



Environmental Assessment Repair and Rehabilitate the Petersen House

JULY 2010



Ford's Theatre National Historic Site





Environmental Assessment

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PROJECT SUMMARY

Introduction

The National Park Service, Ford's Theatre National Historic Site proposes to undertake interior and exterior repairs and rehabilitation and install a new climate management system at the Petersen House. In addition, the National Park Service proposes to accommodate a connection from the Petersen House to building 514, 10th Street NW, which will house the Ford's Theatre Society Center for Education and Leadership museum.

This document demonstrates compliance with both the National Environmental Policy Act of 1969, as amended, and Section 106 of the National Historic Preservation Act of 1966, as amended.

Purpose of and Need for the Action

The purpose of the project is to repair and rehabilitate several sections of the Petersen House, including repairing the exterior; rehabilitating the interior; repairing the historic windows, casings, doors, and shutters; and rehabilitating the rear porch to provide an accessible route in a manner that maintains visitor experience while preserving the building's historic character. The project also includes a proposed connection from the Petersen House to the adjacent Ford's Theatre Society Center for Education and Leadership.

The action is needed due to the extensive water damage and climate control issues at the Petersen House during the past years, which have solicited formal and informal complaints from building visitors. Water damage has impacted interior and exterior historic fabric while climate control issues have impacted the historic fabric of the building.

The action is needed to increase the accessibility of the Petersen House to ensure access for all visitors, including visitors with disabilities.

The proposed connection from the Petersen House to the Center for Education and Leadership is needed to provide visitors with a connection to the wide array of programs the center will offer on the life, legacy, and lessons in leadership of President Abraham Lincoln.

Overview of the Alternatives

Three alternatives are addressed in this environmental assessment:

Alternative A: No Action

Alternative B: Repair and Rehabilitate the Petersen House, Install New Climate Control System, and Accommodate Connection to the Center for Education and Leadership

Alternative C: Repair and Rehabilitate the Petersen House, Rehabilitate the Rear Porch for Accessibility, Install New Climate Control System, and Accommodate Connection to the Center for Education and Leadership

Summary of Impacts

Impacts of the proposed alternatives were assessed in accordance with the National Environmental Policy Act, the National Park Service Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making, and the National Historic Preservation Act. Several impacts topics were dismissed from further analysis because the proposed action would result in no impacts or negligible to minor and/or short-term impacts to those resources. No major impacts are anticipated as a result of this project.

How to Comment

Agencies and the public are encouraged to review and comment on the contents of this environmental assessment during a 30-day public review and comment period. We invite you to comment on this plan

and you may do so by any one of several methods. The preferred method of providing comments is on the park's planning website: <http://parkplanning.nps.gov/FOTH>. You may also submit written comments to

Kym Elder, Superintendent
Ford's Theatre National Historic Site
Attn: Petersen House Project
511 10th Street, NW
Washington, DC 20004

Only written comments will be accepted. Please submit your comments within 30 days of the posting of the notice of availability on PEPC. If you wish to remain anonymous, please clearly state that within your correspondence.

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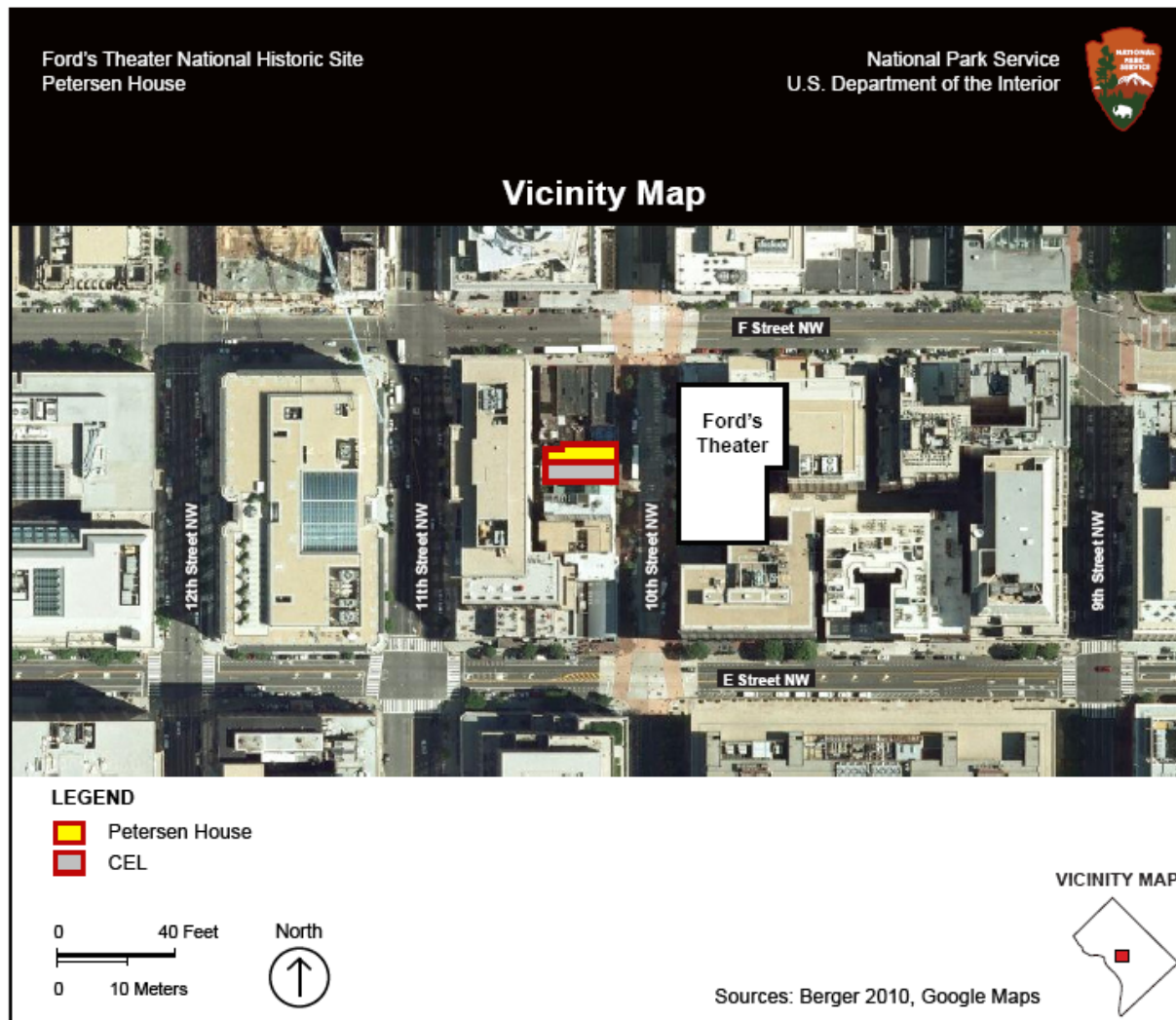
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CHAPTER 1: PURPOSE AND NEED

INTRODUCTION

The National Park Service (NPS) is considering a project to repair and rehabilitate several sections of the Petersen House. In addition, the NPS is proposing to accommodate a connection from the Petersen House to building 514 10th Street NW, which will house the Ford's Theatre Society Center for Education and Leadership (CEL). The Petersen House is located on 10th Street, NW, Washington D.C., across from Ford's Theatre. The project area is shown in figure 1.

Figure 1. Petersen House Repair and Rehabilitation Project Area



The Petersen House is the house where President Abraham Lincoln died. On April 14, 1865 in Ford's Theatre, located across the street from the Petersen House, President Abraham Lincoln with his wife and two guests were watching the play *Our American Cousin*, when, at approximately 10:15 PM, John Wilkes Booth, a well-known Shakespearian actor, entered the State Box. He wedged the door shut, fired a 44 caliber derringer six inches from the President's left ear. The doctors, who attended to President Lincoln after the shooting, pronounced the "wound mortal" and wanted a place where the President could rest peacefully for the remaining hours he would live. The Petersen House, across the street from the theatre

and a boarder, on the front porch and seeing the commotion in the street, waved the men, carrying the unconscious Lincoln, into the house because there was a spare bed not being used. The front parlor was used by Mrs. Lincoln, who spent most of her time there "during the death watch" and received visitors; the back parlor became the "seat of government" where an investigation was started on who shot the president as well as other governmental activities. The back bedroom is where President Lincoln, who never regained consciousness, would spend his remaining hours and succumb to his wounds on April 15, 1865 at 7:22 in the morning.

An environmental assessment (EA) analyzes the proposed action and alternatives and their impacts on the environment. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, and implementing regulations, 40 CFR Parts 1500-1508, NPS Director's Order #12 and the handbook, *Conservation Planning, Environmental Impact Analysis, and Decision-making* (DO-12). Compliance with Section 106 of the National Historic Preservation Act of 1966 has occurred in conjunction with the NEPA process.

PURPOSE OF AND NEED FOR ACTION

The purpose of the project is to repair and rehabilitate several sections of the Petersen House, including repairing the exterior; rehabilitating the interior; repairing the historic windows, casings, doors, and shutters; and rehabilitating the rear porch to provide an accessible route in a manner that maintains visitor experience while preserving the building's historic character. In addition, the project would provide a connection from the Petersen House to the adjacent Ford's Theatre Society Center for Education and Leadership (CEL).

The action is needed due to the extensive water damage and limited environmental controls at the Petersen House during the past years. Water damage have impacted interior and exterior historic fabric¹ while the lack of humidity controls and ventilation system in the building have impacted the building and objects.

The action is also needed because currently, the Petersen House is not fully compliant with NPS policies for universal accessibility. The sole point of entry into the Petersen House is via the curved front steps off of 10th Street, NW; there is no ramp or lift to accommodate wheelchairs.

In addition, the proposed connection from the Petersen House to the CEL is needed to provide visitors with a connection to the array of programs the CEL offers on the life, legacy, and lessons in leadership of President Abraham Lincoln. The CEL programs would be available to visitors of the Ford's Theatre Historic Site, regardless if the Petersen House is directly connected to the CEL building. However, having the buildings connected would provide a continuous or seamless experience for visitors to the Petersen House and the programs and exhibits offered in the CEL. In addition, because the interior of the CEL will be universally accessible, one of the goals of the proposed action is to improve upon the options for access to the Petersen House by coordinating a connection between the two buildings.

PROJECT BACKGROUND

THE PETERSEN HOUSE

The Petersen House, part of the Ford's Theatre National Historic Site, is located on 10th Street, NW, between E and F Streets, NW, Washington D.C. across from Ford's Theatre. After President Abraham Lincoln was shot, he was carried to the Petersen boarding house where he later died. Built in 1849, the Petersen House is a three-story, pitched roofed, brick row house built over a raised basement (NPS 1982).

¹ The material remains of a historic structure or object, whether original materials or materials incorporated in a subsequent historically significant period.

Currently, visitors enter the house after ascending the front steps, which curve out from the side of the platform in front of the door (NPS 1982). Visitors are allowed to view two rooms of the house, as well as the Death Room, before exiting out through the rear porch and down a flight of stairs.

The Petersen House is small and suffers structurally and cosmetically due to heavy visitation and moisture intrusion issues. Extensive moisture damage and a lack of climate control have resulted in further damage to the house. Water damage has impacted interior and exterior historic fabric. Temperature and humidity fluctuations have also negatively impacted the historic fabric. The house does not have central air conditioning (AC) and is subject to severe heat and humidity in the summer months. There is no humidity control and no ventilation system in the house. AC units are limited to one window unit and two portable units positioned in the first floor parlor and on the first to second floor stair landing. Hot water baseboard heating provides heat during the colder months. The current heating system is not efficient and causes temperature and humidity fluctuations that cause the air to be too dry in the winter months. The existing systems are unable to maintain a constant temperature as the outside temperature fluctuates (Oehrlein & Associates 2007).

Current conditions at the Petersen House include water damaged walls and wall paper, high humidity levels, continued moisture intrusion, peeling paint, exposed wood on doors and windows, cracking and missing window glazing, and deteriorating wooden window frames. The proposed repair and rehabilitation actions are needed to repair these damages, which have solicited formal and informal complaints from building visitors, and to prevent further deterioration of the structures and related features. An accessible route in the Petersen House is also needed to ensure access for all visitors, including visitors with disabilities.

NPS PARTNERSHIP WITH THE FORD'S THEATRE SOCIETY

The NPS entered into a formal partnership agreement with the Ford's Theatre Society just shortly after the Ford's Theatre was renovated and reopened to the public in 1968. For more than 40 years, the NPS and Ford's Theatre Society have co-managed the theatre as both a historic site and a working theatre to perpetuate the legacy of the 16th U.S. president Abraham Lincoln.

