of transmission lines were rebuilt within park boundaries. Construction for this project was completed in the spring 2011.

The following past, present, and reasonably foreseeable future actions at the park or in the surrounding area have been identified as having the potential to impact the resources evaluated in this EA.

TABLE 3: CUMULATIVE IMPACT SCENARIO TABLE

Impact Topic	Study Area	Past Actions	Present Actions	Future Actions
Soils	Manassas National Battlefield Park boundaries	Establishment of the access road and parking area at the Brawner Farm	None	Projects associated with the GMP and the Sesquicentennial Celebration
Vegetation	Manassas National Battlefield Park boundaries	Establishment of the access road and parking area at the Brawner Farm	None	Projects associated with the GMP and the Sesquicentennial Celebration
Visitor Use and Experience and Recreational Resources	Manassas National Battlefield Park boundaries	Establishment of the access road and parking area at the Brawner Farm	None	Projects associated with the GMP and the Sesquicentennial Celebration
Cultural Landscapes	Manassas National Battlefield Park boundaries	Establishment of the access road and parking area at the Brawner Farm Upgrade of transmission line facilities	None	Projects associated with the GMP and the Sesquicentennial Celebration
Park Operations and Management	Manassas National Battlefield Park boundaries	Establishment of the access road and parking area at the Brawner Farm	None	Projects associated with the GMP and the Sesquicentennial Celebration

SOILS

METHODOLOGY AND ASSUMPTIONS

Potential impacts were assessed based on the extent of disturbance to soils, including natural undisturbed soils, the potential for soil erosion resulting from disturbance, and limitations associated with soils.

Analysis of possible impacts on soils was based on information provided by the NPS and other agencies and professional judgment. It is assumed that the existing paved parking area would serve as the construction staging area.

STUDY AREA

The geographic study area for impacts on soils includes the project area for the proposed actions at the Brawner Farm within the Manassas National Battlefield Park. It is expected that construction activities would not occur outside these areas. The study area for cumulative impact analysis includes the project area in the park and areas immediately adjacent to the project.

IMPACT THRESHOLDS

The impact intensities for soils were defined as follows:

- Negligible:* The action would result in a change to soils, but the change would be so small that it would not be of any measurable or perceptible consequence.
- Minor:* The action would result in impacts on soils, but the change would be small and localized and of little consequence.
- Moderate:* The action could result in a change to soils; the change would be measurable and of consequence. Mitigation measures would be necessary to offset adverse impacts and would likely be successful.
- Major:* The action would result in a noticeable change to soils; the change would be measurable and would result in a severely adverse impact. Mitigation measures necessary to offset adverse impacts would be needed and would be extensive, and their success would not be guaranteed.
- Beneficial:* A beneficial impact would occur when actions were taken to actively preserve, stabilize, or return soils to their pre-existing condition.
- Duration:* Short-term impacts would occur during the implementation of the alternative; long-term impacts would extend beyond implementation of the alternative.

IMPACTS OF ALTERNATIVE 1: NO ACTION

Analysis

The no action alternative represents the current conditions in the project area. There would be no grading or excavation of soils or removal of vegetation as a result of this alternative, and visitors would continue to use the two Porta-Johns (one handicap) at the site and the other existing restroom facilities within the park. Implementation of the no action alternative would result in no impact on soils.

Cumulative Impacts

Because no impacts are projected under the no action alternative, no cumulative impacts would occur.

Conclusion

Implementation of the no action alternative would not result in impacts on soils in the project area because there would be no modifications to these resources. There would be no cumulative impacts.

IMPACTS OF ALTERNATIVE 2 (PREFERRED): CONSTRUCTION OF AN ACCESSIBLE COMFORT STATION AT THE BRAUNER FARM WITH A SEPTIC, WELL, AND WATER TREATMENT SYSTEM

Analysis

Under alternative 2, the greatest impact on soils would occur during the installation of the gravel support pad, concrete building apron, and an ADA compliant sidewalk connecting the facility to the existing parking area. The building footprint of the restroom structure would be a minimum 420 square feet and a maximum 575 square feet and set on a gravel pad. The building would be surrounded by a 3-foot-wide concrete sidewalk. Another 5-foot-wide and approximately 100-foot-long concrete sidewalk would be installed along the western edge of the parking spaces to allow visitors to access the restroom. In addition, a septic system would be included, incorporating two pumps, a storage tank, and pipe to the designated primary drip field. The reserve drip field would remain virgin land and would be designated for future use. Both drip field locations would be north of the facility and parking area and would be 60 feet wide and 114 feet long. The site plan would also include the installation of a new well to supply the facility with water and a water treatment system to supply a safe source of potable water. A water fountain would be installed on the outside of the building for visitor use. An electric transformer is already located at the site; underground lines would be installed from the existing transformer to the new facility for the operation of lights, the well, and heating system. The total area of disturbance for the construction of the facility and associated septic and well systems is estimated to be 0.56 acre.

In preparation for construction activities, grading and leveling on construction areas would occur in areas currently maintained as turf or natural vegetation. As a result, soils would be compacted, the soil layer structure would be disturbed and modified, and soils would be exposed, increasing the overall potential for erosion. Mitigation would include the employment of best management practices, which would include the use of silt fencing to prevent and control soil erosion and sedimentation during construction of the proposed comfort station and septic system. Construction activities would have a localized short-term negligible to minor adverse impact on soils in the project area. Soil productivity would be temporarily disturbed in the primary drip field and would be completely eliminated for those areas within the footprint of the new restroom and sidewalks. The proposed restroom layout increases the total amount of impervious surfaces, and as a result would potentially increase stormwater runoff and erosion in the long term. Construction of the restroom and sidewalk would have localized long-term, minor adverse impacts on soils in the project area due to the loss of soil productivity and increased amount of impervious surfaces.

The construction of the new septic system, well, water treatment facility, and tank would disturb and remove soil productivity and would result in long-term negligible to minor adverse impacts on soils. Utility trenching for electricity and plumbing could increase the potential for erosion and result in short-term negligible adverse impacts. In areas where the drip fields for the septic system would be located, soils would constantly be filtering material released through the septic system; however, vegetation would be able to grow at the surface, thus not eliminating soil productivity. As a result, impacts on soils would be localized long-term negligible to minor adverse.

Cumulative Impacts

Projects that could affect soils include past, ongoing, and future projects at Manassas National Battlefield Park. Past and ongoing projects associated with the 2008 GMP include minor modifications to a number of existing facilities resulting in short- and long-term negligible adverse impacts on soils. These projects have required or would require some soil disturbance, including localized erosion and compaction, but would include mitigation to reduce soil loss and erosion. The plan also prescribes resource protection resulting in long-term beneficial impacts on soils. During the installation of the paved access road and parking area at the Brawner Farm in 2004, soil productivity was eliminated and impervious surfaces were introduced. The access road and parking turnaround is approximately 0.5 mile long by 35 feet wide (doubling in width at the parking area). Proper erosion and sediment control measures were used during construction; however, due to the loss in soil productivity and increased potential for runoff, there are long-term minor to moderate impacts on soils. In August 2012, Manassas National Battlefield Park will hold its Sesquicentennial Celebration. This celebration is expected to drastically increase the number of visitors to the park and could increase soil compaction as visitors step off the paved pathways. The increased visitor traffic would have a short-term negligible impact on soils due to the increased potential for soil compaction during the Sesquicentennial Celebration.

Overall, impacts from past, present, and reasonably foreseeable future actions would be localized long-term negligible to minor adverse impacts. When combined with the localized long-term negligible to minor adverse impacts from construction activities and increased impervious surfaces, cumulative impacts on soils would be long-term negligible to minor adverse.

Conclusion

Construction of a new comfort station, septic system, and well under alternative 2 would disturb, modify, and expose soils as the result of grading and other construction activities, including utility trenching, and would result in short-term negligible to minor adverse impacts on soils. The loss, modification, and disturbance of soils from the construction of a new comfort station would increase potential for stormwater runoff and erosion and result in long-term minor adverse impacts on soils due to the localized nature of the impacts. The construction of the septic system and the requirements placed on soils by the drip fields would result in localized long-term negligible to minor adverse impacts. Cumulative impacts on the soils would be long-term negligible to minor adverse.

IMPACTS OF ALTERNATIVE 3: CONSTRUCTION OF AN ACCESSIBLE VAULT TOILET FACILITY AT THE BRAWNER FARM

Analysis

Under alternative 3, the greatest impact on soils would occur during the installation of the gravel support pad, concrete storage tank, and sidewalk connecting the building facility to the existing parking area. This facility would not include a septic, well, or water treatment system, and subsequently drainage fields would not be necessary. The restroom structure would have a footprint similar to the one described under alternative 2; however, it would not include the drip fields (installed or reserve). The estimated footprint would be a minimum 420 square feet and a maximum 575 square feet and set on a gravel pad. The building would be surrounded by a 3-foot-wide concrete sidewalk. Another 5-foot-wide and approximately 100-foot-long concrete sidewalk would be installed along the western edge of the parking spaces to allow visitors and staff to access the restroom.

In preparation for construction activities, grading and leveling of construction areas would occur in areas currently maintained as turf or natural vegetation. As a result, soils in the area of construction would be

compacted, the soil layer structure would be disturbed and modified, and soils would be exposed, increasing the overall potential for erosion. Mitigation would include the employment of best management practices, which would include the use of silt fencing to prevent and control soil erosion and sedimentation during construction of the comfort station. Soil productivity would be completely eliminated for those areas within the footprint of the new restroom and sidewalk. The proposed restroom layout incorporates impervious surfaces, therefore increasing the total amount of impervious surface, and would potentially increase stormwater runoff and erosion in the long term. Construction of the restroom and sidewalk would have localized long-term negligible to minor adverse impacts on soils in the project area.

Cumulative Impacts

The impacts of past, present and reasonably foreseeable future actions under alternative 3 would be the same as those listed under alternative 2. When combined with the localized long-term negligible to minor adverse impacts from construction activities and increased impervious surface under this alternative, cumulative impacts would be long-term negligible to minor adverse.

Conclusion

Construction of a new restroom structure under alternative 3 would disturb, modify, and expose soils as the result of grading and other construction activities and would result in short-term negligible to minor adverse impacts on soils. The loss, modification, and disturbance of soils from the construction of the vault toilet facility would increase potential for stormwater runoff and erosion and result in long-term minor adverse impacts on soils. Cumulative impacts on the soils would be long-term negligible to minor adverse.

VEGETATION

METHODOLOGY AND ASSUMPTIONS

The following describes the methodology used to evaluate the impacts of the proposed alternatives on vegetation in Manassas National Battlefield Park. This discussion focuses on general vegetation and it incorporates the best available research related to the construction and operation of restroom facilities and the effects on vegetation.

Data used in the analysis were collected from available literature and park staff. Analysis of potential impacts on vegetation was based on species that occur and have the potential to occur in the vicinity of the proposed comfort station.

STUDY AREA

The geographic study area for vegetation includes the project area for the proposed actions at the Brawner Farm within the Manassas National Battlefield Park. It is expected that construction activities would not occur outside these areas. The study area for cumulative impact analysis includes the project area in the park and areas immediately adjacent to the project.

IMPACT THRESHOLDS

- Negligible:* There would be no observable or measurable impacts on native vegetation. Impacts would be well within natural fluctuations.
- Minor:* Impacts on native vegetation would be detectable, but would not be outside the natural range of variability. Occasional disturbance to individual plants could be expected, but without affecting population levels. Small changes to local population numbers might occur. Sufficient habitat in the park would remain functional to maintain the viability of the species in the park.
- Moderate:* Impacts on native vegetation would be detectable and could be outside the natural range of variability. Frequent responses to disturbance by some individuals could be expected, with negative impacts on local population levels. Some impacts might occur in key characteristics of habitat in the park. However, sufficient population numbers or habitat in the park would remain functional to maintain the viability of the species in the park.
- Major:* Impacts on native vegetation would be expected to be outside the natural range of variability, and would be permanent. Frequent responses to disturbance by some individuals would be expected, with negative impacts on park population levels. Impacts would occur during critical periods of the plants life cycle and key habitats in the park would be lost, resulting in direct mortality or loss of habitat that might affect the viability of a sensitive species. Local population numbers might experience large declines.
- Beneficial:* A beneficial impact would occur when actions were taken to actively preserve, stabilize, or return vegetation to pre-existing conditions.
- Duration:* Short-term impacts would last less than two growing seasons. Long-term impacts would last longer than two growing seasons.

IMPACTS OF ALTERNATIVE 1: NO ACTION

Analysis

Under alternative 1, construction of the Brawner Farm comfort station would not occur. Manicured lawn currently exists in the proposed comfort station site and would continue to exist without further disruption. Operation of this site would continue to include maintenance activities such as lawn mowing and minor landscape manicuring. Implementation of alternative 1 would result in long-term negligible impacts on vegetation.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions that have the potential to impact vegetation would include the previous establishment of the Brawner Farm access road and parking area, implementation of the GMP, and the Sesquicentennial Celebration. Installation of the paved access road and parking area resulted in a permanent loss of vegetation in an area approximately 0.5 mile long by 35 feet wide (doubling in width at the parking area). Prior to the establishment of the road, this area was maintained to be manicured lawn; therefore, there was not diverse or robust vegetation. Due to the loss in vegetation

there were long-term minor impacts on vegetation during the installation of the access road. The Sesquicentennial Celebration may result in short-term negligible impacts on vegetation due to an increased number of people visiting the area. Vegetation may be temporarily matted down due to high activity; however, it is assumed vegetation would return to normal conditions after the celebration, resulting in short-term minor adverse impacts. These impacts, in combination with the long-term negligible adverse impacts of alternative 1, would result in short- and long-term negligible to minor adverse cumulative impacts.

Conclusion

Continued landscaping maintenance activities in the area under alternative 1 would have negligible long-term adverse impacts on vegetation. Cumulative impacts would be short and long-term negligible to minor adverse.

IMPACTS OF ALTERNATIVE 2 (PREFERRED): CONSTRUCTION OF AN ACCESSIBLE COMFORT STATION AT THE BRAUNER FARM WITH A SEPTIC, WELL, AND WATER TREATMENT SYSTEM

Analysis

Under alternative 2, the greatest impact on vegetation would occur during the installation of the gravel support pad, concrete building apron, and sidewalk connecting the building facility to the existing parking area. The building footprint of the restroom structure would be a minimum of 420 square feet and a maximum of 575 square feet and set on a gravel pad. A 3-foot-wide concrete sidewalk would surround the building. Another 5-foot-wide and approximately 100-foot-long concrete sidewalk would be installed along the western edge of the parking spaces to allow visitors and staff to access the restroom. Both drip field locations (primary and reserve) would be on the north side of the facility and parking area and would be 60-feet wide and 114-feet long. The primary drip field would incorporate two pumps, storage tank, and pipe to the designated primary drip field. The reserve drip field would remain undisturbed and is designated for future use. The total area of disturbance for the construction of the facility and associated septic and well systems is estimated to be 0.56 acre.

The construction of the facility would require the removal of brush and low growing vegetation in the parking circle to accommodate the new structure and water well line. The most acreage of vegetation loss would be manicured lawn. There would be a temporary loss of vegetation along the pipe to the primary drip field, the pipe connecting the well, and the location of the primary drip field. As described in the “Soils” section, construction of the comfort station would create ground disturbance and compact soil, resulting in a temporary loss of vegetation in the area of construction. Mitigation for the temporary loss of vegetation would be the rehabilitation and seeding of the primary drip field to restore natural vegetation. Vegetation growth (including brush and manicured lawn) would be completely eliminated in the areas within the footprint of the facility and sidewalk, resulting in localized long-term negligible to minor adverse impacts on vegetation due to the removal of brush and manicured lawn in these areas. After the installation of the primary drip field and drainage pipes, the vegetation would be allowed to return to a manicured lawn, resulting in short-term negligible impacts on vegetation.

Cumulative Impacts

The impact of past, present, and reasonably foreseeable future actions on vegetation under alternative 2 would be the same as those under alternative 1. These impacts, in combination with the short-term

negligible adverse and localized long-term negligible to minor adverse impacts of alternative 2, would result in long-term negligible to minor cumulative impacts.

Conclusion

Alternative 2 would have short-term negligible adverse impacts due to continued lawn manicuring at the site and long-term negligible to minor adverse impacts due to the loss of vegetation at the facility site. Cumulative impacts would be short- and long-term negligible to minor adverse.

IMPACTS OF ALTERNATIVE 3: CONSTRUCTION OF AN ACCESSIBLE VAULT TOILET FACILITY AT THE BRAWNER FARM

Analysis

Under alternative 3, the greatest impact on vegetation would occur during the installation of the gravel support pad and sidewalk connecting the building facility to the existing parking area. The facility would not include a septic, well, or water treatment system, and subsequently drainage fields would not be necessary. The restroom structure would have footprint similar to the one described under alternative 2; however, it would not include either primary or reserve drip fields. The estimated footprint would be a minimum of 420 square feet and a maximum of 575 square feet and set on a gravel pad. The building would be surrounded by a 3-foot-wide concrete sidewalk. Another 5-foot-wide and approximately 100-foot-long concrete sidewalk would be installed along the western edge of the parking spaces to allow visitors to access the restroom.

In preparation for construction activities, grading and leveling of the facility site would occur, resulting in a loss of vegetation in areas currently maintained as turf or natural vegetation. There would be a permanent loss of vegetation beneath the gravel support pad and sidewalk. Similar to alternative 2, construction of the facility would include the removal of brush and low growing vegetation. The removal of manicured vegetation and brush would result in localized long-term negligible to minor adverse impacts on vegetation.

Cumulative Impacts

The impact of past, present, and reasonably foreseeable future actions on vegetation under alternative 3 would be the same as those under alternatives 1 and 2. These impacts, in combination with the long-term negligible to minor adverse impacts of alternative 3, would result in short and long-term negligible to minor cumulative impacts.

Conclusion

Alternative 3 would have long-term negligible to minor adverse impacts on vegetation due to the permanent loss of vegetation at the comfort station site and sidewalk. Cumulative impacts would be short- and long-term negligible to minor adverse.

VISITOR USE AND EXPERIENCE AND RECREATION RESOURCES

METHODOLOGY AND ASSUMPTIONS

The purpose of this impact analysis is to assess the effects of the alternatives on the visitor use and experience in the project area and surrounding areas that would be affected by the proposed actions. To

determine impacts, the current uses of the area were considered and the potential effects of the construction and operation of the proposed restroom facilities on visitor use and experience were analyzed. Activities and the type of visitor experience and use/visitation that occur in the park and that might be affected by the proposed actions, as well as the visual character of the area and noises experienced by the visitors, were considered.

STUDY AREA

The geographic study area for visitor use, experience, and recreation resources includes the project area for the proposed actions at the Brawner Farm within the Manassas National Battlefield Park. It is expected that construction activities would not occur outside these areas. The study area for cumulative impact analysis includes the project area in the park and areas immediately adjacent to the project.

IMPACT THRESHOLDS

Negligible: Visitors would likely be unaware of impacts associated with implementation of the alternative. There would be no noticeable change in visitor use and experience or in any defined indicators of visitor satisfaction or behavior.

Minor: Changes in visitor use and/or experience would be slight and detectable, but would not appreciably limit or enhance critical characteristics of the visitor experience. Visitor satisfaction would remain stable.

Moderate: Few critical characteristics of the desired visitor experience would change. The number of participants engaging in a specified activity would be altered. Some visitors who desire their continued use and enjoyment of the activity/visitor experience might be required to pursue their choices in other available local or regional areas. Visitor satisfaction would begin to either decline or increase.

Major: Multiple critical characteristics of the desired visitor experience would change and/or the number of participants engaging in an activity would be greatly reduced or increased. Visitors who desire their continued use and enjoyment of the activity/visitor experience would be required to pursue their choices in other available local or regional areas. Visitor satisfaction would markedly decline or increase.

Beneficial: A beneficial impact would occur when actions were taken to actively promote, enhance visitor use, experience, and recreation within the park.

Duration: Short-term impacts would be immediate, occurring during construction. Long-term impacts would persist after construction.

IMPACTS OF ALTERNATIVE 1: NO ACTION

Analysis

Under the no action alternative, visitor use would continue at Manassas National Battlefield Park. The two existing Porta-Johns would remain at the site, and no permanent restroom facilities would be constructed. Full restroom facilities located at the park headquarters and the visitor center would remain

the only facilities available to visitors. Increased visitor use levels occurred after the construction of the access road and parking area at the Brawner Farm House and are anticipated to increase further during the Sesquicentennial Celebration. In August 2010, there were 53,498 documented visitors at the park. The park is anticipating that up to 25,000 visitors could visit the park for the week of the Second Manassas anniversary in 2012 (Brown pers. comm. 2011). The week of the Sesquicentennial Celebration alone would bring in half of the total number of visitors to the park last August. The current Porta-Johns (one handicap) would not likely be able to handle the influx of visitors to the area and would result in long lines while waiting to use the restroom and potential smell from overuse. Due to the continued and potential increases in visitation of this area, there would be long-term minor adverse impacts on visitor use, experience, and recreation due to the anticipated lack of restroom facilities in this area.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions that would impact visitor use and experience within Manassas National Battlefield Park include the construction of the access road and parking area, implementation of the GMP and the Sesquicentennial Celebration in August 2012. The construction of the access road and parking area has made the area more accessible and convenient to visitors wanting to learn more of the Second Battle of Manassas, resulting in long-term beneficial impacts to visitor use. The Sesquicentennial Celebration could bring the total number of park visitors up to 25,000 for the week during the Second Battle of Manassas anniversary in 2012 (Brown pers. comm. 2011). The Sesquicentennial Celebration would provide numerous educational programs as well as unique visitor use opportunities for a large number of visitors resulting in beneficial impacts on visitor use and experience. In addition, the GMP would serve as a tool to allow the park to identify and provide new visitor use opportunities and to improve existing opportunities in the park. The GMP specifically focuses on additional interpretation relating to the Second Battle of Manassas. The Second Battle of Manassas has received less emphasis at Manassas National Battlefield Park. The preferred alternative in the GMP aims to provide a level of interpretation inclusive to both battles. Future development and management of the park would facilitate and deepen visitor understanding of the Civil War and the importance of both battles that occurred at Manassas. Currently, Stuart's Hill is the main visitor contact station for the Second Battle of Manassas; however, the GMP states this would be relocated to Brawner Farm. The use of Brawner Farm to emphasize the Second Battle of Manassas would have a beneficial impact on visitor experience within the park. These factors would enhance recreational facilities at the park and, as a result, would have a moderate long-term beneficial impact on visitor use, experience, and recreation.

Overall, impacts from past, present, and reasonably foreseeable future actions would be beneficial to park visitors by providing additional educational programs and promoting the historical significance of the Second Battle of Manassas. These impacts in combination with the long-term minor adverse impacts from the lack of restrooms within reasonable distance would result in overall long-term beneficial cumulative impacts on visitor use and experience.

Conclusion

Implementation of the no action alternative would result in long-term minor adverse impacts on visitor use and experience as a result of the lack of restroom facilities within a reasonable distance of the Brawner Farm. Long-term beneficial cumulative impacts would occur under the no action alternative.

IMPACTS OF ALTERNATIVE 2 (PREFERRED): CONSTRUCTION OF AN ACCESSIBLE COMFORT STATION AT THE BRAWNER FARM WITH A SEPTIC, WELL, AND WATER TREATMENT SYSTEM

Analysis

Under alternative 2, the park would install a prefabricated, precast concrete, three-room restroom building compliant with ADA-ABA Accessibility Guidelines, including plumbing, electrical, and mechanical systems at the Brawner Farm. The facility would include a men's and women's restroom with two stalls in each. In addition, the facility would have electricity and running water that would enable the use of low flush toilets, hand-washing sinks, and water fountains. Alternative 2 would result in long-term beneficial impacts on visitor use as a result of the increased availability of ADA accessible restroom facilities and proximity to Brawner Farm, a popular destination for tour buses and future location of a visitor contact station. During construction, the presence of materials, equipment and associated noise may distract from the historical context of the site, shifting the visitors focus. There would be short-term minor adverse impacts on visitor use and experience during installation and construction because of the presence of construction materials and equipment. Short-term minor adverse impacts on visitor experience would also result from construction noise by introducing an industrial element, affecting the historical context of the area.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions and the resulting impacts on visitor use and experience would be the same as those under alternative 1. The establishment of the access road and parking area, GMP, and the Sesquicentennial Celebration would result in long-term beneficial impacts on visitor use and experience as a result of increased and improved visitor use opportunities. These long-term beneficial impacts in combination with the long-term beneficial impacts of alternative 2 would result in overall long-term beneficial cumulative impacts on visitor use and experience.

Conclusion

Implementation of alternative 2 would result in long-term beneficial impacts on visitor use and experience as a result of ADA-accessible restroom facilities within a reasonable distance from the Brawner Farm. There also would be some short-term minor adverse impacts from construction noise. Long-term beneficial cumulative impacts would occur under alternative 2.

IMPACTS OF ALTERNATIVE 3: CONSTRUCTION OF AN ACCESSIBLE VAULT TOILET FACILITY AT THE BRAWNER FARM

Analysis

Under alternative 3, the park would install a prefabricated, precast concrete, vault toilet facility compliant with ADA-ABA Accessibility Guidelines. The comfort station would be located at the same area described under alternative 2. A septic system, well, and water treatment system would not be included as part of construction. Alternative 3 would result in long-term beneficial impacts to visitor use as a result of the increased availability of restroom facilities and proximity to the Brawner Farm. However, there would be no running water, hand-washing sinks, flushing toilets, or water fountains. During construction, the presence of materials, equipment, and associated noise could distract from the historical context of the site, shifting the visitors' focus. There would be short-term minor adverse impacts to visitor use and experience during installation and construction as a result of the presence of construction materials and

equipment. Short-term minor adverse impacts to visitor experience would also result from construction noise.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions and the resulting impacts on visitor use and experience would be the same as those under alternatives 1 and 2. The establishment of the access road and parking area, the GMP, and the Sesquicentennial Celebration would result in long-term beneficial impacts to visitor use and experience as a result of increased and improved visitor use opportunities. These impacts in combination with the long-term beneficial impacts of alternative 3 would result in overall long-term beneficial cumulative impacts to visitor use and experience.

Conclusion

Implementation of alternative 3 would result in long-term beneficial impacts to visitor use and experience as a result of accessible restroom facilities within a reasonable distance from the Brawner Farm. There also would be some short-term minor adverse impacts during construction. However, this alternative would not have the same restroom amenities as alternative 2, such as flushing toilets, hand-washing sinks, or water fountains. Long-term beneficial cumulative impacts would occur under alternative 3.

CULTURAL LANDSCAPES

METHODOLOGY AND ASSUMPTIONS

The analyses of effects on cultural landscapes that are presented in this section respond to the separate requirements of NEPA and Section 106 of the NHPA. Section 106 was handled separately from this document.

Under the implementing regulations for Section 106, if no cultural landscapes are identified and the SHPO concurs, then the Section 106 process is complete (36 CFR 800.d). If, on the other hand, there is a determination that there are adverse effects or no adverse effects to cultural landscapes, continued consultation among the SHPO, consulting parties, and the public is required (36 CFR 800.5(a)). An adverse effect occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for inclusion in the NRHP (e.g., diminishing the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association). Adverse effects also include reasonably foreseeable effects caused by the proposed alternative that would occur later in time, be farther removed in distance, or be cumulative (36 CFR 800.5(a) (1)). A determination of no adverse effect means that the effect would not diminish in any way the characteristics of the historic property that qualify it for inclusion in the NRHP or that the project has been modified or conditions are imposed to ensure consistency with the *Secretary of Interior's Standards for the Treatment of Historic Properties* (36 CFR 68).

CEQ regulations and the NPS *Conservation Planning, Environmental Impact Analysis, and Decision-making* (Director's Order 12) also call for a discussion of the appropriateness of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact, for example, reducing the intensity of an impact from major to moderate or minor. Any resultant reduction in intensity of impact due to mitigation, however, is an estimate of the effectiveness of mitigation under NEPA only. Cultural resources are non-renewable resources, and adverse effects generally consume, diminish, or destroy the original historic materials or form, resulting in a loss in the integrity of the resource that can never be recovered. Therefore, although actions determined to have an adverse effect under Section 106 may be mitigated, the effect remains adverse.

The NPS guidance for evaluating impacts (Director's Order 12, *Conservation Planning, Environmental Impact Analysis, and Decision-making*) (NPS 2001) requires that impact assessment be scientific, accurate, and quantified to the extent possible. For cultural resources, it is seldom possible to measure impacts in quantifiable terms; therefore, impact thresholds must rely heavily on the professional judgment of resource experts.

A summary is included in this impact analysis for cultural landscapes to comply with NEPA and incorporate the Section 106 consultation that has occurred separately from this document. The impact analysis is an assessment of the effect, based upon the Advisory Council on Historic Preservation's criteria of adverse effect, of the undertaking (implementation of the alternative) on NRHP eligible or listed cultural resources only. The following assumptions were used for identifying cultural resources.

Cultural landscapes are the result of the long interaction between people and the land, and reflect the influence of human beliefs and actions over time upon the natural landscape. Shaped through time by historical land-use and management practices, as well as politics and property laws, levels of technology, and economic conditions, cultural landscapes provide a living record of an area's past, and a visual chronicle of its history. The dynamic nature of modern human life, however, contributes to the continual reshaping of cultural landscapes, making them a valuable source of information about specific times and places on one hand, but rendering their long-term preservation a challenge on the other.

For a cultural landscape to be listed in the NRHP, it must possess significance (the meaning or value ascribed to the landscape) and retain the integrity of those features necessary to convey its significance as well as meet one or more of the NRHP criteria (36 CFR 63). The character-defining features of a cultural landscape include spatial organization and land patterns; topography; vegetation; circulation patterns; water features; and structures/buildings, site furnishings, and objects. Individual features of the landscape are never examined alone but only in relationship to the overall landscape. The arrangement and interrelationships of a cultural landscape's organizational elements and character-defining features provide the key to determining the potential impacts and effects of proposed undertakings on a cultural landscape (Birnbaum 1996).

STUDY AREA

Pursuant to Section 106 of the NHPA and 36 CFR 800, the area of potential effects was defined in accordance with the Manassas National Battlefield Landscape Plan. The landscape plan identifies landscape character areas for this area of the park. The area of potential effects is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of cultural landscapes, if any such landscapes exist (36 CFR 800.16 (d)).