Over the years, the theatre has undergone a series of renovations to maintain the historic facility; however, in 2008, the theatre was closed for approximately 18 months and underwent a major renovation that included an upgrade of the heating and cooling system, theatrical upgrades, accessibility improvements, a new visitor center and an interpretive museum featuring interactive exhibits to engage all in the legacy of Lincoln and specifically his love for his country and the performing arts.

In the Fall of 2010, the Ford's Theatre Society plans to renovate an office building (just across the street from the theatre and next door to the Petersen House) and develop their CEL. The CEL would serve as a continual experience for the theatre's visitors. Visitors would experience the aftermath of the assassination that includes exploring the conspiracy theory associated with the assassination, the trials of those accused of conspiracy of the assassination and of course the 11-day manhunt for the assassin John Wilkes Booth. The building would also serve as both permanent and temporary exhibit space, a concessions area featuring Lincoln related books and memorabilia as well as office space for the Ford's Theatre Society.

The optional experience through the CEL would begin after leaving the Death Room of the Petersen House. Modifications to both buildings to create a direct connection would permit the visitor to travel from one building to another. Visitors who choose to conclude their visit after touring the Petersen House can exit through the rear porch staircase of the Petersen House.

PURPOSE AND SIGNIFICANCE OF THE PARK

The purpose of the Petersen House, as a part of Ford's Theatre National Historic Site, is to allow visitors to witness both the location of President Abraham Lincoln's assassination in the theatre and the room in the Petersen House where he perished. A major reason for the longevity of the Petersen House is its

singular importance as the location of the death of President Lincoln on April 15, 1865 following his fatal injury the night before at Ford's Theatre across the street. As a result of its historical association with President Lincoln and its resulting significance, in 1896 the house became one of the first house museums to be purchased and operated by the federal government. In 1937, the site was described as "... a shrine more than national in its significance, dedicated to one of the wisest and gentlest of men" (NPS 2002).

The sheer respect paid to President Lincoln after his death has elevated the Petersen House to a memorial to the President, and given the property its commemorative focus. The exterior, the first-floor interior, and the period furniture have all been maintained to the defined period of significance – April 14-15, 1865 – as closely as possible.

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

The NPS is governed by laws, regulations, and management plans before, during, and following any management action considered under any NEPA analysis. The following are those that are applicable to the proposed action.

APPLICABLE STATE AND FEDERAL LAWS

National Environmental Policy Act, 1969, as Amended

NEPA was passed by Congress in 1969 and took effect on January 1, 1970. This legislation established this country's environmental policies, including the goal of achieving productive harmony between human beings and the physical environment for present and future generations. It provided the tools to implement these goals by requiring that every federal agency prepare an in-depth study of the impacts of "major federal actions having a significant effect on the environment" and alternatives to those actions and required that each agency make that information an integral part of its decisions. NEPA also requires that agencies make a diligent effort to involve the interested members of the public before they make decisions that affect the environment.

NEPA is implemented through CEQ regulations (40 CFR 1500–1508) (CEQ 1978). The NPS has in turn adopted procedures to comply with the act and the CEQ regulations, as found in Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making (NPS 2001), and its accompanying handbook.

National Historic Preservation Act of 1966, as Amended through 2000 (16 USC 470)

The National Historic Preservation Act (NHPA) protects buildings, sites, districts, structures, and objects that have significant scientific, historic, or cultural value. The act established affirmative responsibilities of federal agencies to preserve historic and prehistoric resources. Effects on properties that are listed in or eligible for the National Register of Historic Places (NRHP or National Register) must be taken into account in planning and operations. Any property that may qualify for listing in the NRHP must not be inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate. Section 106 requires of the NHPA federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by ACHP. Revised regulations (Protection of Historic Properties (36 CFR 800)) became effective January 11, 2001.

Archeological Resources Protection Act

The Archeological Resources Protection Act (ARPA) was enacted in 1979. The act prohibits unauthorized excavation on federal and Indian lands, establishes standards for permissible excavation, prescribes civil and criminal penalties, requires agencies to identify archeological sites, and encourages cooperation between federal agencies and private individuals.

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 NPS Director to restore, reconstruct, rehabilitate, preserve, and maintain historic or prehistoric sites, buildings, objects, and properties of national historical or archeological significance.

National Park Service Organic Act of 1916

By enacting the NPS Organic Act of 1916, Congress directed the U.S. Department of 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 sec. 1.4.3). 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 acts (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).

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 that if “such information cannot be obtained due to excessive cost or technical impossibility, the proposed alternative for decision would be modified to eliminate the action causing the unknown or uncertain impact, or other alternatives would be selected” (NPS 2006).

Americans with Disabilities and Architectural Barriers Act Guidelines

Pursuant to the Americans with Disabilities Act of 1990 (ADA) and the Architectural Barriers Act of 1968, all public buildings, structures, and facilities must comply with specific requirements related to architectural standards, policies, practices, and procedures that accommodate people with hearing, vision, or other disability; and other access requirements. Public facilities and places must remove barriers in existing buildings and landscapes, as necessary and where appropriate. The NPS must comply with Architectural Barriers Act Accessibility Standard as well as ADA standards for this project, as historic properties are not exempt from ADA requirements. To the greatest extent possible, historic buildings must be as accessible as non-historic buildings. However, it may not be possible for some historic properties to meet the general accessibility requirements. NPS Preservation Brief 32 addresses the complex issue of providing accessibility at historic properties and underscores the need to balance

accessibility and historic preservation. The brief provides guidance on making historic properties accessible while preserving their historic character.

Redwood National Park Act of 1978, As Amended

All national park system 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.”

EXECUTIVE ORDERS AND DIRECTOR’S ORDERS

Director’s Order 28: Cultural Resource Management

Director’s Order 28 (NPS 1998b) calls for the NPS to protect and manage cultural resources in its custody through effective research, planning, and stewardship and in accordance with the policies and principles contained in the *NPS Management Policies 2006* (NPS 2006). This order also directs the NPS to comply with the substantive and procedural requirements described in the *Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation*, the *Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Treatment of Cultural Landscapes*, and the *Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. Additionally, the NPS would comply with the 2008 NPS Programmatic Agreement with the ACHP and the National Conference of State Historic Preservation Officers (NPS 2008a). The accompanying handbook to this order addressed standards and requirements for research, planning, and stewardship of cultural resources as well as the management of archeological resources, cultural landscapes, historic and prehistoric structures, museum objects, and ethnographic resources.

Additionally, Ford’s Theatre Nation Historic Site has an existing housekeeping plan that that the curatorial staff follows to preserve and conserve the artifacts on display within the Petersen House.

Director’s Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services

Director’s Order 42 (NPS 2000) approaches the issue of accessibility in a comprehensive, organized way, rather than on a project-by-project basis. The primary goal of the program is to develop and coordinate a system-wide, comprehensive approach to achieving the highest level of accessibility that is reasonable, while ensuring consistency with the other legal mandates of conservation and protection of the resources that the NPS manages. Since 1980, the NPS has been working with accessibility coordinators in each regional office, and in parks and program offices, to (1) assess the level of accessibility of various parks; (2) identify the barriers to accessibility; (3) develop policies and guidelines regarding appropriate methods and techniques for improving access; and (4) provide technical assistance and in-service training on effective approaches and program implementation. The NPS employs the principles of universal design in providing facilities for everyone, rather than for only a portion of the population, including those persons with invisible disabilities such as cardiac and respiratory problems; those who have temporary disabilities such as broken arms or legs; and parents with strollers and wheeled devices.

LOCAL PLANS

Comprehensive Plan for the National Capital: Federal Elements, 2004

In August 2004, the National Capital Planning Commission (NCPC) adopted the Comprehensive Plan for the National Capital: Federal Elements (NCPC 2004). The plan is a statement of goals, principles, and planning policies for the growth and development of the National Capital during the next twenty years. The plan encompasses all federal lands in Washington, D.C., and the surrounding areas, including

Montgomery and Prince George's Counties in Maryland; Arlington, Fairfax, Loudoun, and Prince William Counties in Virginia; and all cities within the boundaries of those counties. The Comprehensive Plan for the National Capital includes federal elements that identify and address the current and future needs of federal employees and visitors to the Nation's Capital; provide policies for locating new federal facilities and maintaining existing ones; guide the placement and accommodation of foreign missions and international agencies; promote the preservation and enhancement of the region's natural resources and environment; protect historic resources and urban design features that contribute to the image and functioning of the Nation's Capital; and, working with local, state, and national authorities, support access into, out of, and around the Nation's Capital that is as efficient as possible for federal and nonfederal workers.

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 Interior. Actions under this EA are in part guided by these management policies. Sections which are particularly relevant to this project are as follows:

Section 5.3.1, Protection and Preservation of Cultural Resources

The NPS will endeavor to protect cultural resources against overuse, deterioration, environmental impacts, and other threats without compromising the integrity of cultural resources (NPS 2006).

Section 5.3.5.4, Historic and Prehistoric Structures

The treatment of historic and prehistoric structures will be based on sound preservation practice to enable the long-term preservation of a structure's historic features, materials, and qualities. There are three types of treatment for extant structures: preservation, rehabilitation, and restoration (NPS 2006).

Section 8.2.1, Visitor Carrying Capacity

The NPS will identify visitor carrying capacities for managing public use and will identify ways to monitor and address unacceptable impacts on park resources and visitor experiences (NPS 2006).

Section 8.2.5.1, Visitor Safety

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).

Section 9.1.2, Accessibility for Persons with Disabilities

The NPS will provide accessible facilities and resources in a manner that is consistent with preserving park resources and providing visitor safety and high-quality visitor experiences. The policy states that "in most instances, the degree of accessibility provided will be proportionately related to the degree of human-made modifications in the area surrounding the facility and the importance of the facility to people visiting or working in the park" (NPS 2006).

SCOPING PROCESS AND PUBLIC PARTICIPATION

NEPA regulations require an "early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action." To determine the scope of issues to be analyzed in depth in this plan, meetings were conducted with park staff and the public.

In addition to internal and agency scoping, public scoping for the Petersen House repair and rehabilitation EA began May 14, 2010, and concluded June 18, 2010. Notice of the public scoping period was posted on the Planning, Environment, and Public Comment (PEPC) website. During the public scoping period, NPS

received one comment from the public via the PEPC website regarding the proposed action. The commenter expressed concerns regarding the preservation of the historic nature of the building and the purpose in which the Petersen House will be connected to the CEL. These concerns have been addressed in the Purpose and Need for the Action (shown earlier in this Chapter) and in the Environmental Consequences discussions (Chapter 4).

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. Park staff identified potential issues associated with the repair and rehabilitation of Petersen House during internal scoping. The issues and concerns identified during scoping were grouped into impact topics that are discussed in “Chapter 3: Affected Environment” and are analyzed in “Chapter 4: Environmental Consequences.”

IMPACT TOPICS ANALYZED IN THIS ENVIRONMENTAL ASSESSMENT

CULTURAL RESOURCES

The National Historic Preservation Act (NHPA; 16 USC 470 et seq.), NEPA, Organic Act, NPS *Management Policies 2006* (NPS 2006), DO-12 (Conservation Planning, Environmental Impact Analysis and Decision-making), and NPS-28 (Cultural Resources Management Guideline), require the consideration of impacts on any cultural resources that might be affected. The NHPA, in particular, requires the consideration of impacts on cultural resources either listed in, or eligible to be listed in, the National Register of Historic Places (NRHP). Cultural resources include archeological resources, cultural landscapes, historic structures and districts, ethnographic resources, and museum collections (prehistoric and historic objects, artifacts, works of art, archival documents, and natural history specimens). Impacts to historic districts and structures, archeological resources, and museum collections are the cultural resource topics carried forward in this EA.

Historic Districts and Structures

The NHPA (16 USC 470 et seq.), NEPA, the NPS 1916 Organic Act, NPS *Management Policies 2006* (NPS 2006), Director’s Order 12, and NPS-28 (Cultural Resources Management Guideline) require the consideration of impacts on any cultural resources that might be affected, and NHPA, in particular, on cultural resources listed in, or eligible for, the NRHP. The Petersen House is individually listed on the NRHP as part of the Ford’s Theatre National Historic Site. The house is a contributing feature to the National Register nomination for the Pennsylvania Avenue National Historic Site and is immediately adjacent to the Downtown Historic District. Because of the nature of the project (or rather, collection of related projects) for the repair and rehabilitation of the Petersen House, which do not change the 10th Street, NW exterior of the house in any way, there would be no impact on the Pennsylvania Avenue National Historic Site/Historic District or the Downtown Historic District. The series of projects in the proposed action include elements of repair, rehabilitation, and restoration and must be carried out in accordance with the *Secretary of Interior’s Standards for the Treatment of Historic Properties* and NPS Preservation Briefs, which provide guidance on preserving, rehabilitating and restoring historic buildings. The projects also constitute an undertaking with regard to Section 106 of NHPA. Any exterior repairs associated with the proposed action would be negligible and would not adversely impact the integrity of the district. As a result, only historic structures are analyzed in this EA.

Museum Objects

The proposed repair and rehabilitation of the Petersen House would necessitate the removal and safe storage of the park’s historic furnishings and objects. The furnishings in the house are not original to the house; however, they are accurate to the period of significance. Therefore, this impact topic is analyzed as a topic in this EA.

Archeological Resources

Ground disturbing activities from implementation of the proposed drainage improvements and construction of the proposed exterior stairway as part of the rehabilitation of the rear porch for accessibility may impact archeological resources located in the back yard of the house. Therefore, this impact topic is analyzed in the EA.

VISITOR USE AND EXPERIENCE

The repair and rehabilitation of certain elements of Petersen House would result in impacts on visitor use and experience. Lack of climate control has elicited formal and informal complaints from visitors and has impacted the historic fabric of the building. The addition of an accessible route from the CEL could impact visitor accessibility and circulation through the Petersen House. The closure of the Petersen House during the construction period could impact overall visitor use and experience of the Ford's Theatre National Historic Site. As a result of potential impacts to visitor use and experience that could occur from both the no action and action alternatives, this resource area is addressed as an impact topic in this EA.

HUMAN HEALTH AND SAFETY

The repair and rehabilitation of Petersen House would include the removal of deteriorated lead-based paint to sound paint in preparation for repainting could impact public health and safety. Additionally, as a result of climate control issues, several floorboards within Petersen House are uneven and present a tripping hazard for visitors and staff. In addition, the existing staircase in the rear porch that serves as the main egress for the Petersen House is not universally compliant. As a result, impacts to human health and safety are addressed as an impact topic in this EA.

PARK OPERATIONS AND MANAGEMENT

The repair and rehabilitation of Petersen House would include the closure of Petersen House during the construction period, potentially impacting park operations and management. Additionally, to accommodate the new entrance to the CEL the NPS could potentially require additional staffing or otherwise alter the existing operation of Petersen House. As a result of potential impacts to park operations and management, this resource area is addressed as an impact topic in this EA.

IMPACT TOPICS DISMISSED FROM FURTHER ANALYSIS

The following impact topics were eliminated from further analysis in this EA. A brief rationale for dismissal is provided for each topic. Potential impacts to these resources would be none or negligible, localized, and most likely immeasurable.

GEOLOGY, GEOLOGIC HAZARDS, TOPOGRAPHY, AND SOILS

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 any geological or topographical resources. As a result, these topics were dismissed from further analysis. Soils located in the backyard area of Petersen House may be impacted from the installation of a new drainage system, exterior porch staircase, and placement of a concrete pad to support the new AC units, but the impacts would be negligible due to the previously disturbed nature of the soils.

WATER QUALITY

The 1972 Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977, is a national policy to restore and maintain the chemical, physical, and biological integrity of the nation's waters, enhance the quality of water resources, and to prevent, control, and abate water pollution. The NPS 2006 Management Policies provides direction for the preservation, use, and quality of water originating,

flowing through, or adjacent to park boundaries. There are no surface waters within the project area; therefore the impact topic was dismissed from further analysis.

AIR QUALITY

The 1963 Clean Air Act, as amended (42 USC 7401 et seq.), requires federal land managers to protect air quality in national parks. The project site is located in the Washington Metropolitan Area nonattainment zone for ozone. During repair and rehabilitation, local air quality would be temporarily affected by dust and vehicle emissions. Moving certain elements off-site for repair would result in increased vehicle exhaust and emissions during the repair and rehabilitation period. Hydrocarbons, nitrogen oxide, and sulfur dioxide emissions would be rapidly dissipated by air drainage since air stagnation is uncommon at the project site. Overall, there would be a slight and temporary degradation of local air quality due to dust generated from repair and rehabilitation activities, but these effects would be localized and negligible. The park's current level of air quality would not be affected by the proposed project; therefore, this impact topic was dismissed from further analysis.

FLOODPLAINS

Executive Order 11988 (Floodplain Management) requires an examination of impacts to floodplains and the potential risk involved in placing facilities within floodplains. The NPS 2006 Management Policies, Section 4.6.4, Floodplains and NPS Director's Order 77-2 Floodplain Management Guidelines (NPS 2003) provide guidelines on developments proposed in floodplains. The Petersen House is not within a designated floodplain; therefore, floodplains were not addressed as an impact topic in this EA.

VEGETATION

Vegetation within the project area is minimal and there is no existing rare or unusual vegetation. The highly urban setting reduces the land area available for vegetation. The backyard portion of Petersen House consists mostly of paved brick areas and dirt. Previously, the entire backyard had been paved and a layer of cement is still present approximately one foot below the surface. Landscaping is not proposed as part of the repair and rehabilitation of Petersen House. Due to the lack of existing vegetation, the impact topic was dismissed for this EA.

WILDLIFE

The project area is in an urban setting. It is adjacent to heavily used roads with attendant vehicle noise. As a result, wildlife in the project area is limited to adapted urban species, such as squirrels and songbirds. Although construction-related activities may temporarily displace wildlife from the area, the proposed action would not result in greater than negligible effects on wildlife or wildlife habitat. Due to the area's urban context, level of human activity, and minimal habitat value, this topic was dismissed as an impact topic analyzed in this EA.

RARE, THREATENED, AND ENDANGERED SPECIES

Because the proposed actions would take place entirely within the Petersen House and its courtyard, no rare, threatened, or endangered species or habitat known would be impacted. Therefore, this impact topic was dismissed from consideration.

VISUAL RESOURCES (AESTHETICS AND VIEWSHEDS)

Petersen House visual resources would not be impacted as a result of the proposed action. All exterior renovations would be in accordance to the Secretary of the Interior's Standards for the Treatment of Historic Properties and would not change the aesthetics or viewsheds of the 10th street corridor. Therefore, this impact topic was dismissed from consideration.

ETHNOGRAPHIC RESOURCES

Ethnographic resources are defined by the NPS as any “site, structure, object, landscape, or natural resource feature assigned traditional, legendary, religious, subsistence or other significance in the cultural system of a group traditionally associated with it” (NPS 1998b). In this analysis, the NPS’ term “ethnographic resource” is equivalent to the term “Traditional Cultural Property” (TCP) which is more widely used in cultural resource management. Guidance for the identification of ethnographic resources is found in National Register Bulletin #38, Guidelines for Evaluating and Documenting Traditional Cultural Properties (NPS 1998a). The key considerations in identifying TCPs are their association with cultural practices or beliefs of a living community that are rooted in the community’s history and are important in maintaining the continuing cultural identity of the community (Parker and King 1998). There are no properties that meet the definition of a TCP within the area of potential effects (APE); therefore, this impact was dismissed from further consideration.

CULTURAL LANDSCAPES

According to Director’s Order 28, Cultural Resources Management Guideline, a cultural landscape is

...a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions.

The Petersen House is a remnant of the densely built up urban rowhouse element of nineteenth century Washington; as such, it is not part of any identified cultural landscape. Therefore, this topic was dismissed from further consideration.

TRANSPORTATION

The Petersen House is accessed by 10th Street, NW, which is used both by park visitors and local commuter traffic. Under both action alternatives, the street would remain open during repair and rehabilitation activities; however there could be some short-term, negligible, impacts to traffic with the increased construction traffic hauling materials to and from the site, which could cause slight delays in transit time. Because traffic impacts along 10th Street, NW would be negligible during construction under any of the proposed alternatives, this impact topic was dismissed from further analysis in this EA.

UNIQUE ECOSYSTEMS, BIOSPHERE RESERVES, WORLD HERITAGE SITES

There are no known biosphere reserves, World Heritage sites, or unique ecosystems listed at Ford’s Theatre park unit or specifically at the project site, therefore the impact topic was dismissed from further analysis.

LAND USE

The existing land use within Petersen House would not change as a result of implementation of the proposed action; therefore the impact topic was dismissed from further analysis.

SOCIOECONOMICS

NEPA requires an analysis of impacts to the human environment, which includes economic, social, and demographic elements in the affected area. Repair and rehabilitation activities associated with the proposed actions may bring a short-term need for additional personnel at the site, but this addition would be minimal and would not affect the surrounding community’s overall population, income, and employment base. The proposed action would not appreciably impact local businesses or other agencies. Implementation of the proposed action could provide a beneficial impact to the economies of nearby areas

(e.g., minimal increases in employment opportunities for the construction workforce and revenues for local businesses and government generated from construction activities and workers). Any increase, however, would be negligible. Therefore, socioeconomics was dismissed as an impact topic.

ENVIRONMENTAL JUSTICE

On February 11, 1994, President Clinton issued Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This order directs agencies to address environmental and human health conditions in minority and low-income communities to avoid the disproportionate placement of any adverse effects from federal policies and actions on these populations. Local residents may include low-income populations, but these populations would not be particularly or disproportionately affected by activities associated with the repair and rehabilitation of Petersen House; therefore, this impact topic was dismissed from further analysis in this EA.

CHAPTER 2: ALTERNATIVES

INTRODUCTION

NEPA requires federal agencies to explore a range of reasonable alternatives aimed at addressing the purpose of and need for the proposed action. The alternatives under consideration must include the “no action” alternative as prescribed by CEQ regulations for implementing NEPA (40 CFR 1502.14).

The alternatives analyzed in this document, in accordance with NEPA, are based on preliminary design and the result of internal scoping and public scoping. These alternatives, described in this section, meet the overall purpose of and need for proposed action. Alternatives that were considered but were not technically feasible, did not meet the purpose and need of the project, created unnecessary or excessive adverse impacts to cultural or natural resources, and/or conflicted with the overall management of the park or its resources were dismissed from further analysis and are also described in this chapter.

The NPS explored and objectively evaluated three alternatives in this EA, including

Alternative A: no action

Alternative B: Repair and Rehabilitate the Petersen House, Install New Climate Control System, and Accommodate Connection to the Center for Education and Leadership

Alternative C: Repair and Rehabilitate the Petersen House, Rehabilitate the Rear Porch for Accessibility, Install New Climate Control System, and Accommodate Connection to the Center for Education and Leadership

The descriptions of alternatives B and C are based on preliminary designs and information available at the time of this writing. Specific distances, areas, and layouts used to describe the alternatives are estimated based on good engineering practice and may change during the actual design. If changes during any approved design are not consistent with the intent and effects of the selected alternative, additional compliance may be required prior to project implementation to ensure that NEPA guidelines are met.

DESCRIPTIONS OF ALTERNATIVES

ALTERNATIVE A: NO ACTION

Alternative A, the no action alternative, is the continuation of current management. It does not imply or direct discontinuing the present action or removing existing uses, developments or facilities. The no action alternative provides a baseline of existing conditions and actions and provides a basis for evaluating the changes and impacts of the action alternatives. If the no action alternative were to be selected, the NPS would respond to future needs and conditions without substantial action or policy change.

Under alternative A, exterior and interior rehabilitation and repair of the Petersen House, rehabilitation of the rear porch for accessibility; installation of new climate control system; and a connection to the CEL would not occur. Water damage and lack of temperature and humidity control would continue to further impact the historic fabric of the building. Figures 2 and 3 depict some of the damage that is evident in the interior and the exterior of the house.

Normal, but limited, levels of maintenance would continue at the Petersen House but would be inadequate to prevent further deterioration from water

Figure 2. Recently Installed Wall Paper and the Ceiling Plaster and Paint are Damaged as the Result of the Leaking Downspout Outside



damage and temperature and humidity fluctuations.

The current circulation pattern would continue, with visitors entering from the front porch stairs to the landing and then into the house. Once in the house, visitors enter into a hallway leading up to the front parlor. Visitors then pass through the three rooms in the Petersen House that are public exhibit areas – the front parlor, back parlor, and the back bedroom (Death Room). The exhibit areas are cordoned off by stanchions. After leaving the Death Room, visitors exit the house out through the rear porch, down a small flight of stairs, and down a narrow alleyway on the side of the building leading out to 10th Street, NW.

The Petersen House is open daily from 9:30 to 5:30 daily. Staffing levels at peak visitation time (mid March through the end of July) are two to three staff members - two in the house, one on the line. Beginning in February 2009, the Petersen House instituted a timed entrance program, with tickets needed to enter the site.

Public visiting areas are small and to help protect the resource 15 people are allowed in the house at one time. Once all the visitors have cleared the back bedroom, are exiting down the rear porch stairs, the next set of visitors are invited in. During peak season and when most of the school groups are visiting, the visitor experience is about 10 minutes.