IMPACT THRESHOLDS

For purposes of analyzing potential impacts on cultural landscapes, the thresholds of change for the intensity of an impact are defined as follows:

Negligible: The impact is at the lowest levels of detection or barely perceptible and not measurable. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Minor: The impact would not affect the character-defining features of a cultural landscape listed in or eligible for listing on the NRHP. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Moderate: The impact would alter a character-defining feature or features of the cultural landscape but would not diminish the integrity of the landscape to the extent that its NRHP eligibility would be jeopardized. For purposes of Section 106, the determination of effect would be *an adverse effect*.

Major: The impact would alter a character-defining feature(s) of the cultural landscape, diminishing the integrity of the resource to the extent that it would no longer be eligible to be listed in the NRHP. For purposes of Section 106, the determination of effect would be *adverse effect*.

Duration: All impacts are considered long term.

IMPACTS OF ALTERNATIVE 1: NO ACTION

Analysis

Under alternative 1, the existing conditions of the landscape would remain unchanged. The parking area, access road, and paved walkway would remain at the Brawner Farm site. No construction activities would occur at the site, and there would be no impacts on cultural landscapes, resulting in no impacts and no adverse effects.

Cumulative Impacts

Because no impacts are projected under the no action alternative, no cumulative impacts would occur.

Conclusion

Because the Brawner Farm and surrounding area would remain in the current conditions, implementation of the no action alternative would result in no impacts and no adverse effects. There would be no cumulative impacts.

IMPACTS OF ALTERNATIVE 2 (PREFERRED): CONSTRUCTION OF AN ACCESSIBLE COMFORT STATION AT THE BRAWNER FARM WITH A SEPTIC, WELL, AND WATER TREATMENT SYSTEM

Analysis

Under alternative 2, a restroom compliant with ADA-ABA Accessibility Guidelines would be built adjacent to the paved parking area. The restroom structure would be 10 feet tall and would have a footprint between minimum 420 square feet (minimum) and 575 square feet (maximum) based on preliminary designs of the proposed facility. A viewshed analysis was conducted to show the potential visual impacts that the installation of the facility would have on the cultural landscape of the surrounding area.

The Brawner Farm Cultural Landscape Plan (NPS 2005) identifies seven “landscape character areas” at the Brawner Farm including the historic core, south woods, confederate staging area, unfinished railroad, west fields, and Warrenton turnpike (figure 6). The historic core is the section of the Brawner Farm that has the most significance to the Second Battle of Manassas. The proposed comfort station would fall in the west fields landscape category, west of the historic core. The west fields were not historically part of Brawner (Douglas) Farm; however, a twentieth century cemetery of the Swart Family (post-Civil War owner) remains on the property.

The viewshed analysis is shown in figure 7. The yellow areas represent areas where the comfort station would be visible, and the green areas represent the areas that would be visible if tree cover were removed. Figure 7 shows of the areas of visibility, extending beyond the immediate vicinity of the Brawner Farm. The tree line (historic fence line) between the west field and historic core would largely block the line of site from the comfort station building (figure 7). Additionally, the comfort station would be situated adjacent to an existing parking lot and in an area where a restroom would be expected by park visitors. The construction of the building would not affect the overall character of the cultural landscape. As currently designed, the facility could have long-term negligible to minor visual impacts due to the historically open landscapes of battlefields. Impacts would not affect the character-defining features of a cultural landscape listed in or eligible for listing on the NRHP, resulting in no adverse effect on cultural landscapes.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions that would affect cultural landscapes within the park include the establishment of paved access road and parking lot, implementation of the GMP, the upgrade of transmission line facilities, and the Sesquicentennial Celebration in August 2012. The establishment of the access road and parking lot altered the historical landscape; however, it resulted in no adverse effect to cultural landscapes. In 2009, an EA was written to assess impacts on the park for the upgrade and reconfiguration of the transmission lines near this project (NPS 2009). The EA concluded that the preferred alternative would have negligible to minor impacts to cultural landscapes, resulting in no adverse effects as currently designed. Construction was completed in 2010 and represents the current condition of the park. The GMP would further benefit cultural landscapes by managing the landscape at Manassas National Battlefield Park in a way that keeps it in its historical context. The GMP also aims to increase visitor use and interpretation for events surrounding the Second Battle of Manassas. The Sesquicentennial Celebration would not provide additional historical interpretations specifically at the Brawner Farm; however, it would direct visitors’ attention to this part of the park. Overall, these actions would result in negligible to minor beneficial impacts on cultural landscapes. When combined with the negligible to minor long-term impacts, alternative 2 would have negligible to minor cumulative adverse impacts. There would be no adverse effect to cultural landscapes.

Conclusion

Alternative 2, as currently proposed, would have negligible to minor impacts on the cultural landscape, resulting in no adverse effects. The current design has been developed in consultation with the park and SHPO to minimize impacts on historic resources. Cumulative impacts under alternative 2 would be long-term negligible to minor impacts, which would be considered to have no adverse effects to cultural landscapes under the NHPA.

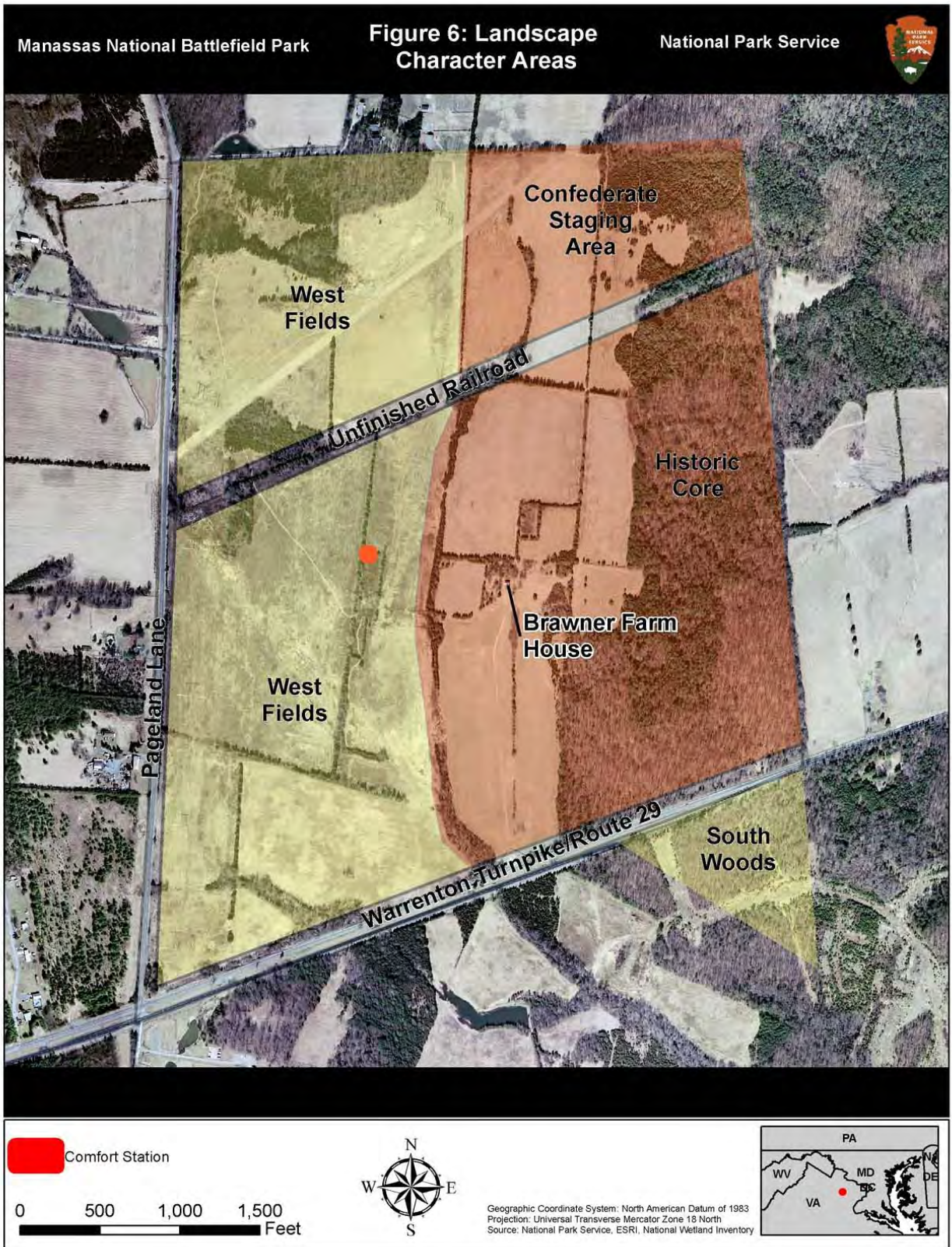


FIGURE 6: LANDSCAPE CHARACTER AREAS

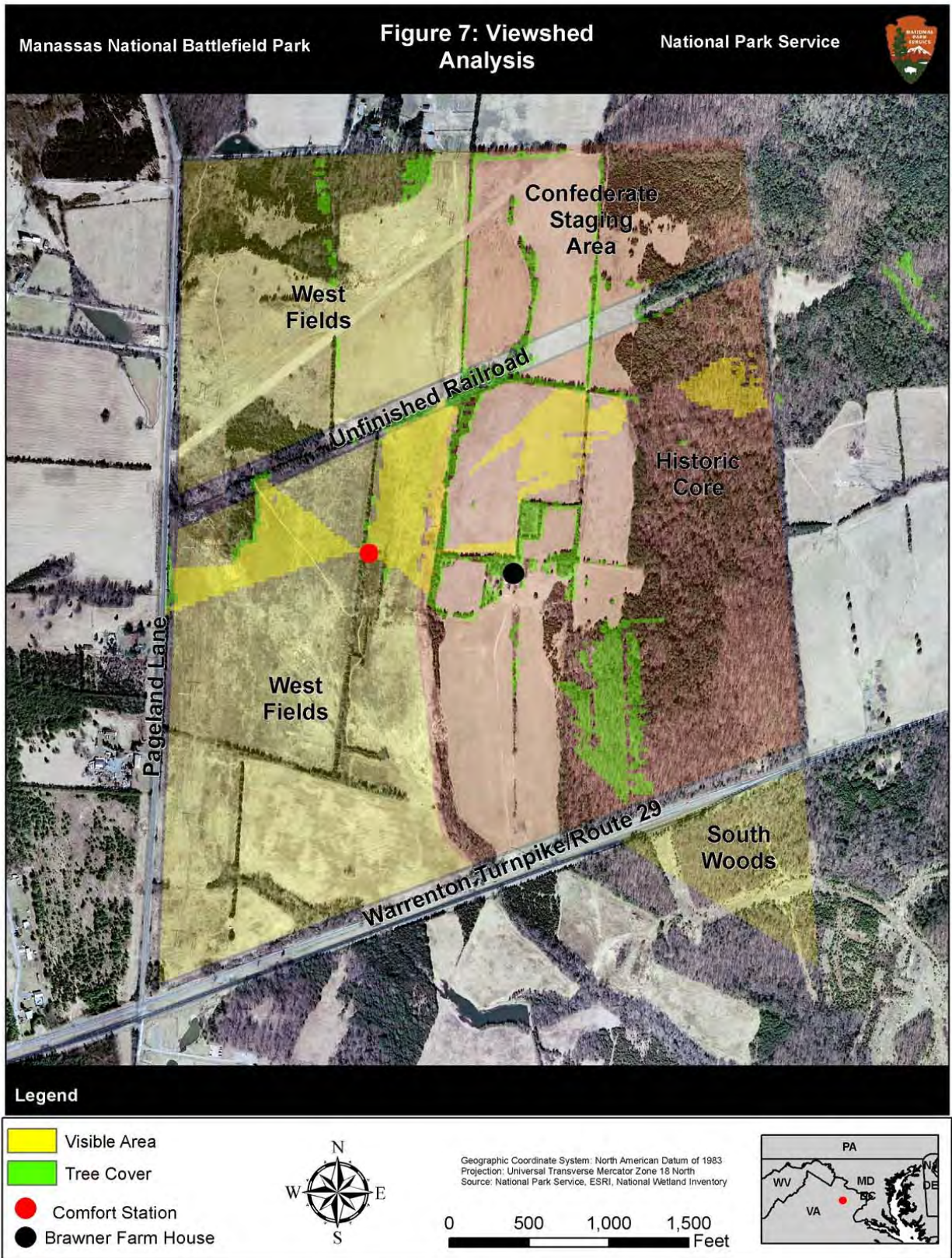


FIGURE 7: VIEWSHED ANALYSIS

IMPACTS OF ALTERNATIVE 3: CONSTRUCTION OF AN ACCESSIBLE VAULT TOILET FACILITY AT THE BRAWNER FARM

Analysis

Under alternative 2, a restroom compliant with ADA-ABA Accessibility Guidelines would be built adjacent to the paved parking area. The restroom structure would be 10 feet tall and would have a footprint between minimum 420 square feet (minimum) and 575 square feet (maximum) based on preliminary designs of the proposed facility. A viewshed analysis was conducted to show the potential visual impacts that the installation of the facility would have on the cultural landscape of the surrounding area.

The vault toilet facility would be the same height and have the same building footprint as described under alternative 2; therefore, impacts relating to cultural landscapes would also be the same as described above. As currently designed, the facility could have long-term negligible to minor impacts due to the historically open landscapes of battlefields. As a result, there would be no adverse effect on cultural landscapes.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions that would affect cultural landscapes within the park include the establishment of paved access road and parking lot, implementation of the GMP, the upgrade of transmission facilities, and the Sesquicentennial Celebration in August 2012. Cumulative impacts under alternative 3 would be the same as described under alternative 2. These actions would result in negligible to minor beneficial impacts on cultural landscapes. When combined with the negligible to minor long-term impacts, alternative 2 would have negligible to minor cumulative adverse impacts. There would be no adverse effect to cultural landscapes.

Conclusion

Alternative 3, as currently proposed, would have long-term negligible to minor impacts on the cultural landscape, resulting in no adverse effect. The current design has been developed in consultation with the park and SHPO to minimize impacts on historic resources. Cumulative impacts under alternative 3 would be long-term negligible to minor impacts with no adverse effect to cultural landscapes.

PARK OPERATIONS AND MANAGEMENT

METHODOLOGY AND ASSUMPTIONS

Manassas National Battlefield Park is responsible for providing staff to perform all day-to-day operations and maintenance required of the structures that support operations at the park and other associated structures that serve park visitors.

STUDY AREA

The geographic study area for park operations and management is the area directly surrounding the Brawner Farm lands; however, the entirety of the Manassas National Battlefield Park and projects and events within the park are considered in the cumulative impact analysis.

IMPACT THRESHOLDS

The impact thresholds for park operations and management were defined as follows:

- Negligible:* Impacts would be barely detectable and would not have an appreciable effect on park operations.
- Minor:* The impact would be detectable and would be of a magnitude that would not have an appreciable effect on park operations. If mitigation were needed to offset adverse effects, it would be simple and likely successful.
- Moderate:* The impacts would be readily apparent and result in a substantial change in park operations in a manner noticeable to staff and the public. Mitigation measures would be necessary to offset adverse effects and would likely be successful.
- Major:* The impacts would be readily apparent, result in a substantial change in park operation in a manner noticeable to staff and the public, and be markedly different from existing operations. Mitigation measures to offset adverse effects would be needed and extensive, and success could not be guaranteed.
- Beneficial:* A beneficial impact would occur when actions were taken to actively promote, enhance or maintain park operations and management at the park.
- Duration:* Short-term impacts would be immediate, occurring during implementation of the alternative. Long-term impacts would persist after implementation of the alternative.