Under the no action alternative, the Petersen House would continue to remain not fully compliant with NPS policies for universal accessibility. Visitors who are unable to access the house from its sole point of entry via the curve front steps would be allowed to experience the house by watching a video that is available at Fords' Theatre that shows the interior of the Petersen House and the Death Room.

Access to the new CEL would be limited to 10th Street, NW. The lack of connection between the Petersen House and the CEL would affect the proposed layout and circulation pattern of the exhibits in the building and require the CEL to alter their current interior concept.

ALTERNATIVE B: REPAIR AND REHABILITATE THE PETERSEN HOUSE, INSTALL NEW CLIMATE CONTROL SYSTEM, AND ACCOMMODATE CONNECTION TO THE CENTER FOR EDUCATION AND LEADERSHIP

Extensive water damage and lack of temperature and humidity control over the past years has impacted the interior and exterior historic fabric of the Petersen House. The house receives more than 600,000 visitors annually and the public rooms are furnished with period pieces. Formal and informal complaints have been made about water damaged walls and wall paper, too much heat in the summer months, too little heat in the colder months, high humidity levels, peeling paint, exposed wood on doors and windows, cracking and missing window glazing, and deteriorating wooden window features.

This alternative proposes multiple improvements to repair and rehabilitate the historic windows and various exterior and interior areas of the Petersen House and to install a new climate control system. All work on the interior and exterior of the house would be conducted in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Additionally, alternative B proposes to accommodate the connection from the Petersen House to the adjacent CEL. The connection would be an opening made through a wall in the CEL building at the rear porch level of the Petersen House. There would be a controlled elevator vestibule within the CEL at the connection. (The project to create a connection between the CEL and the Petersen House is not a NPS action but a project of the Ford's Theatre Society. Details of the CEL project are discussed in the cumulative projects section in "Chapter 4: Environmental Consequences").

Figure 3. Gutter is Sagging, Full of Debris and does not Slope Toward the Downspout



Rehabilitation, repairs and construction activities are expected to begin in November 2010 lasting through May 2011. The construction period for the CEL would run parallel to the construction period for the proposed actions at the Petersen House. The Petersen House would be closed to the public during rehabilitation, repairs and construction activities. Elements of the proposed projects, which are common to all action alternatives, are described below.

Elements Common to All Action Alternatives

Exterior Repairs

Exterior repairs of the Petersen House would be conducted in identified areas of the house to help maintain and prevent further deterioration of the structure and related features from water damage. Elements of exterior repairs (shown in figures 4 and 5) include the following:

- Install a new flashing along parapet walls and chimneys.
- Repair cornices and/or replace gutters, downspouts and flashing and install screen covers at downspouts. Relocate downspouts at the rear ell and connect downspouts to existing and new underground storm sewer piping.
- Dismantle and repair the exterior stone landing and steps located at the front of the building. Remove, repair, and reinstall iron railings and balusters.
- Repair and replace damaged brick on the exterior of the building. Repaint deteriorated mortar joints.
- Remove existing patches at the first floor entrance door sill and plinths and install new repairs.
- Install a new drainage system in the backyard to include a gravel filled trench (i.e., French drain) along the ground floor exterior walls from grade to footing to drain water away from the building wall.
- Replace the ground floor areaway entrance drain and concrete slab. Relocate the existing drain; lower the slab and drain away from the entrance door.
- Install slate damp-proofing course.
- Apply mineral coating to exterior brickwork.
- Install new underground sewer (collection box) and sanitary piping to drain water and waste to existing sewer lines in alley to the west of the Petersen House property.
- Install structural repairs and modifications at floor and roof framing of the rear porch and the house.
- Install new support framing for the roof beams. Repair the first floor beam at the north end of the porch. Replace rotten roof framing and sheathing.
- Install interior energy panels at all storm windows.
- Insulate the floor of the Death Room and former kitchen.

New Climate Control System

Installation of a climate control system would prevent further damage from extreme temperature fluctuations, lack of ventilation, and high levels of humidity. Currently the house does not have central AC and is subject to severe heat and humidity in the summer months. AC units are limited to one window unit and two portable units positioned in the first floor parlor and on the first to second floor stair landing. These window units would be removed when the new climate control system is in place.

Elements of the installation of the new climate control system include installation of new three exterior AC condensing units, mechanical equipment (boiler, air handlers, and ductwork) primarily in the attic, storage and mechanical rooms. Improvements would be made to the electrical system to accommodate new mechanical equipment. The preferred option for placement of the condensing units is to locate all three units at the rear of the ell at the west elevation (figure 4).

Interior Repairs

Interior repairs of the Petersen House would be conducted in identified areas of the house to help maintain and prevent further deterioration of the structure and related features. Elements of interior repairs include the following:

- Remove deteriorated² lead-based paint to sound paint³ in preparation for repainting throughout the house on interior walls, ceilings, doorways, doors, baseboards, window frames and sills; full lead abatement would be limited (all deteriorated paint will not be removed). Prepare all surfaces for repainting.
- Strip wallpaper from exhibition area walls and ceilings in the hallway, front and back parlors and Lincoln's Death Room.
- Repaper exhibit area walls and ceilings using 1865 wallpapering expertise and methodology. Front hallway seams would face a westerly direction – the same direction as traffic flow.
- Repair plaster cracks and holes in walls and ceilings throughout the house on all floors where needed and prepare areas for repainting/repapering.
- Repaint non-papered rooms and all interior trims with historic 1865 where known or match existing colors.
- Repair wood flooring where it is damaged and buckled and refinish all wood flooring surfaces throughout the house.
- Remove all heating baseboards in public rooms and replace with appropriate wood baseboard trim to match existing size and profile.
- Replace carpeting in historic rooms with appropriate carpeting of the type that would have been present in a typical Washington, D.C. boarding house of 1865. Replace carpeting in hallway, hall stair, and room walkways with heavy-duty thick-weave wool carpeting of an 1865 pattern.

² Deteriorated paint is defined as paint that is flaking and/or has excessive alligating.

³ Sound paint is paint that has sound cohesion and is not chipping or chalking.

Figure 4. Proposed Exterior Improvements (Preferred Option)



Historic Windows, Casings, Doors, Shutters

Repair and replacement of deteriorated wood window sills, shutter hardware, sashes, and glazing would be conducted. The work would be composed of the repair of 31 historic wood windows. It would also include the repair of ten pairs of wood shutters and six pairs of replica wood shutters. Repair work would be conducted to the greatest extent possible with limited replacement in-kind based on replication. The work would also include removal of deteriorated lead-based paint to sound paint in preparation for repainting.

Repairing the windows, sashes, and door slabs would be conducted offsite by a contractor in the local region. Temporary protective coverings to prevent water penetration would be installed to maintain secure conditions at all times when windows and building components are not in place. All repair work would be performed in accordance with Architectural Woodwork Institute Architectural Woodwork Quality Standards Illustrated, Premium Grade. Preservation approaches for the treatment and repair of historic windows and their associated features outlined in NPS Preservation Brief 9 will be followed.

Accommodate Connection between Petersen House and Center for Education and Leadership Building

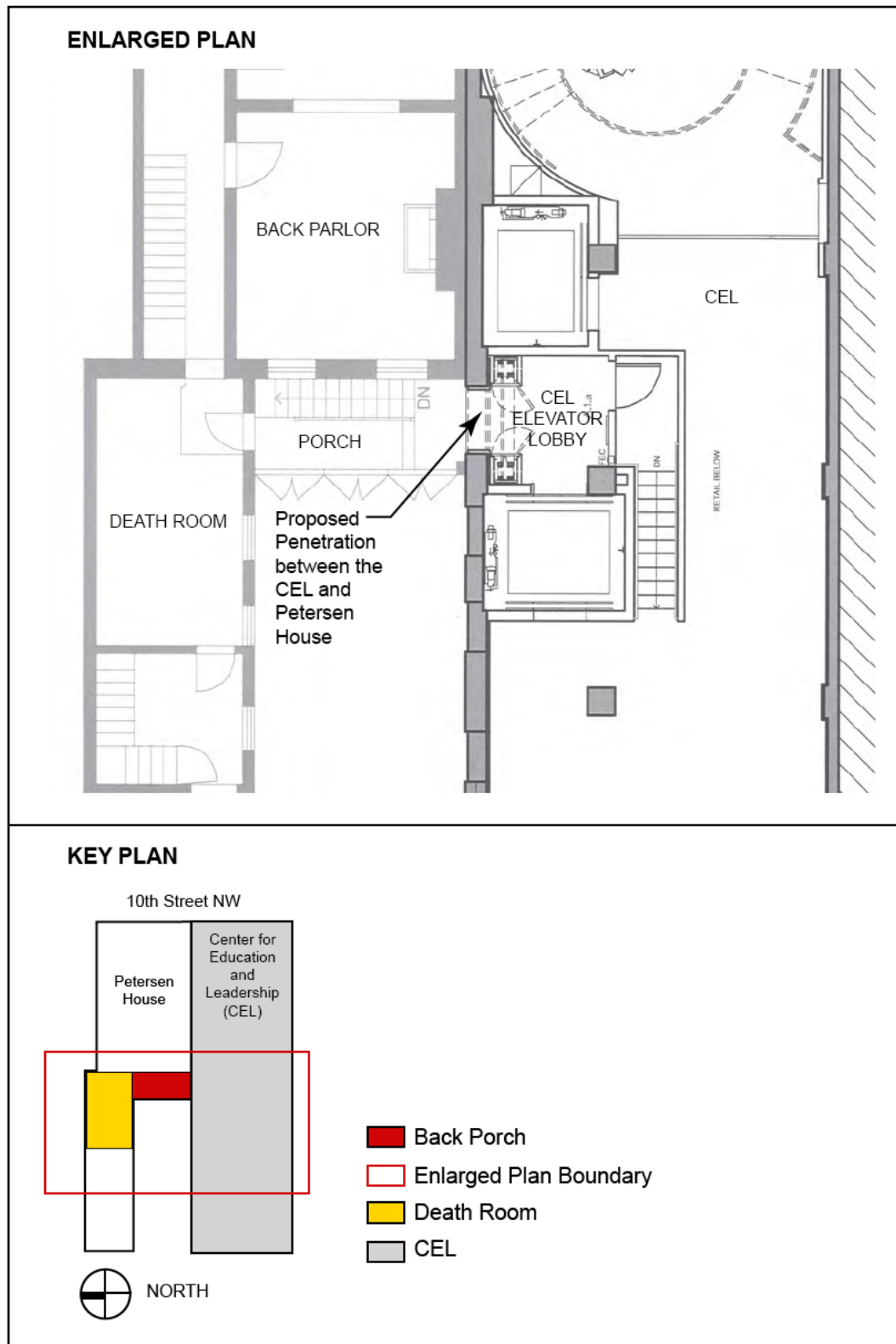
The Ford's Theatre Society, in partnership with the NPS, proposes a connection from the Petersen House to the adjacent CEL to provide visitors a connection between the two facilities. The actual construction of the proposed connection would be taken on by the Ford's Theatre Society; however, the NPS would need to accommodate for this opening and circulation pattern from the Petersen House side.

The proposed penetration to create the connection would occur in the rear porch area (see figure 5), which is a secondary contributing feature of the Petersen House⁴. The penetration would be made in the wall of the CEL. The connection would bring visitors from the rear porch area of the Petersen House to a controlled access point at an elevator vestibule in the CEL. Through this entry point, visitors would be allowed to gain access to an array of programs at the CEL that will focus on the "Fourth Act" – what happened in the aftermath of Abraham Lincoln's death. This "finale" program would complete the overall visitor experience of the Ford's Theatre National Historic Site – taking them from Ford's Theatre where President Lincoln was shot, to the Petersen House where he died, and on to the programs provided by the CEL, which aims to deepen visitors' knowledge and understanding of Abraham Lincoln's presidency, the significance of his death and the legacy he left the nation. Construction of CEL is expected to occur from November 2010 through May 2011.

Under alternative, no improvements to accessibility are proposed. The house would continue to remain not fully compliant with NPS policies for universal accessibility. Visitors who are unable to access the house from its sole point of entry via the curve front steps would continue have access to the NPS's alternative way of experiencing the house; they could watch a video that is available at Fords' Theatre that shows the interior of the Petersen House and the Death Room.

⁴ The Petersen House is listed on the National Register of Historic Places and contains both primary and secondary contributing features to its historic significance. Primary contributing elements include spaces of the house that stood as direct witness to the tragic events through the evening prior to President Lincoln's death. Secondary contributing features were present in April of 1865, but were not directly touched by the death scene.