IMPACTS OF ALTERNATIVE 1: NO ACTION

Analysis

Under alternative 1, current management would continue at Manassas National Battlefield Park, and no comfort station would be constructed in the Brawner Farm area. Current maintenance would continue. This includes checking grounds for litter and trash, checking the conditions of the existing staff and visitor Porta-Johns (one handicap), mowing and trimming manicured areas, and cleaning debris and performing other grounds care activities. Continuation of current maintenance and staffing would result in no impact on park operations and maintenance because the funding and staff resources exist to address current maintenance needs.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions that would impact park operations and management within Manassas National Battlefield Park include the establishment of the access road and parking lot, implementation of the GMP, and the Sesquicentennial Celebration in August 2012. The establishment of the access road in 2004 provided a paved road and parking lot to the Brawner Farm. This area was previously maintained as an open field; with the addition of the road came maintenance activities as described above. The GMP designates the Brawner Farm House to be converted to the main contact station (previously Stuart Hill) for visitors to this area of the park. The conversion would require additional staff to be stationed at the Brawner Farm full time and could require additional park staff to be hired or could reassign staff from other areas of the park. Greater numbers of visitors could be expected as a result of the GMP and the Sesquicentennial Celebration and would require more frequent cleaning of

the area and pumping of temporary Porta-Johns. As a result, long-term and short-term minor adverse impacts would result from the implementation of the GMP and the Sesquicentennial Celebration.

Conclusion

Implementation of alternative 1 would result in no impact on park operations and management from the continuation of current maintenance and staffing. Cumulative impacts would be long-term and short-term minor adverse impacts would result from the implementation of the GMP and the Sesquicentennial Celebration.

IMPACTS OF ALTERNATIVE 2 (PREFERRED): CONSTRUCTION OF AN ACCESSIBLE COMFORT STATION AT THE BRAWNER FARM WITH A SEPTIC, WELL, AND WATER TREATMENT SYSTEM

Analysis

Under alternative 2, a new comfort station would be constructed in the Brawner Farm area of Manassas National Battlefield Park. All construction activities would be handled by contractors; however, planning, contracting, and construction administration efforts, including communication and visitor outreach programs associated with the proposed project, would require park staff time. During the planning of this project, park resources would be pulled from other management tasks within the park. Alternative 2 would result in short-term minor adverse impacts on park staff and operations due to this reallocation of park resources.

After construction activities are complete, currently employed park staff would maintain and clean the restroom facilities. Maintenance activities would be infrequent and would include general upkeep, such as painting, repairing any components that may break, replacing outdated fixtures, etc. Cleaning activities would occur more frequently and would include emptying the trash receptacles, cleaning the fixtures and floors, replacing toilet paper as needed, etc. Alternative 2 would not require any additional staff; however, it would increase current employee workload, resulting in long-term negligible to minor adverse impacts from the addition of duties to the existing staff workload in the Brawner Farm area. Once the restroom facilities become operational, there would be long-term beneficial impacts for park staff who work in the area because they would have a more convenient facility available for use.

Overall, alternative 2 would result in short-term minor adverse impacts on park operations and management during construction activities and long-term beneficial and long-term negligible to minor adverse impacts due to the increase in staffing duties for upkeep of the comfort station and beneficial impacts due to the additional restroom for staff use in the Brawner Farm area.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions that would impact park operations and management within Manassas National Battlefield Park include the establishment of the access road and parking lot, implementation of the GMP, and the Sesquicentennial Celebration in August 2012. The establishment of the access road in 2004 provided a paved road and parking lot to the Brawner Farm. This area was previously maintained as an open field, with the addition of the road came maintenance activities as described above. The GMP designates the Brawner Farm House to be converted to the main contact station (previously Stuart Hill) for visitors to this area of the park. The conversion would require additional staff to be stationed at the Brawner Farm full time and could require additional park staff to be hired or could reassign staff from other areas of the park. Greater numbers of visitors could be expected

as a result of the GMP and the Sesquicentennial Celebration and would require more frequent cleaning of the area. As a result, long-term and short-term minor adverse impacts would result from the implementation of the GMP and the Sesquicentennial Celebration. The impact of these past, present, and reasonably foreseeable future actions would result in long-term minor adverse impacts. When combined with the short-term minor adverse impacts on park operations and management during construction activities and long-term beneficial and long-term negligible to minor adverse impacts due to the increase in staffing duties, there would be long-term minor adverse cumulative impact on park operations and management under alternative 2.

Conclusion

Implementation of alternative 2 would result in short-term minor adverse impacts and long-term beneficial and negligible to minor adverse impacts on park operations and management. Cumulative impacts on park operations and management would be long-term minor and adverse.

IMPACTS OF ALTERNATIVE 3: CONSTRUCTION OF AN ACCESSIBLE VAULT TOILET FACILITY AT THE BRAWNER FARM

Analysis

Under alternative 3, a vault toilet facility would be constructed in the Brawner Farm area of Manassas National Battlefield Park. All construction activities would be handled by contractors; however, planning, contracting, and construction administration efforts, including communication and visitor outreach programs associated with the proposed project, would require park staff time. During the planning of this project, park resources would be reassigned from other management tasks within the park. Alternative 3 would result in short-term minor adverse impacts on park staff and operations.

After construction activities are complete, currently employed park staff would be required to maintain and clean the vault toilet facilities. Vault toilets are typically installed in places with low visitor use due to the requirements for pumping and using biological and chemical additives. Vault toilets must be pumped to remove waste from the facility. Each vault toilet (four total) would be able to hold up to 1,000 gallons of waste or about 15,000 uses. Considering the current and projected volume of visitors in this location, pumping of the facility would be frequent and would require additional park resources. Alternative 3 would not require any additional staff; however it would increase the workloads of current employees, resulting in long-term minor to moderate adverse impacts from the addition of duties to the existing staff workload in the Brawner Farm area.

Once the restroom facilities become operational, there would be long-term beneficial impacts for park staff who work in the area because they would have a more convenient facility available for use.

Overall, alternative 3 would result in short-term minor adverse impacts on park operations and management during construction activities and long-term beneficial and long-term minor to moderate adverse impacts due to the increase in staffing duties for upkeep of the comfort station as well as the staff use of the restroom in the Brawner Farm area.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions that would impact park operations and management within Manassas National Battlefield Park include the establishment of the access road and parking lot, implementation of the GMP and the Sesquicentennial Celebration in August 2012. Cumulative impacts would be the same as described under alternative 2 and would result in minor adverse

impacts due to the increased maintenance associated with the vault toilet options. When combined with the short-term minor adverse impacts on park operations and management during construction activities and long-term beneficial and long-term minor to moderate adverse impacts due to the increase in staffing duties and maintenance activities, there would be long-term minor to moderate adverse cumulative impact on park operations and management under alternative 3.

Conclusion

Implementation of alternative 3 would result in short-term minor adverse impacts during construction and long-term minor to moderate adverse impacts due to increased staffing and maintenance of the facility. Long-term beneficial impacts would occur due to the convenience of the comfort station to park staff working at the Brawner farm. Cumulative impacts on park operations and management would be long-term minor to moderate adverse.

CHAPTER 5: CONSULTATION AND COORDINATION

Coordination with local and federal agencies, as well as various interest groups, was conducted during the NEPA process to identify issues and/or concerns related to the installation of a comfort station at the Manassas National Battlefield Park. Notice of this EA will be posted on PEPC, the park website, and local newspapers.

FEDERAL AGENCY COORDINATION AND CONSULTATION

Coordination with federal agencies was conducted in previous NEPA processes and concurrent with the completion of the Environmental Assessment Dominion Virginia Power Electric Power Transmission Upgrade Manassas National Battlefield Park in March 2009 (NPS 2009). The EA identified issues or concerns related to natural and cultural resources found within the study area at Manassas National Battlefield Park.

All consultations with the Virginia SHPO, as mandated in Section 106 of the NHPA, were completed separate from this EA and were incorporated into the “Cultural Landscapes” section of this EA. An archeology survey of the site was completed in 2010, and no additional archeological sites or cultural surface/subsurface features or deposits relating to the Brawner Farm Site or the Civil-War era battles were identified. The location of the facility was changed in March 2011, after the completion of initial archeological surveys. A letter was sent to the SHPO requesting concurrence regarding the change in the location of the comfort station on June 2, 2011. The Virginia SHPO received the letter and on June 3, 2011, concurred that no additional archeological surveys would be required at the comfort station site.

A letter was received from the Virginia Department of Health on April 19, 2011, stating that the Prince William Health district is not required to issue a permit for the proposed sewage system because this is federal property and is exempt from state regulations.

Correspondence with the USFWS and VDCR occurred as part of the transmission line upgrade EA completed in 2006 and 2009. In accordance with Section 7 of the *Endangered Species Act of 1973*, a letter was sent to the USFWS to solicit comments regarding potential occurrences of any federal or state listed species within the project area that could be adversely impacted by the proposed alternatives in December 2008. A letter of response was received on January 21, 2009, from the USFWS recommending consultation with the Virginia Department of Agriculture and Consumer Services and surveys for the small whorled pogonia. Consultation as part of the transmission line project included a letter dated August 17, 2006, from the Virginia Department of Game and Inland Fisheries that identified no known rare, threatened, or endangered species in the vicinity of the study area at Manassas National Battlefield Park. In a letter dated September 8, 2006, the VDCR Heritage Program designated a number of Diabase Conservation Areas throughout Virginia that support these uncommon plant communities. The portion of the park within the Manassas Diabase Conservation Area is known to support two state listed rare species, the marsh hedgenettle and purple milkweed. According to the VDCR, there is potential for a number of additional rare plant species that may occur in diabase conservation areas including earleaf foxglove, blue-hearts, downy phlox, and stiff goldenrod. Field surveys were conducted in 2009 per the suggestion of the USFWS and VDCR, and it was determined these species were not present in the study area. Consultation as part of the project included a letter from the VDCR dated March 17, 2011, and stated that this portion of the park was within the Manassas Diabase Conservation Area and could support the growth of *Stachys arenicola* marsh hedgenettle. Field surveys were conducted on June 13, 2011, and no individual or populations of the species were found. The park will continue to consult with the VDCR to obtain concurrence with the survey methodology and results. The letter dated March 17, 2011, also stated,

the current activity will not affect any documented state-listed plants or insects. VDCR files did not indicate the presence of any State Natural Area Preserves under VDCR jurisdiction in the project vicinity.

LIST OF PREPARERS

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GLOSSARY

Affected Environment—The existing environment to be affected by a proposed action and alternatives.

Contributing Resource—A building, site, structure, or object that adds to the historic significance of a property or district.

Council on Environmental Quality (CEQ)—Established by Congress within the Executive Office of the President with passage of NEPA. CEQ coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives.

Cultural Resources—Historic districts, sites, buildings, objects, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or any other reason.

Cumulative Impacts—Under NEPA regulations, the incremental environmental impact or effect of an action together with the effects of past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions (40 CFR 1508.7).

Enabling Legislation—NPS legislation setting forth the legal parameters by which each park may operate.

Endangered Species—“...any species (including subspecies or qualifying distinct population segment) that is in danger of extinction throughout all or a significant portion of its range” (ESA Section 3(6)). The lead federal agency, the USFWS, for the listing of a species as endangered is responsible for reviewing the status of the species on a five-year basis.

Endangered Species Act (16 USC 1531 et seq.)—An act to provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved and to provide a program for the conservation of such endangered and threatened species.

Environmental Assessment (EA)—An environmental analysis prepared pursuant to NEPA to determine whether a federal action would significantly affect the environment and thus require a more detailed environmental impact statement (EIS).

Executive Order—Official proclamation issued by the President that may set forth policy or direction or establish specific duties in connection with the execution of federal laws and programs.

Finding of No Significant Impact—A document prepared by a federal agency showing why a proposed action would not have a significant impact on the environment and thus would not require preparation of an EIS. A finding of no significant impact is based on the results of an EA.

National Environmental Policy Act (NEPA)—The act as amended articulates the federal law that mandates protecting the quality of the human environment. It requires federal agencies to systematically assess the environmental impacts of their proposed activities, programs, and projects including the “no action” alternative of not pursuing the proposed action. NEPA requires agencies to consider alternative ways of accomplishing their missions in ways that are less damaging to the environment.

National Historic Preservation Act of 1966 (NHPA) (16 USC 470 et seq.)—An act to establish a program for the preservation of historic properties throughout the nation, and for other purposes, approved October 15, 1966 [Public Law 89-665; 80 STAT.915; 16 USC 470 as amended by Public Law

91-243, Public Law 93-54, Public Law 94-422, Public Law 94-458, Public Law 96-199, Public Law 96-244, Public Law 96-515, Public Law 98-483, Public Law 99-514, Public Law 100-127, and Public Law 102-575].

National Register of Historic Places (NRHP)—A register of districts, sites, buildings, structures, and objects important in American history, architecture, archeology, and culture, maintained by the Secretary of the Interior under authority of Section 2(b) of the *Historic Sites Act of 1935* and Section 101(a)(1) of the *National Historic Preservation Act of 1966*, as amended.

Organic Act—Enacted in 1916, this act commits the NPS to making informed decisions that perpetuate the conservation and protection of park resources unimpaired for the benefit and enjoyment of future generations.

Scoping—Scoping, as part of NEPA, requires examining a proposed action and its possible effects; establishing the depth of environmental analysis needed; and determining analysis procedures, data needed, and task assignments. The public is encouraged to participate and submit comments on proposed projects during the scoping period.

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- 2008 Soil Data Mart- Prince William County. Hazard of Erosion and Suitability for Roads on Forestland. Accessed via the internet on February 3, 2001 at:
<http://soildatamart.nrcs.usda.gov/>.
- 2011 Natural Resources Conservation Services: Web *Soil Survey of Prince William County, Virginia*. Accessed via the internet on February 3, 2011 at:
<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>.

U.S. Environmental Protection Agency (EPA)

- 1998 Chapter 1, page 15

Zenzen, Joan

- 1998 *Battling for Manassas: The Fifty-year Preservation Struggle at Manassas National Battlefield Park*.

APPENDIX A: CONSULTATION

2006-1202



IN REPLY REFER TO:
L30(NCR-MANA)

United States Department of the Interior

NATIONAL PARK SERVICE
Manassas National Battlefield Park
12521 Lee Highway
Manassas, Virginia 20109-2005

June 2, 2011

Ms. Kathleen Kilpatrick
State Historic Preservation Officer
Department of Historic Resources
Commonwealth of Virginia
2801 Kensington Avenue
Richmond, Virginia 23221

Attn.: Ethel R. Eaton

Dear Ms. Kilpatrick:

The National Park Service is proposing to construct a public restroom facility on the Brawner Farm at Manassas National Battlefield Park. The park, a unit of the National Park Service (NPS), is located within Prince William County, about five miles north of the city of Manassas, Virginia. As the park is listed on the National Register of Historic Places, this undertaking is being submitted for review under the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended, and the regulations of the Advisory Council on Historic Preservation.

The proposed undertaking entails constructing a restroom facility adjacent to the existing parking area for the Brawner Farm. The primary drain field and the secondary, reserve drain field for the facility will be located to the north of the parking area. The locations of these and other associated features appear on the Utility Plan (Sheet C1.04 from the Brawner Farm Restroom Facility construction documents), which is included in the enclosure. A restroom facility plan and exterior elevations are likewise enclosed for your reference. We have also enclosed a copy of our recent correspondence with you concerning the adequacy of archeological testing within the project area, bearing a concurrence signature dated April 9, 2011. The color brochure depicting the Montrose structure, produced by CXT, is an example of the type of structure proposed and is included for illustrative purposes.



We have applied the criteria of adverse effect found in 36 CFR § 800.5 of the Council's regulations, and we believe that this project will have no adverse effect upon this historic property. The enclosed documentation, consisting of the assessment of effect form for this proposal, will provide your office with our review of this project for its effect upon the park's historic properties. We request your concurrence in our finding of effect at your earliest convenience.

If you have any questions regarding this proposal, please contact Ray Brown, Chief of Interpretation and Cultural Resources Management at (703) 361-1339, ext. 1203. Please forward all Section 106 compliance concerns to my office. We look forward to hearing from you soon.


Sincerely,



Edward W. Clark, III
Superintendent

Enclosure

I concur that the proposed project will have no adverse effect upon historic properties at Manassas National Battlefield Park.

 State Historic Preservation Officer Ed R. Eaton Date 6-
DHR File No. 2006-1202



ASSESSMENT OF ACTIONS HAVING AN EFFECT ON CULTURAL RESOURCES

A. DESCRIPTION OF UNDERTAKING

1. Park: Manassas National Battlefield Park

2. Project Description:

Project Name: Develop Public Restrooms for Brawner Farm

Prepared by: Ray Brown **Date Prepared:** **Telephone:** 703-361-1339

PEPC Project Number: 31692

Locations:

Describe project and area of potential effects (as defined in 36 CFR 800.2[c])

This project entails developing and constructing a public restroom facility for the Brawner Farm on the Second Manassas Battlefield. The park has rehabilitated the post-Civil War farmhouse at the Brawner Farm for use as an interpretive facility, with an information desk, exhibit panels, and a lighted battle map program, to orient visitors to the battlefield and introduce them to the Second Manassas battle story. The development of the site also included an entrance road, a parking lot, and a paved pedestrian path to the house. Although the rehabilitation project did not include restrooms, the plans for the site identified a location for a future restroom building near the parking lot.

This project will result in designing and constructing a comprehensive restroom facility that will accommodate the following factors: -annual (12 month) visitation of 35,000 visitors -uses two designated drain fields with their inherent percolation capacities to meet the septic system demand -total of two sinks, one urinal, and three commodes, all having flushing capacity -location of well to supply the facility, to include designation of water line route and electric service line route -water treatment system adequate to supply safe source of potable water -location and design of electric service to the facility that will provide operation of lights, the water well system, heating system, and water treatment system -placement/construction of the park-designated pre-cast restroom structure on park designated location, with associated installation concerns, procedures, and sequence of construction.

The restroom facility will be located west of the parking lot at the Brawner Farm and within the loop drive. Both the primary drain field and the secondary, reserve drain field will be located to the north of the parking area. Although earlier planning had identified other locations for the restroom facility and drainfields, these revised locations were determined during project design. Consultation with the Virginia Department of Historic Resources, by letter dated April 9, 2011, determined that adequate archeological testing had taken place in the project area and that no additional investigation was warranted.

To connect the restroom facility with the parking lot, a sidewalk will be installed extending along the west edge of the parking area and will connect with the restroom building. The sidewalk will also run along the perimeter of the structure. The sidewalk will measure approximately 5' in width.

The park is proposing a structure designed and provided by a GSA vendor, in keeping with agency procedures. The park had previously acquired a restroom structure from another GSA vendor for its picnic area. The reason for choosing this design, instead of the one chosen for the picnic area, is that the Brawner facility will need to have flushing capability, running hot/cold water, lights, and a mid-structure corridor inside the building footprint to accommodate utilities and maintenance operations.

The proposed structure will measure 25'-6" long by 16'-6" wide, with an approximate roof height of 13'. A shed structure measuring 12'-10" by 5' will be built in rear of and adjoining the restroom structure. The enclosed example of the Montrose model flush restroom, by CXT, is a similar to the proposed structure and is included for illustrative purposes. The model has multiple options for roof and wall type, texture, and color.

3. Has the area of potential effects been surveyed to identify cultural resources?

No

Yes

Source or reference: Bedell, John. Archeological Investigation for 2nd Manassas Tour Development: Brawner Farm Site (44PW452), 2005. Earley, Judith, and Kay Fanning. Brawner Farm, Manassas National Battlefield Park: Cultural Landscape Report, 2005. Joseph, Maureen. Cultural Landscape Inventory: Northwest Quadrant, Manassas National Battlefield Park, 1996. Cultural Landscapes Inventory: Brawner Farmstead, Manassas National Battlefield Park, prepared by National Capital Region, 2009. Potter, Stephen R., et al. "No Maneuvering and Very Little Tactics": Archeology and the Battle of Brawner Farm (44PW452), 2001

Check here if no known cultural resources will be affected. (If this is because area has been disturbed, please explain or attach additional information to show the disturbance was so extensive as to preclude intact cultural deposits.)

4. Potentially Affected Resource(s):

Brawner Farm

5. The proposed action will: (check as many as apply)

No **Destroy, remove, or alter features/elements from a historic structure**

No **Replace historic features/elements in kind**

No **Add non-historic features/elements to a historic structure**

No **Alter or remove features/elements of a historic setting or environment (inc. terrain)**

Yes **Add non-historic features/elements (inc. visual, audible, or atmospheric) to a historic setting or cultural landscape**

No **Disturb, destroy, or make archeological resources inaccessible**

No **Disturb, destroy, or make ethnographic resources inaccessible**

Yes **Potentially affect presently unidentified cultural resources**

No **Begin or contribute to deterioration of historic features, terrain, setting, landscape elements, or archeological or ethnographic resources**

No **Involve a real property transaction (exchange, sale, or lease of land or structures)**

Other (please specify):

6. Supporting Study Data:

(Attach if feasible; if action is in a plan, EA or EIS, give name and project or page number.)

B. REVIEWS BY CULTURAL RESOURCE SPECIALISTS

The park 106 coordinator requested review by the park's cultural resource specialist/advisors as indicated by check-off boxes or as follows:

[X] Archeologist

Name: Stephen Potter

Date: 08/03/2010

Comments: Archeologists from the Louis Berger Group, Inc., Richmond, VA, office conducted Phase I archeological investigations at the locations of the proposed restroom facility and two drain fields on the Brawner Farm during the period from September 27 to October 13, 2010. A total of 31 shovel test pits were excavated within these three areas and no artifacts were discovered. Systematic metal detector sweeps of the same areas were also undertaken and only two Civil War artillery shell fragments were recovered -- both from Drainfield Site 2. A Management Summary dated October 27, 2010, was prepared by Brad M. Duplantis of the Louis Berger Group, Inc. and reviewed and approved by the NPS. Therefore, the proposed undertaking will have no adverse effect upon archeological resources.

Check if project does not involve ground disturbance []

Assessment of Effect: No Historic Properties Affected No Adverse Effect
 Adverse Effect Streamlined Review

Recommendations for conditions or stipulations: This project is being done under the terms of a Memorandum of Agreement between Dominion Virginia Power, the Virginia State Historic Preservation Office, and Manassas National Battlefield Park (NPS), dated August 11, 2009.

Doc Method: Park Specific Programmatic Agreement

[X] Historical Landscape Architect

Name: Maureen Joseph

Date: 12/02/2010

Check if project does not involve ground disturbance []

Assessment of Effect: No Historic Properties Affected No Adverse Effect
 Adverse Effect Streamlined Review

Recommendations for conditions or stipulations:

Doc Method: Standard 4-Step Process

No Reviews From: Curator, Historical Architect, Historian, 106 Advisor, Other Advisor, Anthropologist

C. PARK SECTION 106 COORDINATOR'S REVIEW AND RECOMMENDATIONS

1. Assessment of Effect:

No Historic Properties Affected No Adverse Effect Adverse Effect

2. Documentation Method:

A. STANDARD 36 CFR PART 800 CONSULTATION
Further consultation under 36 CFR Part 800 is needed.

B. STREAMLINED REVIEW UNDER THE 2008 SERVICEWIDE PROGRAMMATIC AGREEMENT (PA)

The above action meets all conditions for a streamlined review under section III of the 2008 Servicewide PA for Section 106 compliance.

APPLICABLE STREAMLINED REVIEW Criteria
(Specify 1-16 of the list of streamlined review criteria.)

C. PLAN-RELATED UNDERTAKING

Consultation and review of the proposed undertaking were completed in the context of a plan review process, in accordance with the 2008 Servicewide PA and 36 CFR Part 800.
Specify plan/EA/EIS:

D. UNDERTAKING RELATED TO ANOTHER AGREEMENT

The proposed undertaking is covered for Section 106 purposes under another document such as a statewide agreement established in accord with 36 CFR 800.7 or counterpart regulations.
Specify: _____

E. COMBINED NEPA/NHPA Document

Documentation is required for the preparation of an EA/FONSI or an EIS/ROD has been developed and used so as also to meet the requirements of 36 CFR 800.3 through 800.6

F. No Potential to Cause Effects [800.3(a)(1)]

G. Memo to SHPO/THPO

H. Memo to ACHP

3. Additional Consulting Parties Information:

Additional Consulting Parties: No

4. Stipulations and Conditions:

Following are listed any stipulations or conditions necessary to ensure that the assessment of effect above is consistent with 36 CFR Part 800 criteria of effect or to avoid or reduce potential adverse effects.

5. Mitigations/Treatment Measures:

Measures to prevent or minimize loss or impairment of historic/prehistoric properties:
(Remember that setting, location, and use may be relevant.)

No Assessment of Effect mitigations identified.

D. RECOMMENDED BY PARK SECTION 106 COORDINATOR:

Compliance Specialist:

NHPA Specialist

Ray Brown

Ray Brown

Date: 5/27/11

E. SUPERINTENDENT'S APPROVAL

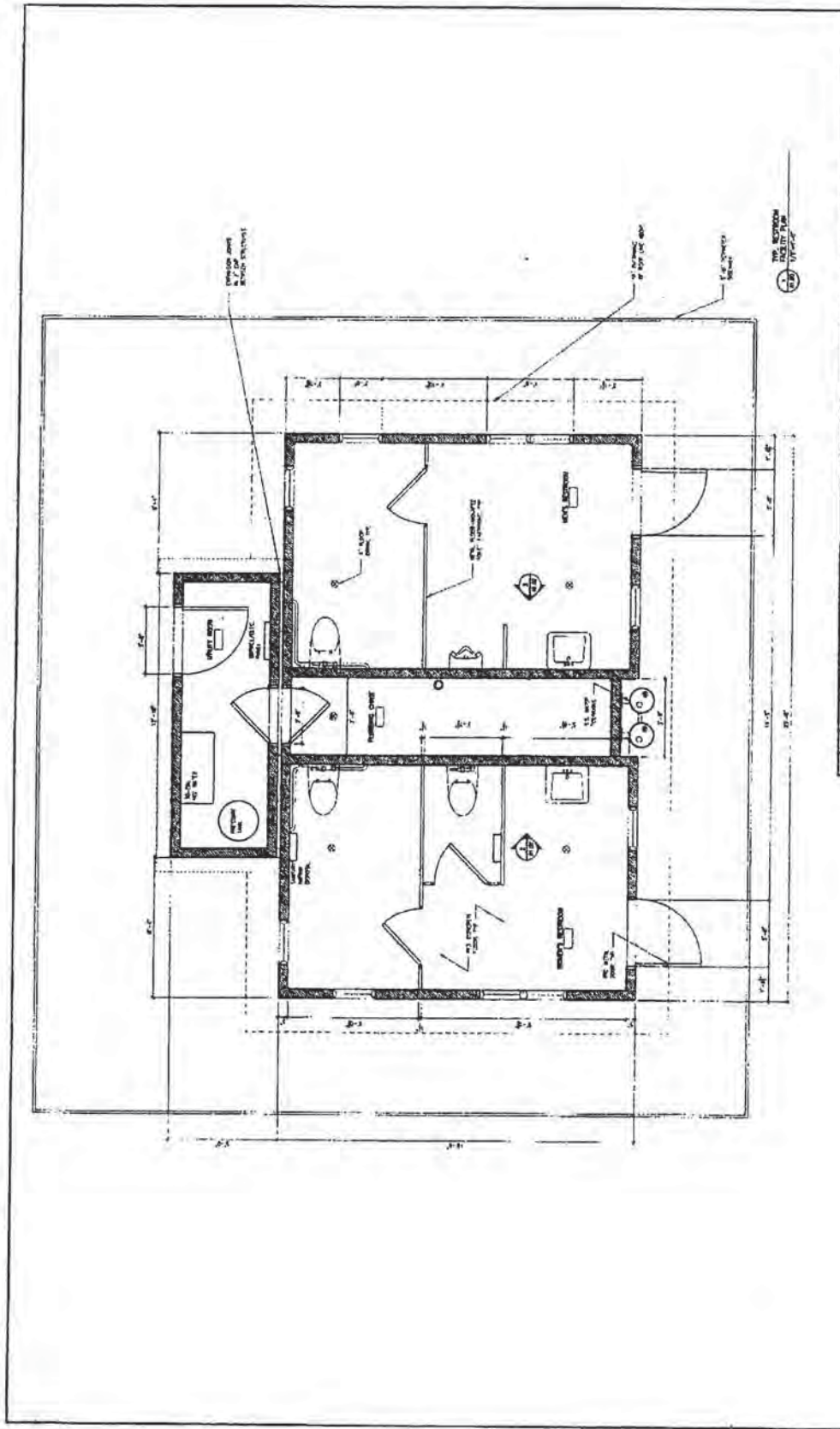
The proposed work conforms to the NPS *Management Policies* and *Cultural Resource Management Guideline*, and I have reviewed and approve the recommendations, stipulations, or conditions noted in Section C of this form.

Signature

Superintendent:

Ray Brown
for Edward W. Clark

Date: 5/27/11



SHEET NO. 11 DATE 06/19/71		PROJECT NO. 11111111 PROJECT NAME RESTROOM FACILITY	
DRAWN BY CHECKED BY DATE	DESIGNED BY DATE	APPROVED BY DATE	TITLE RESTROOM FACILITY PLAN
NO. 1 NO. 2 NO. 3 NO. 4 NO. 5 NO. 6 NO. 7 NO. 8 NO. 9 NO. 10	NO. 11 NO. 12 NO. 13 NO. 14 NO. 15 NO. 16 NO. 17 NO. 18 NO. 19 NO. 20	NO. 21 NO. 22 NO. 23 NO. 24 NO. 25 NO. 26 NO. 27 NO. 28 NO. 29 NO. 30	NO. 31 NO. 32 NO. 33 NO. 34 NO. 35 NO. 36 NO. 37 NO. 38 NO. 39 NO. 40

MONTROSE

Multi-flush, fully accessible.



**Montrose with privacy screen, split face block wall texture, and cedar shake roof.*

The Montrose is a versatile multi-flush building designed to meet the needs of most high use parks.



The Montrose is designed to meet all current American with Disabilities Act requirements.

Standard features include sinks, toilet bowls, urinals, interior and exterior lights.

The Montrose can be ordered in several different textures and multiple different and unique earth tone colors. It can be configured with a privacy screen, full porch, or without either.