Figure 5. Overview of Proposed Penetration from Petersen House to the Center for Education and Leadership



ALTERNATIVE C: REPAIR AND REHABILITATE THE PETERSEN HOUSE, REHABILITATE THE REAR PORCH FOR ACCESSIBILITY, INSTALL NEW CLIMATE CONTROL SYSTEM, AND ACCOMMODATE CONNECTION TO THE CENTER FOR EDUCATION AND LEADERSHIP

Similar to alternative B, this alternative proposes multiple improvements to repair and rehabilitate the historic windows and various areas of the Petersen House, install a new climate control system, and accommodate a connection between the Petersen House and the CEL (see above, Elements Common to All Action Alternatives). In addition, alternative C proposes to rehabilitate the rear porch for an accessible route to Petersen House. Construction work proposed under alternative C would be performed under the same four projects under alternative B, as well as one additional project to rehabilitate the rear porch for an accessible route.

Elements of the rear porch rehabilitation for an accessible route include the following:

- Remove existing interior stairs and existing interior wood porch floor structure (both c. 1959).
- Remove existing porch exterior walls and framing; including casement windows, French doors and paneling both levels (c. 1959).
- Repair existing porch roof structure.
- Install new roof beam where missing along wall of CEL.
- Replace 1/3 of deteriorated roof sheathing.
- Remove and reinstall existing metal roofing to make repairs.
- Replace existing gutters and downspouts.
- Paint exposed wood ceiling.
- Reconstruct porch on existing building foundation wall and maintain existing roof line of the current porch.
- Install new porch wood floor structure aligning with the floor to the Death Room.
- Install and finish new porch flooring.
- Install new wood framed wall and exterior paneling to mimic existing exterior façade. Install new fixed energy efficient wood windows on both levels. Install energy efficient exit doors; one on upper level and one on lower level.
- Install new exterior wood staircase with three landings.
- Install wood guardrail system with metal handrail.
- Install non-slip treads.
- Install new pathway from new stair case to porch ground floor.
- Paint all wood items.
- Improve landscaping and soils in courtyard.
- Add directional (exit) signage and interpretive signage in courtyard.
- Modify existing rear alleyway gate and latch/lock for emergency exit.
- Accommodate new opening to CEL.
- The existing openings to Death Room to will remain unaltered.

The conceptual layout for the preferred option to rehabilitate the porch and placement of a new staircase are shown in figures 6 and 7.

Figure 6. Preferred Option Floor Plan of Rear Porch

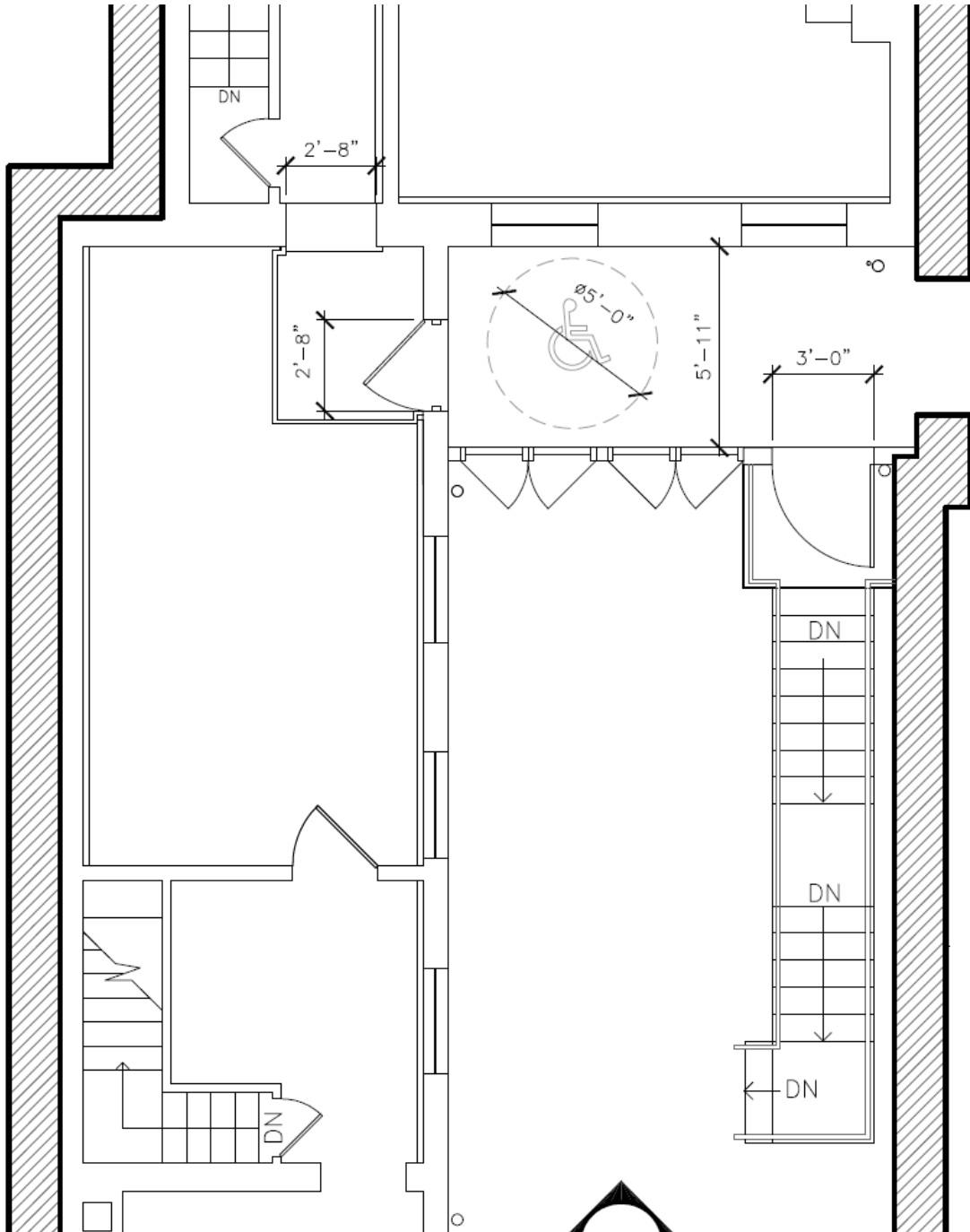
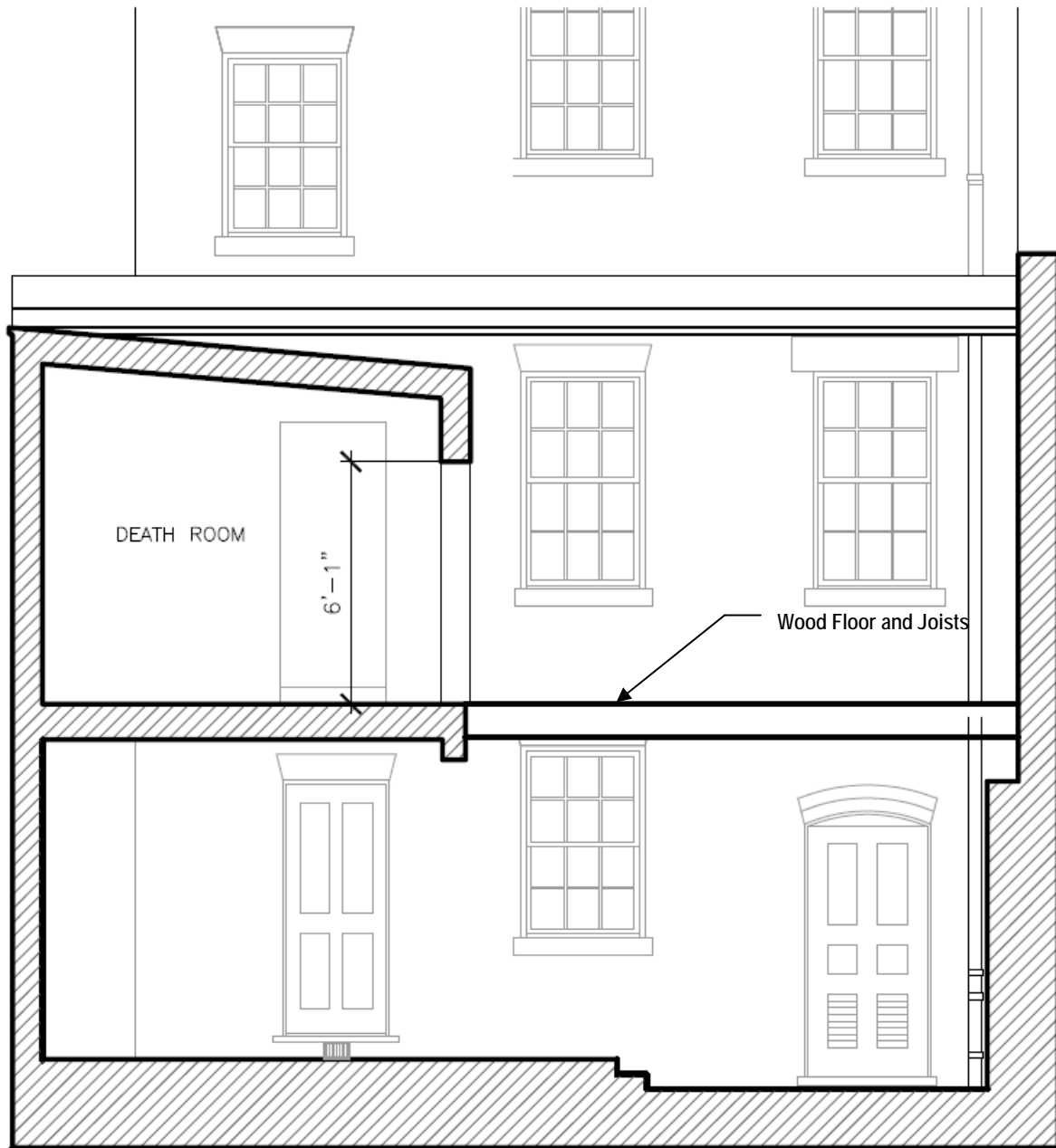


Figure 7. Preferred Option Building Section



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 selected action alternative. 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.

HISTORIC DISTRICTS AND STRUCTURES

- Park staff would oversee every stage of construction activities to ensure that historic fabric is not unduly disrupted by the contractors, and the Petersen House is rehabilitated according to the Historic Structures Report for the Petersen House (NPS 2002).
- There would be no “down time” with regard to fire and security protection for the Petersen House. Temporary fire detection and suppression systems would be in place during construction and would be the responsibility of the contractor.
- All work would be carried out in conformance with the *Secretary of the Interior’s Standards for the Treatment of Historic Properties* and *NPS Management Policies 2006*.
- Additional interpretation and education appropriate to historic context of the project and the site would be developed.
- Construction would be carried out in a way that is least aesthetically disruptive to the adjacent and nearby historic districts.
- Ongoing review with regulating agencies (DC Historic Preservation Officer (DC HPO), NCPC, and U.S. Commission of Fine Arts (CFA)) within the design refinement, and the Section 106 process would ensure that the proposed options blend as harmoniously as possible with the existing scale and character of the Petersen House.

MUSEUM OBJECTS

- Prior to construction, park curatorial staff and fine arts specialists would pack museum objects and transport them to a climate-controlled, secured storage facility, in accordance with the Director’s Order 24, NPS Museum Collections Management.
- Fixtures and paintings would be protected or removed for safety or security as a part of the initial preparatory preservation work to be performed by park staff.
- Objects would be returned and reinstalled in the Petersen House only after construction documents indicate that all repairs and rehabilitation activities are complete and operating.
- All museum objects handling would be performed by qualified, trained personnel, using proper equipment and tools, and collections would be protected at all stages of transport from potential environmental threats including water damage, rapid fluctuations in temperature and/or humidity, theft, excessive vibration, or other as noted by NPS museum standards.

ARCHEOLOGICAL RESOURCES

- Construction in areas outside locations of previously-documented archeological resources would be preceded by shovel testing and/or archeological monitoring to ensure no irreparable adverse impacts to considerable, newly-discovered archeological resources in these areas occur.

- Should any archeological resources be identified during construction, work would stop until NPS archeologists evaluated the resources. The appropriate measures would be undertaken to document or mitigate impacts. The significance of these finds would be assessed in consultation with the District of Columbia Historic Preservation Office (DC HPO).

VISITOR USE AND EXPERIENCE

- The NPS would close the Petersen House to the public for the duration of the repairs, rehabilitation, and construction activities. During this time, all visitors to the Ford's Theatre National Historic Site would be able to view the video of the Petersen House available at Ford's Theatre to learn the history of the house.

HUMAN HEALTH AND SAFETY

- The NPS would close the Petersen House to the public for the duration of the construction period for all repairs and renovations. Construction is expected to begin in November 2010 lasting through May 2011.
- The NPS would require the construction contractor to follow NPS construction contract standards during construction, including implementation of an accident prevention program, installation of warning signs at the construction site and along nearby roads, and installation and maintenance of construction fences around the construction sites to prevent non-contractors and the public from entering the construction areas.