Durability:

The Montrose is engineered and built for long-life in extreme conditions. It is capable of meeting extreme Zone 4 earthquake requirements, hurricane force winds, and extreme snow loads.

Maintenance:

The Montrose is extremely easy to maintain. With our reinforced concrete construction, the building will not rot, rust, or burn. The white interior reflects natural light from steel framed Lexan windows which are cast into the walls. Interior cleaning is easily accomplished with a brush and warm soapy water. Stall partitions are

the same high strength concrete as the exterior walls and roof, all coated with anti-graffiti sealer. The walls and roof are made of "colored through concrete", coated with an exterior stain, followed by an anti-graffiti sealer.

Meets UFAS, A.D.A. and Title 24 statute of the State of California

Vandal resistant building & toilet components

4" thick steel reinforced concrete walls

5" thick steel reinforced concrete roof & floors

Quick installation and hookup at the jobsite

Available in (25) different and unique earthtone colors

Barnwood, stucco, exposed aggregate, or split face block exterior wall textures

Cedar shake, ribbed metal, or exposed aggregate exterior roof textures

Custom textures and colors available



Utilities:

The utilities are pre-wired, plumbed and tested before shipping to meet local code requirements. They are concealed within the chase/storage area for easy hookup and maintenance and to minimize vandalism. Standard plumbing fixtures are of vitreous china construction. Stainless steel fixtures, hot water and room heater are available as options.

Hook Up and Installation:

Minimal site work is required. The Building is installed on minimum

six-inch thick, compacted gravel base. Water, sewage, and electrical utility lines are stubbed up through the prepared base to match up with the utility access hole



in the floor of the chase area.

The two sections of the Montrose are post-tensioned, and the

utilities connected. Full installation is completed in 1-2 days, substantially faster than a site built building.

Quality and Value:

CXT produces consistently high quality buildings at competitive costs. Our state of the art facilities are fitted with the latest technology to insure we meet our customers' high standards. We pride ourselves in our craftsmanship and our legendary customer service. See why our customers say, "Once you buy a CXT produced building you will never purchase anything else."



**Montrose with porch overhang, barnwood texture, and cedar shake roof.*

LBFoster

CXT® Concrete Buildings

CXT Incorporated
An L.B. Foster Company

Spokane Industrial Park
3808 N. Sullivan Road Bldg. #7
Spokane, WA 99216

Telephone 509-921-8766
Fax 509-928-8270
Toll Free 800-696-5766

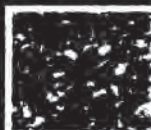
www.cxtinc.com

Wall Textures:

Standard:



Available Options:

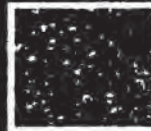


Roof Textures:

Standard:



Available Options:



Also available in custom colors and textures.





IN REPLY REFER TO:
L30(NCR-MANA)

United States Department of the Interior

NATIONAL PARK SERVICE
Manassas National Battlefield Park
12521 Lee Highway
Manassas, Virginia 20109-2005

April 8, 2011

Ms. Kathleen Kilpatrick
State Historic Preservation Officer
Department of Historic Resources
Commonwealth of Virginia
2801 Kensington Avenue
Richmond, Virginia 23221

Attn.: Ethel R. Eaton

Dear Ms. Kilpatrick:

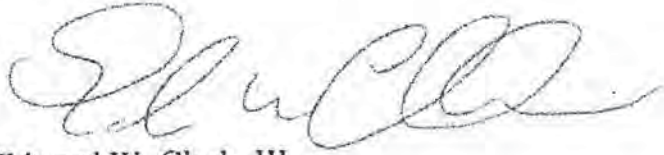
We are writing to follow up on our consultation with your office concerning plans for the construction of a restroom facility with associated drain fields on the Brawner Farm at Manassas National Battlefield Park and the adequacy of existing surveys of archeological resources in the project area. Existing surveys have been documented in a July 2006 final report of the Archeological Investigation for 2nd Manassas Tour Development: Brawner Farm Site (44PW 452) and in a management summary of the archeological survey of sites associated with the Brawner Farm landscape treatment plan, dated October 27, 2010.

As we discussed during our April 5, 2011, conference call, the 30% submission drawings for the proposed restroom facility have revised the location of the facility, resulting in a proposed construction location immediately outside the areas investigated for archeological resources. The areas investigated previously surround and adjoin the revised location of the facility and its associated tanks, well, and septic force main. As documented in the referenced report and management summary above, no significant archeological resources were identified in the areas surrounding and adjoining the revised facility location.

Based on these earlier findings, the National Park Service believes that sufficient archeological testing has been undertaken and that no additional investigation is warranted prior to

construction of the restroom facility and its associated features in the revised location. We request your concurrence with this determination at your earliest convenience.

Sincerely,



Edward W. Clark, III
Superintendent

I concur that sufficient archeological testing has occurred and that no additional investigation is warranted prior to construction at the revised location.

State Historic Preservation Officer Edward R. Eaton Date April 9, 2011
DHR File No. 2006-1202

Larson, Emily

From: Bryan_Gorsira@nps.gov
Sent: Friday, March 04, 2011 11:11 AM
To: Larson, Emily
Subject: Fw: Restrooms at Manassas Battlefield - PWC comments
Attachments: Victor garza comment.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

More comments.

Bryan Gorsira
Natural Resource Program Manager
Manassas National Battlefield Park
12521 Lee Highway
Manassas, VA 20109
Cell Phone (571)-437-1798
Office Phone (703) 754-1861 Ext. 1109
Fax (703) 754-1107

----- Forwarded by Bryan Gorsira/MANA/NPS on 03/04/2011 11:08 AM -----

"Switzer, Debra (DCR)" <Debra.Switzer@dcr.virginia.gov>

To <bryan_gorsira@nps.gov>

cc "Aveni, Marc" <MAveni@pwcgov.org>, "Vanover, Kelly (DCR)"
<Kelly.Vanover@dcr.virginia.gov>

03/04/2011 11:01 AM EST

Subject RE: Restrooms at Manassas Battlefield - PWC comments

Mr. Gorsira,

If this project includes more than 2,500 sq.ft of land disturbance, be sure to obtain a Virginia Stormwater Management Program permit (VSMP) and have a complete SWPPP (Stormwater Pollution Prevention Plan) on site during construction.

Additional information is on the DCR website (http://www.dcr.virginia.gov/soil_and_water) or you may contact me.

Thanks,

Debra Switzer
Stormwater Compliance Specialist
Department of Conservation & Recreation
Warrenton Regional Office

98 Alexandria Pike
Warrenton, VA 20186

(540) 351-1589
FAX (540) 347-6423
debra.switzer@dcr.virginia.gov

From: Aveni, Marc [<mailto:MAveni@pwcgov.org>]

Sent: Thursday, March 03, 2011 3:23 PM

To: bryan_gorsira@nps.gov

Cc: Loyko, Joan C.; Taylor, Glenda; Duby, Dreama D.; Kirste, Uwe; Bruun, Thomas; Peacor, Melissa S.; Flood, Mary Jo A.; Dietz, Patty T.; Hanafin, Brendon C.; Switzer, Debra (DCR)

Subject: Restrooms at Manassas Battlefield - PWC comments

Mr. Gorsira,

Prince William County is in receipt of your request for comments on the National Park Service plans to construct restrooms on the Brawner Farm in the Manassas Battlefield Park.

The County has no objections to this proposal provided all applicable Virginia Erosion and Sediment controls are installed and maintained until final site stabilization.

The County does request a courtesy copy of the final, approved site plan be sent to us at the address below for our records.

Regards,

Marc T. Aveni
Watershed Branch Chief
Prince William County Public Works
5 County Complex, Suite 170
Prince William, VA 22192
voice 703-792-4064
fax 703-792-6297
cell 571-722-4353
email maveni@pwcgov.org



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

4975 Alliance Drive
Fairfax, VA 22030

GREGORY A. WHIRLEY
COMMISSIONER

February 25, 2011

Mr. Edward W. Clark
Park Superintendent
Manassas National Battlefield Park Headquarters
ATTN: Brawner Farm Restroom Facility
12521 Lee Highway
Manassas, Virginia 20109



Dear Superintendent Clark:

Thank you for alerting us to the new restroom facility, and appurtenant items, proposed for construction in the Brawner Farm portion of the Park. That project should not have any significant impacts on our transportation network. Neither the adopted metropolitan regional constrained long range plan (CLRP) nor the Prince William County transportation plan envisions any improvement to US 29 in that area.

We appreciate you telling us about this project and hope that the construction goes smoothly. The proposed restroom facility will undoubtedly add to the overall enjoyment of the Park by its many visitors.

Sincerely,

A handwritten signature in blue ink that reads "R. McDonald".

Robert H. McDonald, P.E.
Chief, Planning Section
Northern Virginia District

cc: Christopher D. Adkins, Environmental Division

EC 4/1
Copy to BEGAN



Loudoun County, Virginia

Department of Planning

1 Harrison Street, S.E., 3rd Floor, P.O. Box 7000, MSC #62

Leesburg, VA 20177-7000

Telephone (703) 777-0246 • Fax (703) 777-0441

March 29, 2011

Mr. Edward W. Clark
Park Superintendent
Manassas National Battlefield Park Headquarters
12521 Lee Highway
Manassas, VA 20109



Dear Mr. Clark:

This letter is in response to the request received on February 18, 2011 for comments, questions, and/or concerns on the proposed Brawner Farm Restroom Facility at Manassas National Battlefield Park.

The information available at <http://parkplanning.nps.gov/MANA> as of the date of this letter included a project home page, a Project Location image and a Letter to Public file. Each has been reviewed and no comments are offered.

Thank you for notification and the opportunity to comment on this project.

Sincerely,

Julie Pastor, AICP
Director of Planning

cc: File

EC 3/16

United States Department of Agriculture



Natural Resources Conservation Service
1606 Santa Rosa Road, Suite 209
Richmond, VA 23229-5014

Telephone: 804-287-1691
Fax: 804-287-1737

March 14, 2010

Manassas National Battlefield Park Headquarters
Attn: Brawner Farm Restroom Facility
12521 Lee Highway
Manassas, VA 20109

Dear Mr. Clark:

Thank you for your scoping letter regarding the proposed construction of a new restroom facility at the Brawner Farm in Manassas National Battlefield Park.

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) has reviewed documentation pertaining to the Environmental Assessment (EA) your agency is preparing. Prime farmlands exist within the proposed project limits. However, pursuant to §658.2 of the Farmland Protection Policy Act (FPPA), those lands are no longer subject to the FPPA. Since the new facility will be adjacent to the existing parking lot, those lands are considered to be already in or committed to urban development. Therefore, no further action is required by the National Park Service in regards to the provisions of the FPPA.

Thank you for the opportunity to review and comment on this project. If you have any questions, please contact Jeffray Jones at (804) 287-1636 or jeffray.jones@va.usda.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. Bricker".

JOHN A. BRICKER
State Conservationist

cc: Jeffray Jones, Resource Conservationist, NRCS, Richmond

EC 3/16



COUNTY OF PRINCE WILLIAM

1 County Complex Court, Prince William, Virginia 22192-9201
(703)792-4640 Metro (703) 631-1703 FAX: (703) 792-4637

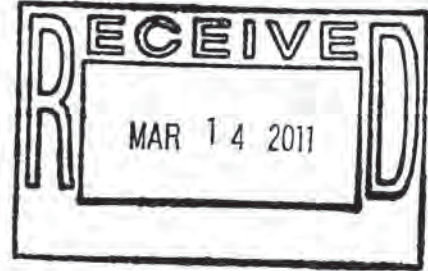
BOARD OF COUNTY SUPERVISORS

Corey A. Stewart, Chairman
Maureen S. Caddigan, Vice Chairman
W.S. Wally Covington III
John D. Jenkins
Michael C. May
Martin E. Nohe
Frank J. Principi
John T. Stirrup

Corey A. Stewart
Chairman

March 3, 2011

Edward W. Clark
Park Superintendent
US Department of the Interior
Manassas National Battlefield Park
12521 Lee Highway
Manassas, VA 20109-2005



Re: Brawner Farm Restroom Facility Upgrade at Manassas National Battlefield Park

To Whom It May Concern:

I strongly support the proposed upgrade of the Brawner Farm Restroom Facility at Manassas National Battlefield Park. This year will mark the Sesquicentennial Anniversary of First Manassas and as such will bring a record number of visitors to our for this event and throughout the year. This upgrade is vitally needed to accommodate these visitors.

Should you have any further questions, please feel free to contact me.

Sincerely,

Corey A. Stewart

Larson, Emily

From: Bryan_Gorsira@nps.gov
Sent: Friday, March 04, 2011 8:40 AM
To: Larson, Emily
Subject: Fw: Restrooms at Manassas Battlefield - PWC comments

FYI

Bryan Gorsira
Natural Resource Program Manager
Manassas National Battlefield Park
12521 Lee Highway
Manassas, VA 20109
Cell Phone (571)-437-1798
Office Phone (703) 754-1861 Ext. 1109
Fax (703) 754-1107

----- Forwarded by Bryan Gorsira/MANA/NPS on 03/04/2011 08:39 AM -----

"Aveni, Marc" <MAveni@pwcgov.org>

03/03/2011 03:23 PM EST

To <bryan_gorsira@nps.gov>

cc "Loyko, Joan C." <jloyko@pwcgov.org>, "Taylor, Glenda" <gtaylor@pwcgov.org>, "Duby, Dreama D." <dduby@pwcgov.org>, "Kirste, Uwe" <ukirste@pwcgov.org>, "Bruun, Thomas" <tbruun@pwcgov.org>, "Peacor, Melissa S." <mpeacor@pwcgov.org>, "Flood, Mary Jo A." <MFlood@pwcgov.org>, "Dietz, Patty T." <pdietz@pwcgov.org>, "Hanafin, Brendon C." <bhanafin@pwcgov.org>, "Switzer, Debra (DCR)" <Debra.Switzer@dcr.virginia.gov>

Subject Restrooms at Manassas Battlefield - PWC comments

Mr. Gorsira,

Prince William County is in receipt of your request for comments on the National Park Service plans to construct restrooms on the Brawner Farm in the Manassas Battlefield Park.

The County has no objections to this proposal provided all applicable Virginia Erosion and Sediment controls are installed and maintained until final site stabilization.

The County does request a courtesy copy of the final, approved site plan be sent to us at the address below for our records.

Regards,

Marc T. Aveni
Watershed Branch Chief
Prince William County Public Works
5 County Complex, Suite 170
Prince William, VA 22192
voice 703-792-4064
fax 703-792-6297
cell 571-722-4353

email maveni@pwcgov.org



COMMONWEALTH of VIRGINIA

In Cooperation with the
State Department of Health

Prince William Health District
Division of Onsite and Water Services
5 County Complex Court, Suite #240
Woodbridge, Virginia 22192

SERVING:
CITY OF MANASSAS
CITY OF MANASSAS PARK
PRINCE WILLIAM COUNTY
TELEPHONE: 703-792-6310
ENVIRONMENTAL HEALTH:
703-792-6310
Fax: 703-792-4743

19 April 2011

Darrell F. Caison, P.E.
Wiles Mensch Corporation
11860 Sunrise Valley Drive Suite 200
Reston, Va 20191

RE: PROPOSED PUBLIC RESTROOM FACILITY AT MANASSAS NATIONAL BATTLEFIELD PARK

DEAR MR. CAISON:

To confirm- Prince William Health District is not required to issue a permit for the proposed sewage disposal system for the restrooms at the Brawner Farm site at Manassas National Battlefield. As this is federal property it is exempt from state regulations and we therefore decline to issue a permit. We do recommend that a licensed Alternative Onsite Sewage Evaluator(AOSE) be retained to certify that the system proposed meets the State's regulations. We understand you have retained one.

AOSE's are authorized by code and regulation to certify that proposed sewage disposal sites comply with the criteria in the Virginia regulations. **There is a standard certification statement they turn in with application submitted.** You may want this statement signed for your project.

As time permits, we are willing to look over the proposal for the site and offer our comments on its feasibility and compliance. Please forward a copy with contact information to Les Ramsey, Environmental Health Supervisor should you want a review.

Please contact me if you have further questions.

Sincerely,

John X. Meehan, Jr.
Environmental Health Manager



PEPC Project ID: 31692, DocumentID: 39271

Correspondence: 1

Author Information

Keep Private: Yes
Name: Kim D. Chinn
Organization: Prince William County Police
Organization Type: I - Unaffiliated Individual
Address: 8900 Freedom Center Blvd
manassas, VA 20110
USA

E-mail:

Correspondence Information

Status: New Park Correspondence Log:
Date Sent: 02/24/2011 Date Received: 02/24/2011
Number of Signatures: 1 Form Letter: No
Contains Request(s): No Type: Web Form
Notes:

Correspondence Text

Great idea. The Battlefield Park is a fantastic place to ride but is lacking in comfort areas for visitors. The proposal for facilities and water is a necessary upgrade. Thank you!

PEPC Project ID: 31692, DocumentID: 39271

Correspondence: 2

Author Information

Keep Private: No
Name: Kate Norris
Organization: Prince William Soil & Water Conservation District
Organization Type: I - Unaffiliated Individual
Address: 13061 Fitzwater Drive
Nokesville, VA 20181
Nokesville, VA 20181
USA
E-mail: katenorris@pwsacd.org

Correspondence Information

Status: New Park Correspondence Log:
Date Sent: 03/02/2011 Date Received: 03/02/2011
Number of Signatures: 1 Form Letter: No
Contains Request(s): No Type: Web Form
Notes:

Correspondence Text

Thank you for seeking our comments on the facility upgrade at the Battlefield that will provide bathrooms at Brawner Farm. We would encourage you to consider the use of Local Impact Design (LID) and innovative energy conservation elements, as applicable to the project. The site provides a wonderful opportunity to demonstrate, to the 35,000 annual visitors, the importance of "green" building and conservation, especially initiated by our federal government.

PEPC Project ID: 31692, DocumentID: 39271
Correspondence: 3

Author Information

Keep Private: No
Name: Joe M. Kobus
Organization: Enerfusion Inc.
Organization Type: I - Unaffiliated Individual
Address: 2305 N. High St.
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USA
E-mail: joe@enerfusioninc.com

Correspondence Information

Status: New Park Correspondence Log:
Date Sent: 03/07/2011 Date Received: 03/07/2011
Number of Signatures: 1 Form Letter: No
Contains Request(s): No Type: Web Form
Notes:

Correspondence Text

Hello, Enerfusion Inc. is the manufacturer of a self contained Solar Power charging system, the "Solar Dok". The Solar Dok has been designed to deliver "Green" energy for outdoor use in parks and universities. Please take the time to visit our website at www.enerfusioninc.com as I feel this would be a great fit for parks and recreation.
Thank you,
Joe Kobus

PEPC Project ID: 31692, DocumentID: 39271

Correspondence: 4

Author Information

Keep Private: No
Name: Alice R. Baird
Organization: VA Dept of Conservation & Recreation, Division of Natural Heritage
Organization Type: I - Unaffiliated Individual
Address: 217 Governot Street
Richmond, VA 23219
USA
E-mail: nhreview@dcr.virginia.gov

Correspondence Information

Status: New Park Correspondence Log:
Date Sent: 03/17/2011 Date Received: 03/17/2011
Number of Signatures: 1 Form Letter: No
Contains Request(s): No Type: Web Form
Notes:

Correspondence Text

March 17, 2011

Edward Clark
Manassas National Battlefield Park Headquarters
Attn: Brawner Farn Restroom Facility
12521 Lee Highway
Manassas, VA 20109

Re: Manassas National Battlefield Park ? Brawner Farm Restroom Facility

Dear Mr. Clark:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in our files, this site is located within the Manassas Diabase Uplands Conservation Site. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity,

quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. Manassas Diabase Uplands Conservation Site has been given a biodiversity significance ranking of B3, which represents a site of high significance. The natural heritage resource of concern at this site is:

Stachys arenicola Marsh hedgenettle G5T4?/S1/NL/NL

Marsh hedgenettle can be found, typically in western region of U.S., and adventives eastward. Found to have hairs on stem-angled flexed, pustulate, distinctly longer but scarcely stouter than those of the sides. Leaves are 2-4 cm wide, lance-ovate or broadly oblong to ovate (Cronquist & Gleason, 1993).

Due to the potential for this site to support populations of natural heritage resources, DCR recommends an inventory for Marsh hedgenettle in the study area. With the survey results we can more accurately evaluate potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources.

DCR Division of Natural Heritage biologists are qualified and available to conduct inventories for rare, threatened, and endangered species. Please contact J. Christopher Ludwig, Natural Heritage Inventory Manager, at chris.ludwig@dcr.virginia.gov or 804-371-6206 to discuss arrangements for field work.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

Our files do not indicate the presence of any State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

New and updated information is continually added to Biotics. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized.

The Virginia Department of Game and Inland Fisheries maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from <http://vafwis.org/fwis/> or contact Shirl Dressler at (804) 367-6913.

Should you have any questions or concerns, feel free to contact me at 804-692-0984. Thank you for the opportunity to comment on this project.

Sincerely,

Alli Baird, LA, ASLA
Coastal Zone Locality Liaison

Literature Cited

Cronquist Ph.D., Arthur and Henry A. Gleason, Ph.D. 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada, Second Edition. The New York Botanical Garden. Bronx, N.Y. p.574.

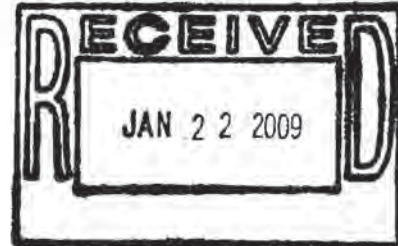


United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
6669 Short Lane
Gloucester, VA 23061

January 21, 2009



National Park Service
Manassas National Battlefield Park
12521 Lee Highway
Manassas, Virginia 20109-2005

Re: Proposed Dominion Transmission
Project Environmental Assessment,
Prince William County, Virginia

Greetings:

The U.S. Fish and Wildlife Service (Service) has received the notice from the National Park Service (NPS) regarding the preparation of an Environmental Assessment for erection of a new transmission line on an existing alignment within an existing cleared right-of-way on Manassas National Battlefield Park in Prince William County, Virginia. Construction of the power line would require clearing for six access roads. This letter constitutes the report of the Service on this project and is submitted in accordance with provisions of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Based on the information provided, the Service recommends that surveys be conducted for the federally-threatened, small whorled pogonia (*Isotria medeoloides*) in any appropriate habitat that would be affected by construction. The enclosed list contains individuals who are qualified to assess habitat and conduct surveys for the small whorled pogonia. This list may not include all individuals qualified or authorized to survey for this species. If a surveyor is selected who is not on the pre-approved surveyor list, the surveyor's qualifications and proposed survey design should be submitted to this office for review at least 30 days prior to work. Please send copies of all survey results to this office or inform this office if a survey will not be conducted.

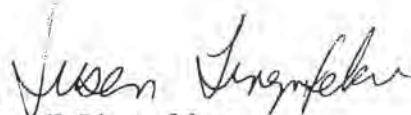
Approval of the survey design by the Virginia Department of Agriculture and Consumer Services may be necessary, since they also have legal authority over plants and insects in Virginia. They may be contacted at:

Mr. Keith Tignor
Virginia Department of Agriculture and Consumer Services
P.O. Box 1163
Richmond, Virginia 23218
Phone: (804) 786-3515
keith.tignor@vdacs.virginia.gov

Please send copies of any survey results to this office or inform this office if surveys will not be conducted. If the survey determines that any listed species are present in the vicinity of the project, NPS has the responsibility to determine if the project may affect the species and so notify the Service. Should NPS determine that the species may be adversely affected by the project, the consultation procedures under Section 7 of the Endangered Species Act (50 CFR Part 402) must be implemented by NPS.

The Service also recommends that you consider survey needs of and potential effects to State listed endangered and threatened species. If you have any questions or need further assistance, please contact William Hester of this office at (804) 693-6694, ext. 134.

Sincerely,



Susan F. Lingenfelser
Acting Supervisor
Virginia Field Office

Enclosure

SMALL WHORLED POGONIA
(Isotria medeoloides)
SURVEY CONTACTS IN VIRGINIA

This list contains individuals who we have already determined are qualified to conduct surveys for the species listed above. This list does not include all individuals qualified or authorized to survey for this species. If you select someone not on this pre-approved surveyor list, please provide the proposed surveyor's qualifications to this office 30 days prior to the start of the survey. Please send copies of all survey results to this office. If the survey determines that any rare species are present, please contact this office to allow us the opportunity to work with you to ensure that a project avoids or minimizes adverse effects to rare species and their habitats. Inclusion of names on this list does not constitute endorsement by the U.S. Fish and Wildlife Service or any other U.S. Government agency. Names are listed alphabetically. The Service recommends surveys within appropriate habitat be conducted from June 1 through July 20 in Caroline County and counties to the north **OR** from May 25 through July 15 in counties south of Caroline County. Outside of these months, a site visit by a qualified individual can determine if appropriate habitat exists at the project site.

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July 25, 2006

Shelly A. Miller
Wildlife Biologist
Virginia Game and Inland Fisheries
4010 West Broad Street
Richmond, Virginia 23230

Request for Information
Meadow Brook to Loudoun Transmission Line Project
Project number 42715

Dear Ms. Miller:

Dominion Virginia Power (DVP), in cooperation with Allegheny Power, is looking for a suitable corridor for approximately 40 miles of new 500-kV electrical transmission line in northern Virginia. The proposed line will connect the existing DVP Loudoun Substation in southern Loudoun County with the Allegheny Power, Meadow Brook Substation in Frederick County and will be constructed as a joint effort between DVP and Allegheny Power. This project is required to be in service by 2011 in order to avoid serious electric reliability issues in Northern Virginia.

Dominion Virginia Power has retained Burns & McDonnell Engineering Inc. of Kansas City, Missouri to assist in alternative route development, public involvement, and preparation of an application to the State Corporation Commission.

Included with this letter are the relevant U.S.G.S. maps for the proposed study area and a typical structure drawing. The study area includes portions of Loudoun, Prince William, Fauquier, Clark, Warren and Frederick Counties. As a part of the routing process, DVP and Burns & McDonnell are asking you to provide comments or potential concerns over locating the transmission line in the study area. We would like to know of any property or resources under your jurisdiction that represent a constraint to this project. The information you provide will help us to prepare a better routing study to file with the Virginia State Corporation Commission.

Please send your comments to Edward Bowers, Environmental Scientist, Burns & McDonnell, 9400 Ward Parkway, Kansas City, MO. 64114. If you have questions about this project please contact John Bailey, Coordinator-Siting and Permitting, Dominion Virginia Power, at (804) 819-2961, or me at (816) 822-3468.

Sincerely,

Edward Bowers
Environmental Scientist
Burns & McDonnell

enclosures



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Ecological Services
6669 Short Lane
Gloucester, VA 23061

Date: September 28, 2006

Project name: MEADOW BROOK TO LOUDAN TRANSMISSION LINE

Project number: 51411-2007-TA-0027 City/County _____, VA

The U.S. Fish and Wildlife Service (Service) has reviewed your request for information on federally listed or proposed endangered or threatened species and designated critical habitat for the above referenced project. The following comments are provided under provisions of the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

_____ We have reviewed the information you have provided and believe that the proposed action will not adversely affect federally listed species or federally designated critical habitat because no federally listed species are known to occur in the project area. Should project plans change or if additional information on listed and proposed species becomes available, this determination may be reconsidered.

We recommend that you contact **both** of the following State agencies for site specific information on listed species in Virginia. Each agency maintains a different database and has differing expertise and/or regulatory responsibility:

Virginia Dept. of Game & Inland Fisheries
Environmental Services Section
P.O. Box 11104
Richmond, VA 23230
(804) 367-1000

Virginia Dept. of Conservation and Recreation
Division of Natural Heritage
217 Governor Street, 2nd Floor
Richmond, VA 23219
(804) 786-7951

If either agency indicates a federally listed species is **present**, please resubmit your project description with letters from both agencies attached.

_____ If appropriate habitat may be present, we recommend surveys within appropriate habitat by a qualified surveyor. Enclosed are county lists with fact sheets that contain information the species' habitat requirements and lists of qualified surveyors. If this project involves a Federal agency (Federal permit, funding, or land), we encourage the Federal agency to contact this office if appropriate habitat is present and if they determine their proposed action may affect federally listed species or critical habitat.

_____ Determinations of the presence of waters of the United States, including wetlands, and the need for permits are made by the U.S. Army Corps of Engineers. They may be contacted at: Regulatory Branch, U.S. Army Corps of Engineers, Norfolk District, 803 Front Street, Norfolk, Virginia 23510, telephone (757) 441-7652.

Our website <http://virginiafieldoffice.fws.gov> contains many resources that may assist with project reviews. Point of contact is Mike Drummond at (804) 693-6694, ext. 114.

Sincerely,

Karen L. Mayne
Supervisor
Virginia Field Office



COMMONWEALTH of VIRGINIA

L. Preston Bryant, Jr.
Secretary of Natural Resources

Department of Game and Inland Fisheries

Colonel W. Gerald Massengill
Interim Director

August 17, 2006

Edward Bowers
Environmental Scientist
Burns & McDonnell
9400 Ward Parkway
Kansas City, Missouri 64114-3319

RE: ESSLOG #22729, Meadow Brook to Loudoun Transmission Line Project, Project number 42715, Frederick, Warren, Clarke, Loudoun, Fauquier, and Prince William Counties, VA.

Dear Mr. Bowers:

This letter is in response to your request for information related to the presence of threatened or endangered species in the vicinity of the above referenced project.