ALTERNATIVES CONSIDERED BUT DISMISSED

Several alternatives or alternative elements were identified during the design process and internal and public scoping. Some of these were determined to be unreasonable, or much less desirable than similar options included in the analysis, and were therefore not carried forward for analysis in this EA.

Justification for eliminating alternatives from further analysis was based on factors relating to:

- conflicts with already-established site uses
- conflict with the statement of purpose and need, or other policy
- severe impact on environmental or historic resources

One other option for placement of the three AC condensing units considered locating two units on a mechanical platform attached to the brick wall of the rear of the main house. The third unit would be installed at the rear of the ell at the west elevation (figure 8). Placement of two AC condensing units on a mechanical platform to the brick wall of the rear of the main house would cause adverse impacts to the visual resources of the Petersen House as they would be located behind the rear ell in a location that is visible to visitors or staff. This option was dismissed due to the potential for adverse impacts to the primary contributing resources of the house (see discussion and figure 13 in Chapter 4), which includes the brick wall of the rear of the main house. Primary contributing resources were established as a restoration zone in the Historic Structures Report (NPS 2002) for the house. These resources are features, spaces, and elements of the house that are original to the period of significance (April 14-15, 1865). Within a restoration zone, these resources receive utmost priority with protection of original historic fabric critical.). This option for placement of the AC condensing units would not protect the historic fabric of the house.

Figure 8. Location of Air Conditioning Condensing Units (Option Considered but Dismissed)

Rehabilitation of the rear porch explored other options that would also provide code compliance and accessibility to the maximum extent possible; avoided or minimized impacts to historic fabric; and provided for a code compliant new stair and accessible hallway. However these alternatives did not provide for code compliance and accessibility to the extent that the preferred option to rehabilitate the rear porch would. Table 1 summarizes the advantages and disadvantages of the alternatives dismissed.

Table 1. Summary of Options for Rehabilitation of the Rear Porch Considered But Dismissed

Option	Advantages	Disadvantages
Reconfigure Upper Porch – Under this alternative, the floor of the porch would be demolished and replaced with a new 4-inch concrete slab set at the elevation of the Death Room. The upper level of the porch would be widened by 6 inches to accommodate a wider hallway, and the center panel of the porch would be bumped out for universal accessibility.	<ul style="list-style-type: none"> • A “T” shaped turning space or a 180 degree full turn is provided for accessibility • Egress stair is enclosed • Basement level is unchanged 	<ul style="list-style-type: none"> • Requires complete replacement of the upper west façade of the porch. Existing windows could be reused • Minor modification to the structural support below the Death Room • Existing pipes in SE corner of the porch are removed • There are obstructions to achieving 80-inch headroom on the stair due to the angled exit at the Death Room and the structural beam supporting the Death Room
Expand Porch - The porch would be expanded 2 feet-3 inches west and the floor would be demolished and replaced with a new 4-inch concrete slab set at the elevation of the Death Room. This option would require a reduction in width of the CEL penetration.	<ul style="list-style-type: none"> • A 180 degree turn is provided • Visual access through historic windows to parlor is provided • Egress stair is enclosed • Existing pipes could remain • Egress stair is enclosed 	<ul style="list-style-type: none"> • Major modification to porch and basement is required • This option would require the removal of portions of historic fabric • A new doorway to courtyard is required • Demolition of portions of the former kitchen is required • Header below Death Room needs to be modified
Renovate Entire Porch - The porch would be expanded approximately 7 feet west and the floor would be demolished and replaced with a new 4-inch concrete slab set at the elevation of the Death Room. The porch would enclose two existing exterior windows on the south façade.	<ul style="list-style-type: none"> • A 180 degree turn is provided • Visual access through historic windows to parlor is provided • Egress stair is enclosed • Historic fabric is affected but not damaged • Existing pipes could remain 	<ul style="list-style-type: none"> • Porch now encloses some exterior windows • The basement level would be reconfigured • A new doorway to the courtyard would be required

Option	Advantages	Disadvantages
Relocate Penetration - The CEL penetration is moved to the west and the porch is bumped out to accommodate accessibility. The exiting stair is unchanged. The doorways to the Death Room are widened and the elevation of the floor is reset	<ul style="list-style-type: none"> Egress stair remains enclosed 	<ul style="list-style-type: none"> Would require major design modifications to the CEL Major reconfiguration of the back porch and disruption to the garden/courtyard Egress stair remains unchanged Major disruption to historic fabric is required

Additional option elements to rehabilitate the porch were also considered, to include:

- Widening of the porch footprint to incorporate an interior staircase.
- Enlargement of the doors to the Death Room (from the rear porch and from the interior hallway) to accommodate wheelchair access.

However, these elements were dismissed because of their potential to cause adverse impacts to the primary historic fabric and interpretation of the house.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The environmentally preferable alternative is defined by CEQ as the alternative that would promote the national environmental policy as expressed in NEPA Section 101. This includes

Fulfilling the responsibilities of each generation as trustee of the environment for succeeding generations;

Assuring for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

Attaining the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;

Preserving important historic, cultural and natural aspects of our national heritage and maintaining, wherever possible, an environment that supports diversity and variety of individual choice;

Achieving a balance between population and resource use that would permit high standards of living and a wide sharing of life's amenities; and

Enhancing the quality of renewable resources and approaching the maximum attainable recycling of depletable resources (NEPA, Section 101).

The NPS is required to identify the environmentally preferable alternative in its NEPA documents for public review and comment. The NPS, in accordance with the Department of the Interior policies contained in the Departmental Manual (516 DM 4.10) and the CEQ's *NEPA's Forty Most Asked Questions*, defines the environmentally preferable alternative (or alternatives) as the alternative that best promotes the national environmental policy expressed in NEPA (Section 101(b) (516 DM 4.10). In their *Forty Most Asked Questions*, CEQ further clarifies the identification of the environmentally preferable alternative, stating "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).

The following paragraphs discuss how each alternative meets the first five policy criteria. The sixth criterion was not applicable because this project does not involve the management of renewable resources.

After completing the environmental analysis, the NPS identified alternative C as the environmentally preferable alternative in this EA because it most closely satisfies the policy goals detailed above. Through the exterior repair and interior rehabilitation of the Petersen House and installation of a new climate control system as proposed under this alternative, criteria 1 and 2 would be fulfilled. These actions protect this historic house for succeeding generations. Alternative C would fulfill criteria 3 by protecting the house and assuring public health, safety, and welfare by installation of an adequate climate control system, removing some of the existing lead-based paints in the house, fixing the loose floorboards, and providing a universally accessible route to the Petersen House. Criteria 4 would be fulfilled as the important historic and cultural aspects of the Petersen House, the house in which President Lincoln died, preserved and protected through activities proposed under this alternative. Alternative C would preserve a very important aspect of our national heritage and best achieve a balance between resource use and visitor use without resource degradation. Finally, criteria 5 would be fulfilled with the accommodation of a connection between the CEL and the Petersen House and the construction of a universally accessible route to the house, which would help to enhance the overall experience to all visitors.

Alternative A, the no action alternative, represents the existing condition at the Petersen House. This alternative would not provide the additional benefits to succeeding generations by not fully protecting The Petersen House and its artifacts from climate extremes. While the no action alternative fulfills criteria 3 by ensuring that existing maintenance maintains a safe environment for visitors and staff, maintenance activities would not fully address the deteriorating condition of the house and the lack of an universally accessible route to the house. Criteria 4 would not be met as fully as under alternative C. The no action alternative would not meet criteria 5 as fully as alternative C, since currently there is no universally accessible route to the Petersen House.

Alternative B does not include rehabilitation of the rear porch for a universally accessible route and therefore, would not meet criteria 3 and 5 for the environmentally preferable alternative as fully as alternative C. Under alternative B, the Petersen House would remain inaccessible and not fully compliant with NPS policies for universal accessibility.

A summary of the environmental consequences of the alternatives analyzed in this EA follows in table 2.

Table 2. Summary of Environmental Consequences

Impacted Resource	Alternative A: No Action	Alternative B: Repair and Rehabilitate the Petersen House, Install New Climate Control System, and Accommodate Connection to the CEL	Alternative C: Repair and Rehabilitate the Petersen House, Rehabilitate the Rear Porch for Accessibility, Install New Climate Control System, and Accommodate Connection to the CEL
Historic Districts and Structures	The no action alternative would result in long-term, moderate, adverse impacts (adverse effect under Section 106) due to the on-going physical degradation of the historic Petersen House. The cumulative impacts from the other projects are primarily long-term and beneficial. When combined with the long-term, moderate, adverse impacts associated with the no action alternative, there is a net long-term, minor to moderate, adverse impact to historic districts and structures. Impairment of historic districts and structures would not occur under the no action alternative	Short-term minor and long-term, beneficial impacts (no adverse effect under Section 106) would result from the implementation of exterior and interior repairs and repairs of the windows. Long-term, negligible impacts (also no adverse effect under Section 106) would result from the implementation of the new climate control system, as the AC condensing units would be placed at the rear ground elevation, which is a non-contributing resource. Alternative B would create long-term, minor, adverse impacts (no adverse effect under Section 106) from the accommodation of the new connection to the CEL; however the impacts could be easily mitigated by the careful design of the doorway to the CEL. Cumulative impacts under alternative B would be long-term and beneficial. Impairment of historic architectural resources would not occur under alternative B.	Short-term minor and long-term, beneficial impacts (no adverse effect under Section 106) would result from the implementation of exterior and interior repairs and repairs of the windows. Long-term, minor, adverse impacts (no adverse effect under Section 106) would result from the implementation of the new climate control system, as the AC condensing units would be placed at the rear ground elevation, which is a non-contributing resource. Alternative C would create long-term, minor, adverse impacts from the accommodation of the new connection to the CEL; however the impacts could be easily mitigated by the careful design of the doorway to the CEL. Long-term, minor, adverse impacts would result from the rehabilitation of the rear porch for an accessible route. Cumulative impacts under alternative C would be long-term and beneficial. Impairment of historic architectural resources would not occur under alternative C.

Impacted Resource	Alternative A: No Action	Alternative B: Repair and Rehabilitate the Petersen House, Install New Climate Control System, and Accommodate Connection to the CEL	Alternative C: Repair and Rehabilitate the Petersen House, Rehabilitate the Rear Porch for Accessibility, Install New Climate Control System, and Accommodate Connection to the CEL
Museum Objects	Implementation of the no action alternative would likely result in long-term, moderate adverse impacts to the artifacts due to the lack of effective environmental controls. As the existing climate control system is inadequate, the artifacts are vulnerable to could be subject to further deterioration. However, the no action alternative is not likely to result in any impacts that would constitute impairment of museum objects.	Implementation of alternative B would result in a beneficial long-term impact to the museum objects, due to the implementation of a new climate control system. There would be no cumulative impacts. Alternative B would not result in impairment of museum objects.	Implementation of alternative C would result in a beneficial long-term impact to the museum objects, due to the implementation of a new climate control system; no additional impacts are expected from the rehabilitation of the rear porch for accessibility. There would be no cumulative impacts. Alternative C would not result in impairment of museum objects.

Impacted Resource	Alternative A: No Action	Alternative B: Repair and Rehabilitate the Petersen House, Install New Climate Control System, and Accommodate Connection to the CEL	Alternative C: Repair and Rehabilitate the Petersen House, Rehabilitate the Rear Porch for Accessibility, Install New Climate Control System, and Accommodate Connection to the CEL
Archeological Resources	Implementation of the no action alternative would result in no direct, indirect, beneficial or adverse impacts to archeological resources in the study area. Cumulative impacts under the no action alternative on archeological resources would not occur. Based on this impact analysis, the no action alternative is not likely to result in any impacts that would constitute impairment of archeological resources.	Ground-disturbing activities associated with alternative B are likely to result in negligible, adverse impacts (no adverse effect under Section 106) to the Petersen House Site. Archeological features and deposits within the area necessary for installation drainage improvements have been fully sampled, and these areas have been determined to be disturbed or fully excavated during the combined Phase I/II archeological study. Because there are no other recent of planned ground-disturbing projects, there are no cumulative impacts to archeological resources associated with Alternative B. Alternative B is not likely to result in any impacts that would constitute impairment of archeological resources.	Ground-disturbing activities associated with alternative C are similar to alternative B, likely to result in negligible, adverse impacts (<i>no adverse effect</i> under Section 106) to the Petersen House Site. A considerable archeological deposit associated with the Petersen House Site has been identified along the southern margin of the yard in the approximate location of the footers for the exterior stairway. However, this resource has been entirely excavated in the projected locations of the footers, and archeological monitoring would be carried out to insure that there is no disturbance to this resource beyond the limits of the Phase I/II excavations. Archeological monitoring of construction would insure that the excavations necessary for a staircase construction are limited to areas that have already been archeologically sampled. There would be no cumulative impacts to the Petersen House Site. Alternative C would not result in impairment of archeological resources.

Impacted Resource	Alternative A: No Action	Alternative B: Repair and Rehabilitate the Petersen House, Install New Climate Control System, and Accommodate Connection to the CEL	Alternative C: Repair and Rehabilitate the Petersen House, Rehabilitate the Rear Porch for Accessibility, Install New Climate Control System, and Accommodate Connection to the CEL
Visitor Use and Experience	Implementation of the no action alternative would result in long-term, minor, adverse impacts to visitor use and experience from the continued interior and exterior damage visible to visitors at Petersen House, a lack of climate control system, and a lack of an accessible route. Combined with other projects in the study area, there would be long-term, moderate, and adverse impacts, as well as beneficial impacts.	Implementation of alternative B would result in short-term, minor, adverse impacts to visitor use and experience as a result of construction activities. There would be long-term, moderate, adverse impact to visitor use and experience for people with mobility impairment as they would continue to not be able to physically gain access to the Petersen House. In addition, alternative B would have long-term, beneficial impacts to visitor use and experience from the interior and exterior improvements at Petersen House and from the direct connection and circulation pattern to the CEL interpretive experience. Cumulative impacts to visitor use and experience would be long-term and beneficial with alternative B having a noticeable beneficial contribution.	Implementation of alternative C would result in short-term, minor, adverse impacts on visitor use and experience as a result of construction activities. In addition, alternative C would have long-term beneficial impacts to visitor use and experience from the interior and exterior improvements at Petersen House and from the direction connection and circulation pattern to the CEL interpretive experience, including the ability for disabled visitors to access the door of the Death Room. There would be negligible, adverse impacts from the occasional disruption of the visitor circulation pattern when disabled visitors approach the Death Room from the CEL. Cumulative impacts to visitor use and experience would be long-term and beneficial with alternative C having a noticeable beneficial contribution.

Impacted Resource	Alternative A: No Action	Alternative B: Repair and Rehabilitate the Petersen House, Install New Climate Control System, and Accommodate Connection to the CEL	Alternative C: Repair and Rehabilitate the Petersen House, Rehabilitate the Rear Porch for Accessibility, Install New Climate Control System, and Accommodate Connection to the CEL
Human Health and Safety	Under the no action alternative, the Petersen House would continue to be non-accessible to person in wheelchairs. An alternative way to experience the Petersen House would be available at Ford's Theatre, which would offset adverse impacts. Lead-based paint removal would not occur and loose floorboards would continue to present a tripping hazard – resulting in long-term, negligible impacts. The no action alternative would result long-term moderate adverse impacts to human health and safety due to the accessibility issues at the Petersen House. There would be no cumulative impacts under the no action alternative.	Under alternative B, repairs and rehabilitation of the house and installation of a new climate control system would result in long term beneficial impacts to human health and safety. There would be no changes to accessibility relative to current conditions and long-term, moderate, adverse impacts would persist. There would be no cumulative impacts under alternative B.	Alternative C would improve accessibility relative to current conditions and would result in long-term beneficial impacts to accessibility at the Petersen House. Similar to the no action alternative, cumulative projects would have no impact on accessibility. Overall, alternative C would result in long-term, beneficial impacts to human health and safety. There would be no cumulative impacts under alternative C.
Park Operations and Management	Implementation of the no action alternative would result in long-term, negligible, adverse impacts to park operations and management from the additional direction required by park staff to guide visitors exiting the Petersen House to the adjacent CEL as a result of a lack of direction connection between the two buildings. Cumulative impacts to visitor use and experience with the no action alternative would be long-term, negligible, and adverse.	Implementation of alternative B would result in short-term, negligible, adverse impacts to park operations and management during construction activities. In addition, alternative B would have long-term beneficial impacts from reduced levels of maintenance and long-term, minor, adverse impacts to park operations and management from the direct connection and visitor circulation pattern to the CEL. Cumulative impacts to park operations and management would be long-term minor, adverse with alternative B.	Implementation of alternative C would result in short-term, negligible, adverse impacts to park operations and management during the construction period. After construction is completed, alternative C would have long-term, beneficial as a result of repairs and rehabilitation activities and minor, adverse impacts to park operations and management as a result of the direct connection and visitor circulation pattern to the CEL and from the new accessible route. Cumulative impacts to park operations and management would be long-term, minor, and adverse with alternative C.

CHAPTER 3: AFFECTED ENVIRONMENT

This chapter describes existing environmental conditions in the areas potentially affected by the alternatives evaluated. This section will describe the following resource areas: cultural resources to include historic structures, visual resources, museum objects, and archeological resources; visitor use and experience; human health and safety to include accessibility; and park management and operations. Potential impacts are discussed in the “Environmental Consequences” chapter in the same order.

CULTURAL RESOURCES

Cultural resources for federal agency planning and environmental review purposes are primarily those resources that qualify for the NRHP as well as those addressed by certain other laws protecting archeological sites and Native American properties. The NHPA, as amended, is the principal legislative authority for managing cultural resources associated with NPS projects. Generally, Section 106 of the NHPA, as amended, and as implemented in 36 CFR 800, requires all federal agencies to consider the effects of their actions on cultural resources listed and/or determined eligible for listing in the NRHP. Such resources are also termed “historic properties.”

Moreover, the federal agency must afford the ACHP the opportunity to comment in the event that an undertaking will have an adverse effect on a cultural resource that is eligible for or listed in the NRHP, and must consult with the State Historic Preservation Officer (SHPO) and other interested parties in an effort to avoid, minimize, or mitigate adverse effects.

Eligibility for the NRHP is established according to the official Criteria of Evaluation (36 CFR 60.4) issued by the Department of the Interior. The criteria relate to the following:

The quality of significance in American history, architecture, archeology, engineering, and culture present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

- That are associated with events that have made a significant contribution to the broad patterns of our history; or
- That are associated with the lives of persons significant in our past; or
- That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- That has yielded, or may be likely to yield, information important in prehistory or history.

Other important laws and regulations designed to protect cultural resources are listed below:

- Native American Graves Protection and Repatriation Act, 1990
- American Indian Religious Freedom Act, 1978
- National Environmental Policy Act, 1969
- Archeological Resources Protection Act, 1979
- Executive Order 11593: Protection and Enhancement of the Cultural Environment, 1971

Lastly, the NPS has a unique stewardship role in the management of its cultural properties, reflected in its own regulations and policies. In these policies, the NPS categorizes cultural resources by the following categories: archeological resources, cultural landscapes, historic districts and structures, museum objects, and ethnographic resources. (The NPS categories, particularly the last two, take into account a somewhat wider scope of cultural resources than those typically eligible for listing on the NRHP.)

Under the regulations implementing Section 106, NHPA, the NPS determined that the repair and rehabilitation of Petersen House would constitute an “undertaking” having a potential effect on the Ford’s Theatre National Historic Site, a property first placed on the National Register in 1966 and subsequently listed with standard documentation in 1982.

Regulations implementing NHPA require the NPS, as the agency responsible for the undertaking to assess, in consultation with the cognizant SHPO and/or Tribal Historic Preservation Officer (THPO), the undertaking’s area of potential effect (APE) on historic properties eligible for or listed on the NRHP. The NPS has proposed in correspondence to the DC HPO that the APE for the undertaking should be the property boundaries of Petersen House. Coordination with the THPO was not conducted as the undertaking would not occur on tribal lands and there is no THPO for the District of Columbia.

For this study, efforts to identify cultural resources included a review of information provided by the park, supplemented by interviews with park staff, the DC HPO, cultural resource survey data, and other published and unpublished sources.

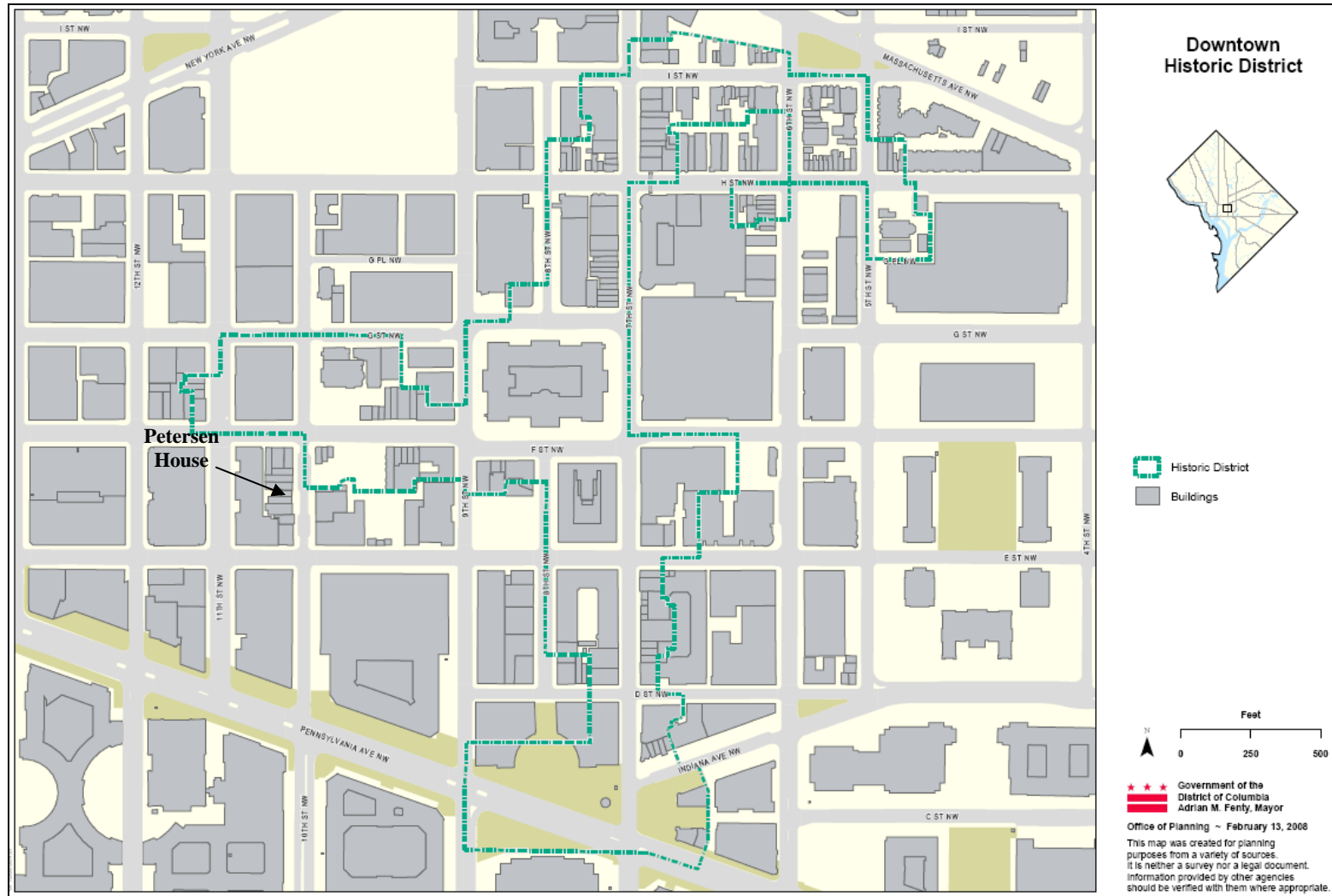
For archeological resources, the NPS sponsored an archeological identification and evaluation study, which is equivalent to a combined Phase I and Phase II investigation as defined in the Guidelines for Conducting Archeological Investigations in the District of Columbia (D.C. Preservation League 1998, as amended).

The backyard was included in the APE as this is the area where ground disturbing activities would be expected from the proposed drainage improvements and construction of the proposed exterior stairway as part of rehabilitation of the rear porch for accessibility.

HISTORIC STRUCTURES AND DISTRICTS

This section addresses historic properties present that have been included in or have been determined eligible for the NRHP as buildings, structures, sites, objects, or historic districts. Because early Washington has been the focus of preservation activity from the initial passage of the NHPA in 1966 and earlier, the official documentation of its historic resources has been accomplished in a series of surveys that sometimes overlap and vary in approach with changing technical standards. The Petersen House is, for purposes of National Register status, a constituent of two listed National Register properties: the Ford’s Theatre National Historic Site and the Pennsylvania Avenue National Historic Site/Historic District. It is neither itself a National Historic Landmark (NHL) nor a contributing element of one. The Petersen House is just south of the Downtown Historic District (see figure 9).