The following species have been documented in approximately the given locations within, or in the vicinity of, the project study area:

federal threatened/state threatened:

- **Madison Cave isopod (*Antrolana lira*), in Clarke County near White Post;**
- **bald eagle (*Haliaeetus leucocephalus*), at the following locations:**
 - **Clarke County near the Shenandoah River and Chapel Run near the northern boundary of the project area.**
 - **Clarke County near Berrys near the Shenandoah River,**
 - **Loudoun County near the northeastern corner of the project boundary near Rt. 15, south of Oatlands and Goose Creek,**
 - **Fauquier County near the Loudoun County line and next to Goose Creek, southeast of the Upperville Airport;**

federal species of concern/state threatened:

- **Henslow's sparrow (*Ammodramus henslowii*), outside the project boundary, but approximately 0.5 from the eastern boundary in southeastern Loudoun County;**
- state threatened:***
- **wood turtle (*Glyptemys insculpta*), at the following locations:**
 - **Warren County near western boundary of project along I-66, just north of Front Royal and Riverton,**
 - **Southeastern Loudoun County near Rt. 620 and Folley Branch,**
 - **Outside project boundary, but approximately 1 mile from the southwestern corner of the project boundary in Warren County;**

- **Loggerhead shrike (*Lanius ludovicianus*), at the following locations:**
 - **Western Loudoun County near Jeffries Branch and northwest of Willisville,**
 - **Outside project boundary, but approximately 1.5 miles from the northern boundary in Loudoun County near the Clarke County line and west of Airmont; and**
- **Upland sandpiper (*Bartramia longicauda*), in Warren County, near the Frederick County line, near Nineveh and Rt. 639.**

Additionally, the following are designated Threatened and Endangered Species' Waters, and all the designations are due to documented occurrences of the *state threatened wood turtle (Glyptemys insculpta)*:

- **Opequon Creek, along the northern project boundary at the border of Clarke and Frederick Counties;**
- **Meadow Brook, along western project boundary in Frederick County; and**
- **Passage Creek, outside of project area, but within 0.5 mile of the southwestern corner of the project boundary.**

As well, Spout Run (07SPT-01) in Clarke County is designated a Class III trout stream (rainbow trout) and is within the project area near the northern project boundary. Therefore, the applicant should coordinate with the VDGIF Environmental Services Section (804-367-6913) and with the U.S. Fish and Wildlife Service concerning potential impacts to these species and resources. Contact information for the U.S. Fish and Wildlife Service is as follows: for the Madison Cave isopod, contact Eric Davis at 6669 Short Lane; Gloucester, VA 23061, (804) 693-6694 ext. 104 (phone), and (804) 693-9032 (fax); and for the bald eagle, contact Trevor Clark at the Chesapeake Bay Field Office, 177 Admiral Cochrane Drive, Annapolis, Maryland 21401, (410) 573-4527 (phone), and (410) 269-0832 (fax).

In addition, the following are designated as stockable trout waters with the given Class designation, and all are in Clarke County, except for Opequon Creek, which is in Frederick County:

- **Page Brook (07PGE-01), Class V, near the northern project boundary;**
- **Wrights Branch (07WRT-01), Class VI, in southern Clarke County and a direct tributary of the Shenandoah River;**
- **Chapel Run (07CPL-01), Class VI, near and along the northern project boundary;**
- **Spout Run (07SPR-01), Class VI, outside the northern project boundary, but within 0.25 mile of the boundary; and**
- **Opequon Creek (07OPE-01), a Class VI, outside the northwestern corner of the project boundary, but within 0.25 mile of the boundary.**

Therefore, the applicant should coordinate with the regional fisheries manager in the

VDGIF Verona office (540-248-9360) to prevent angling and/or stocking conflicts during any construction activities.

Additionally, the following species have been documented either within the project study area or within 0.75 mile of the project boundary:

Federal species of concern:

- cerulean warbler (*Dendroica cerulea*);

Federal species of concern/state special concern:

- yellow lampmussel (*Lampsilis cariosa*);
- yellow lance (*Elliptio lanceolata*);

State special concern:

- hermit thrush (*Catharus guttatus*);
- purple finch (*Carpodacus purpureus*);
- magnolia warbler (*Dendroica magnolia*);
- northern saw-whet owl (*Aegolius acadicus*);
- brown creeper (*Certhia americana*);
- red breasted nuthatch (*Sitta canadensis*);
- yellow-bellied flycatcher (*Empidonax flaviventris*);
- golden-crowned kinglet (*Regulus satrapa*);
- dickcissel (*Spiza americana*);
- barn owl (*Tyto alba*); and
- Allegheny woodrat (*Neotoma magister*).

However, the classifications of *federal species of concern* and *state special concern* are not legal designations and do not require further coordination.

Information about fish and wildlife species was generated from our agency's computerized Fish and Wildlife Information System, which describes animals that are known or may occur in a particular geographic area. Field surveys may be necessary to determine the presence or absence of some of these species on or near the proposed area. Also, additional sensitive animal species may be present, but their presence has not been documented in our information system.

Endangered plants and insects are under the jurisdiction of the Virginia Department of Agriculture and Consumer Services, Bureau of Plant Protection. Questions concerning sensitive plant and insect species occurring at the project site should be directed to Keith Tignor at (804) 786-3515.

The Virginia Department of Conservation and Recreation, Natural Heritage Program, maintains a database of natural heritage resources, including the habitat of rare, threatened, or endangered plant and animal species, unique exemplary natural communities, and significant geologic formations, that may contain information not documented in this letter. Their database may be accessed from <http://www.dcr.state.va.us/dnh/nhrinfo.htm>, or by contacting S. Rene Hypes at (804) 371-2708.

Edward Bowers
ESSLog #22729
8/17/2006
Page 4

There is a processing charge of \$100.00 for our response. Please remit a check, made payable to **TREASURER OF VIRGINIA**, within 30 days. To insure proper credit to your account, please address your payment envelope directly to MaryBeth Murr at the address listed in the letterhead.

This letter summarizes the likelihood of the occurrence of endangered or threatened animal species at the project site. If you have additional questions in this regard, please contact me at (804) 367-1185.

Please note that this response does not constitute consultation or management recommendations regarding endangered or threatened wildlife, or any other environmental concerns. These issues are analyzed by our Environmental Services Section, in conjunction with interagency review of applications for state and federal permits. If you have any questions in this regard, please contact the Environmental Services Section at (804) 367-6913.

Please note that the data used to develop this response are continually updated. Therefore, if significant changes are made to your project or if the project has not begun within 6 months of receiving this letter, then the applicant should request a new review of our data.

For your reference, if you do not receive a response from our office within 30 days, this does not constitute a finding of "no adverse impact" to wildlife or wildlife resources. If you need an expedited response to your request, please call Shirl Dressler at (804) 367-6913.

The Fish and Wildlife Information Service, the system of databases used to provide the information in this letter, can now be accessed via the Internet! The Service currently provides access to current and comprehensive information about all of Virginia's fish and wildlife resources, including those listed as threatened, endangered, or special concern; colonial birds; waterfowl; trout streams; and all wildlife. Users can choose a geographic location and generate a report of species known or likely to occur around that point. From our main web page, at www.dgif.virginia.gov, choose the hyperlink near the top of the page titled "Virginia Fish and Wildlife Information Service". For more information about the service, please contact Shirl Dressler at (804) 367-6913.

Edward Bowers
ESSLog #22729
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Thank you for your interest in the wildlife resources of Virginia.

Sincerely,

A handwritten signature in black ink, appearing to read "Susan H. Watson". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Susan H. Watson
Research Specialist Senior

cc: R.T. Fernald, VDGIF
E. Davis, USFWS
T. Clark, USFWS
R. Hypes, VDCR-NH

APPENDIX B: PUBLIC SCOPING DOCUMENT



United States Department of the Interior

NATIONAL PARK SERVICE
Manassas National Battlefield Park
12521 Lee Highway
Manassas, Virginia 20109-2005

Name
Street address
State, Zip

To Whom it May Concern,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to evaluate the potential impacts to the human and natural environment of the construction of a new restroom facility at the Brawner Farm in Manassas National Battlefield Park. The project site is at the end of the entrance road to the Brawner Farm Contact Station, which is located north of U.S. Route 29 and east of Pageland Road (VA Route 622) in the northwestern portion of the park and includes portions of the historic Brawner Farm (Douglas Hall). The EA is being prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and the Council of Environmental Quality's Regulations for Implementing NEPA (40 CFR 1500-1508).

This project proposes to build a restroom facility near the current parking lot at the Brawner Farm for the use of visiting public and staff. The new facility would serve an estimated 35,000 visitors annually. The project would also include a gravel support pad, concrete building apron and an Architectural Barriers Act and Accessibility Standards (ABAAS) compliant sidewalk connecting the restroom facility to the existing parking area.

The facility would also include the following design features:

- A septic system with two designated drain fields designed to meet the septic system demand;
- A well to supply the facility with water
- A water treatment system to adequately supply safe source of potable water for sinks, drinking fountain, and hose bib; and
- Electric service to provide for the operation of the lights, well system, heating system, and water treatment system.

Comments, concerns, and/or questions regarding this project can either be sent directly to:

Manassas National Battlefield Park Headquarters
Attn: Brawner Farm Restroom Facility
12521 Lee Highway
Manassas, VA 20109

Or submitted electronically by following the link:

<http://parkplanning.nps.gov/MANA>

Click on: Develop Public Restrooms for Brawner Farm

Please provide all comments by March 18, 2010. We appreciate your comments regarding this upgrade to the Manassas National Battlefield Park.

Sincerely,

Superintendent

APPENDIX C: IMPAIRMENT DETERMINATION

THE PROHIBITION ON IMPAIRMENT OF PARK RESOURCES AND VALUES

NPS *Management Policies 2006*, Section 1.4.4, explains the prohibition on impairment of park resources and values:

While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

WHAT IS IMPAIRMENT?

NPS *Management Policies 2006*, Section 1.4.5, “What Constitutes Impairment of Park Resources and Values,” and Section 1.4.6, “What Constitutes Park Resources and Values,” provide an explanation of impairment.

...impairment...is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values.

Section 1.4.5 of NPS *Management Policies 2006* states:

An impact to any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- identified in the park’s general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated.

Per Section 1.4.6 of NPS *Management Policies 2006*, park resources and values that may be impaired include

- the park’s scenery, natural and historic objects, and wildlife, and the processes and condition that sustain them, including, to the extent present in the park: the

- ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
 - the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
 - any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park, but this would not be a violation of the *Organic Act* unless the NPS was in some way responsible for the action.

HOW IS AN IMPAIRMENT DETERMINATION MADE?

Section 1.4.7 of *NPS Management Policies 2006* states:

In making a determination of whether there would be an impairment, an NPS decision-maker must use his or her professional judgment. This means that the decision-maker must consider any environmental assessments or environmental impact statements required by the National Environmental Policy Act of 1969 (NEPA); consultations required under section 106 of the National Historic Preservation Act (NHPA), relevant scientific and scholarly studies; advice or insights offered by subject matter experts and others who have relevant knowledge or experience; and the results of civic engagement and public involvement activities relating to the decision.

NPS Management Policies 2006 further define “professional judgment” as “a decision or opinion that is shaped by study and analysis and full consideration of all the relevant facts, and that takes into account the decision-maker’s education, training, and experience; advice or insights offered by subject matter experts and others who have relevant knowledge and experience; good science and scholarship; and, whenever appropriate, the results of civic engagement and public involvement activities relating to the decision.”

IMPAIRMENT DETERMINATION FOR THE PREFERRED ALTERNATIVE

This determination on impairment has been prepared for alternative 2 described in chapter 2 of this EA. An impairment determination is made for all resource impact topics analyzed. An impairment determination is not made for Park Operations and Management or visitor use and experience and Recreation Resources because impairment findings relate to park resources and values, and these impact areas are not generally considered to be park resources or values according to the *Organic Act*, and cannot be impaired in the same way that an action can impair park resources and values.

The NPS has determined that the implementation of alternative 2 would not constitute an impairment to the resources or values of the Manassas National Battlefield Park. This conclusion is based on consideration of the thorough analysis of the environmental impacts described in the EA, relevant scientific studies, the comments provided by the public and others, and the professional judgment of the decision-maker guided by the direction in NPS *Management Policies 2006*. Implementation of the NPS selected alternative would not result in impairment of park resources or values whose conservation is (1) necessary to fulfill specific purposes identified in the park's establishing legislation, (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or (3) identified in the GMP or other relevant NPS planning documents as being of significance.

FINDINGS ON IMPAIRMENT FOR THE CONSTRUCTION OF A COMFORT STATION AT THE BRAWNER FARM

Alternative 2 would result in short-term to long-term negligible to minor adverse impacts on some of the park's resources, which include soils, vegetation, and cultural landscapes.

SOILS

Part of the mission of the Manassas National Battlefield Park is to protect and preserve the park's natural resources, which includes stabilized soils that support natural vegetation throughout the park. Construction activities under alternative 2 would result in localized areas of ground disturbance at the comfort station site, sidewalk, and areas associated with the septic and well systems. Although alternative 2 would include the clearing of vegetation and exposure of soils, the impacts would be limited to the project areas and soil productivity and characteristics would not change in the area outside of the limit of disturbance. Soil productivity at the surface would be permanently lost at the location of the comfort station and sidewalk, however soil productivity would return to preconstruction conditions in all other areas of disturbance. The total area soil disturbance (temporary and permanent) would be 0.56 acres of the more than 5,000 acres within the park. The use of permeable materials and erosion control measures would ensure the alternative would not increase sedimentation within the park. Soils throughout Manassas are mostly previously disturbed and would not experience significant adverse impacts as a result of implementation of the preferred alternative. Because alternative 2 would not inhibit the park's ability to protect natural resources, including stabilized and productive soils, and would not prevent the park from fulfilling the specific purposes identified in the establishing legislation, the alternative would not result in impairment of soils.

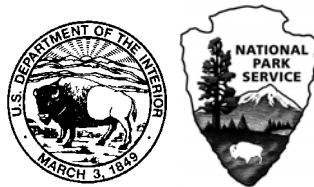
VEGETATION

Part of the mission of the Manassas National Battlefield Park is to protect and preserve the park's natural resources, which includes natural vegetation throughout the park. A letter was received from the VDCR on March 17, 2011, recommending an inventory for the rare plant, marsh hedgenettle (*Stachys pilosa* var.) because the proposed site is within a Manassas Diabase Uplands Conservation Site and could contain the natural heritage resource. Under direction of this letter, surveys for the marsh hedgenettle were completed on June 13, 2011, and no species or populations were found. Consultation with VDCR regarding methodology and results is ongoing at this point in the project. In preparation for construction activities, grading and leveling on construction areas would occur in areas currently maintained as turf or natural vegetation. As a result of construction activities, vegetation in the area of construction would be disrupted and removed. Alternative 2 would have localized areas of ground disturbance at the comfort station site, sidewalk, and areas associated with the septic and well systems. Although alternative 2 would include the clearing of vegetation, the impacts would be limited to the project areas and characteristics would not change outside of the area of disturbance. There would be a permanent loss of vegetation at the

location of the comfort station and the sidewalk, however soil productivity would return to preconstruction conditions in all other areas of disturbance. The total area of vegetation removal (temporary and permanent) would be limited to 0.56 acres of the more than 5,000 acres within the park. Alternative 2 does require the removal of brush and low growing vegetation. Since alternative 2 would not inhibit the park's ability to protect natural resources and would not prevent the park from fulfilling the specific purposes identified in the establishing legislation, the alternative would not result in impairment of vegetation.

CULTURAL LANDSCAPES

The park was established with the intention to preserve the historic landscape containing historic sites, buildings, objects, and views that contribute to the national significance of the Battles of First and Second Manassas, for the use, inspiration, and benefit of the public. Impacts to cultural landscapes would be localized to this portion of the park. The comfort station is not expected to be seen from the Brawner Farm House or from panoramas within the park. Additionally, the comfort station would be built in a location where visitors would expect it to be seen and it is not interrupting the historical battlefields. Because alternative 2 would allow the NPS to fulfill the purpose of the park by protecting and preserving the park's cultural resources without adversely impacting the cultural landscapes, the preferred alternative would not result in impairment of cultural landscapes.



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historic places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

NPS Document Number (August 2011)