Figure 9. Downtown Historic District showing Peterson House Location



Source: DCOP 2008

Before describing Petersen House as an historic property, this section of the EA will briefly take note of the various nominations and surveys that provide a baseline for assessing the effects of the undertaking on cultural resources:

Ford's Theatre National Historic Site - 1982 National Register nomination prepared by Gary Scott, NPS architectural historian. The National Historic Site was defined as two buildings, 511 and 516 Tenth Street, NW, Washington DC, Ford's Theatre and the Petersen House respectively. The buildings were assumed to include the property boundaries of each, in other words, the rear courtyard and dependencies of the Petersen House were included. The nomination's period of significance was given as 1800-1899 and, specifically, as April 14-15, 1865 and the area of significance as Politics/Government and Theater. The text indicates that "Ford's Theatre is significant because it was the location of the assassination of Abraham Lincoln on the night of April 14, 1865, while President and Mrs. Lincoln were attending a performance of the play 'Our American Cousin'" and that "The Petersen House is significant in that it is the house where President Lincoln died."

The nomination discusses "the Lincoln Museum and Library" originally maintained by Osborn H. Oldroyd in the Petersen House beginning in 1892, but subsequently formed and reformed in various locations, including Ford's Theatre and other NPS facilities. The statement is made that "Only those artifacts and books within the collection original to or associated with Ford's Theatre or Petersen House are to be included in this nomination."

The National Register nomination of the Ford's Theatre National Historic Site lacks the designation of the contributing and non-contributing features that would be required by more recent NRHP documentation standards. However the NPS produced Historic Structures Report Part 1 (NPS 2002) for the Petersen House individually based on extensive research in 2001-2002 which gave a detailed development chronology, assessed the condition of the property, offered management and repair recommendations, and listed the contributing and non-contributing features of each level of the house, interior and exterior, including the rear courtyard and appurtenances. (A separate Historic Structures Report was done for Ford's Theatre proper; NPS 1962.)

The designation of features as contributing or not was based upon the closeness of their relationship to the primary historical event, President Lincoln's death. The Historic Structures Report (NPS 2002) recognized that many changes had been made to the house since then and that various repair projects were underway as the report was being written. It set up a three part mandate for appropriate Level of Treatment:

Restoration – undertaken to depict a property at a particular time in its history, while removing evidence of other periods.

"...spaces of the house (that) stood as witness to the tragic events through the evening prior to Lincoln's death are considered significant or **contributing-primary**."

Preservation – focuses on the maintenance and repair of existing historic materials and retention of the property's form as it has evolved over time. This treatment includes protection and stabilization.

"...elements of the house present (that) were present in 1865, but were not touched directly by the death scene. They are considered significant, but a lower priority or **contributing-secondary**."

Rehabilitation - recognizes the need to alter or to add to a historic property to meet continuing or changing uses while retaining the property's historic character.

“...elements of the house (that) were not present in April of 1865 and are considered of no significance or **non-contributing**.”

The Historic Structures Report (NPS 2002) through text and graphics identifies the NRHP contributing status of each character defining feature according to this schema. More information on this is provided below in the Environmental Effects section of the EA, to provide a baseline for the determination of effects.

- **The Pennsylvania Avenue National Historic Site / Historic District** - The Pennsylvania Avenue Historic District is a large district stretching from roughly 15th Street NW on the west, 3rd Street NW the east, Constitution Avenue NW on the south and, variously, E to G Streets, NW on the north. The spine is, of course, the diagonal of Pennsylvania Avenue NW, a street which has been the object of a 50 year period of concerted effort at historic preservation and appropriate infill development suitable for one of the Capital's most symbolic thoroughfares. The district includes most of the major public buildings north of the National Mall between the White House and the Capitol.

Because the project to repair and rehabilitate Petersen House would have no visible effect on the house's exterior street façade, it is evident that it could have no effect upon the qualities of cohesiveness, architectural dignity and association with the government and politics of the United States. Therefore it would not be discussed further in this EA.

- **Downtown Historic District** – The boundary of this historic district takes in the block northwest of the intersection of 10th and G Streets NW and half of the block southeast of it. The row of buildings that contain the Petersen House and Ford's Theatre lie just outside the district. The district is mainly comprised of concentrations of the lower scale 19th century residential and commercial row houses that are more associated with early Washington as a town than as a seat of government. For the reasons cited above with regard to the Pennsylvania Avenue district it is evident that the project would have no effect on this district and require no further discussion in the EA.

Petersen House: A Brief History⁵

In 1849, William Petersen, a German immigrant tailor, built a house on the southern half of Lot 14, one of the remaining available empty lots on the west side of Tenth Street NW between E and F Streets in central Washington, DC. The three-story plus half basement brick row house was detailed in the Greek Revival style with a brownstone stoop, wooden doorway entablature, and sills and lintels in keeping with the style. It is clear that Petersen and his wife Anna plus their six children used the house as a family residence, although they took in boarders and may have used it as a tailor's shop later. A rear addition was constructed in 1858. The house was typical of residential Washington in the nineteenth century but more substantial than many of the smaller wood structures nearby.

⁵ This is to provide a brief summary of the events associated with Petersen House, its historical context and physical development. The source is the NPS's Historic Survey Report (HSR) of the house (NPS 2002), which is incorporated by reference. The relevant sections of that report are "Part I, Developmental History of the Building and Site including: 'A. Historical Development'; 'B. Chronology of Development and Use'; and 'C. Physical Description'". The chronology of Section B. will not be repeated here; however, it provides an important reference point for the characterizations of the house's significant features in that provides comprehensive research on which were and were not present in April, 1865.

On the evening of April 14, 1865, President Abraham Lincoln and his wife Mary Todd joined their friends, Major Henry Rathbone and Miss Clara Harris, in the Presidential box for a performance, already underway, of the play "Our American Cousin." A Confederate sympathizer, John Wilkes Booth, forced his way into the box, shot Lincoln at close range in the head, and jumped from the box to the stage (with some difficulty, having caught his foot on one of the flags decorating the box). A physician in the audience, Dr. Charles Leale, responded and apparently made the decision that the President's grave condition required that he be moved to a quiet place where he could be attended to but that a hospital would be too far away. How Lincoln happened to be carried into William Petersen's house specifically is not known, although it has been speculated that its lit lamps may have made it stand out from a closer neighboring house.

President Lincoln was carried up the steps through the long corridor and stretched out on a bed in the rear bedroom at the beginning of the ell rear addition which was connected by a porch to the rear room of the double parlor on the first floor of the main house. The hours between his arrival at Petersen House and his death at 7:22 a.m. the next morning were filled with a flow of concerned attendants, primarily family and doctors in the bedroom, and public officials, including almost the entire cabinet, in the parlor. Physicians around Lincoln are reported to have considered his head wound fatal from the outset, but Mrs. Lincoln held out hope. The cabinet officials, prominent among them the Secretary of War and the Attorney General, took up the urgent public business of pursuing the assassin, assessing the scope of a possibly wide ranging conspiracy, and reconstituting the Government once the Vice President had been sworn in.

The immediate aftermath of the shocking event for William Petersen's formerly little known house was to turn it into a place of public gathering and makeshift shrine. Members of the public demanded to be admitted to observe the scene and see the room where President Lincoln died. Souvenir seekers trashed the house and took what they could. William Clark, the boarder who was the actual resident of the Lincoln Death Room, saw his place of habitation become an object of determined pillage.

Contemporaneous images of the room after the removal of Lincoln's body were made by Julius Ulke, a boarder who was a professional photographer, Alfred Waud (wood engraving for *Harper's Weekly*), and Albert Berghaus (drawing for *Frank Leslie's Illustrated Weekly*). The public sentiment to memorialize the assassination of President Lincoln was given its initial impetus as Clark's bedroom became "the Lincoln Death Room" and the Petersens' house became "the House Where Lincoln Died."

After the death of Petersen and, shortly thereafter, of his wife in 1871, the furniture was sold at auction and the house occupied by newspaper editor Louis Shade. Leased by the Memorial Association of the District of Columbia in 1893, the house became the residence, at no rent, of O.H. Oldroyd who functioned as a custodian, tour guide to the curious public, and curator of a small private collection of Lincoln memorabilia. The U.S. Government purchased the house in 1896 and placed it under the jurisdiction of the War Department. By 1933 it was transferred to the NPS which in 1966, the year of the passage of NHPA, grouped it with Ford's Theatre in the Ford's Theatre National Historic Site.

In the intervening years Petersen House has undergone a number of renovations and physical changes, mainly to features at the rear and surrounding the courtyard. In 1978, NPS historian Gary Scott, the author of the 1982 NRHP nomination of the National Historic Site, carried out a comprehensive and scientifically researched effort to restore the Death Room to its original appearance. The restoration concentrated on accurately reproducing the original architectural features, such as the rear door which had been gotten wrong in an earlier restoration, the lighting, the style of wallpaper, etc. Original furniture was not available, but the look of the room from documentary evidence was achieved to the extent possible. Treatment of the rest of the house that is on display, the double parlor, is in keeping with the period; however, there was not the documentary evidence that existed for the Death Room. The 1978 restoration of the main rooms of the house is the current NPS interpretation. Later improvements were made to the garden, and fire damage to the roof in 1994 caused the original tin batten roof to be replaced with a modern roof with similar visual qualities.

As stated in previous sections, the NPS has restricted visitor traffic numbers and flow with the goal of maintaining the condition and appearance as well as the feeling and association of the Lincoln Death Room as its highest priority. The rear porch, added in 1958, has been used to funnel traffic to the Death Room from the double parlor while avoiding the narrow hallway that leads directly to it from the house's entrance. That will be discussed in more detail in "Chapter 4: Environmental Consequences."

Treatment Zones: A Basis for Assessing Impacts

Unlike historic properties, which have a period of significance of some length, the Petersen House's brief period of significance is narrowly focused on two days, April 14–15, 1865. All previous attempts to repair, renovate, or restore the house have focused on making it match the appearance, conditions and atmosphere surrounding one unfortunate event, the death of President Lincoln. As indicated in "Chapter 3: Affected Environment," the NPS Historic Structures Report (NPS 2002) for the Petersen House evaluated the components of the house and its site to determine the character defining features. The basis of the evaluation was each component's authenticity for the period of significance. In simple terms, was it there and did it form part of the death scene during the long night of April 14–15? The Historic Structures Report (NPS 2002) established three treatment zones for the house based on this standard.

Restoration Zone or Contributing: Primary

- Front Elevation facing Tenth Street, including curving brownstone entry stairs
- Rear Elevation of the House (including back porch) and Rear Ell
- First floor level rooms of the Main House, including Hall, Front and Rear Parlors
- First floor level room of Rear Ell, where Lincoln was placed – the "Death Room"

These features, spaces, and elements of the house are original to the period of significance (April 14–15, 1865). Within a restoration zone, these receive utmost priority with protection of original historic fabric critical. Elements that are not original within a restoration zone and have been replicated to match the 1865 appearance due to damage or deterioration receive secondary priority, but many of these early replicated features have gained historic significance on their own merit due to the early commemoration of this property. If there is evidence of missing features or elements within the restoration zones, then reconstruction should be considered, only if sufficient documentation or physical evidence is available. Introduction for modern devices for fire suppression and security, for instance, should be discreetly located to minimize visual impact.

Preservation Zone or Contributing: Secondary

- Basement level rooms of Main House and Rear Ell, portion rebuilt 1863
- First Floor level room of Rear Ell – directly behind "Death Room"
- Second Floor level rooms of Main House
- Third Floor level rooms of Main House
- Roof of Main House and Rear Ell
- Alley Easement to the north

These features, spaces, and elements of the house are original to the period of significance (April 14–15, 1865), and should be retained and protected. In order to maintain a restoration level of treatment in adjoining spaces, some of these secondary, supporting areas have received minor alterations to meet management and code requirements or have been used for modernization of building systems. Within preservation zones, reconstruction of missing features or elements is not required.

Rehabilitation Zone or Non-contributing

- West elevation of rear Ell, built during the 1870s containing one room on each of two floors at time of construction
- Roofing material
- Garden with brick garden wall/gate separating the garden from the alley

These building elements were added after the time period of President Lincoln's death, and if retained, are ideal locations to sensitively introduce adaptive use requirements (interior adaptations to modern needs only). Demolition may be considered by park managers if this action is imperative to accurately interpret the period of significance, as determined by a general management or development concept plan.

This was recognized as early as 1959. Other post-1865 additions that severely altered the historic configuration of the house from its 1865 appearance were demolished in 1959.

Other items that may be considered non-contributing are those building materials or features that have been replaced over time, but are differing materials that do not match the original or 1865 appearance or condition.

Further, more detailed information is presented in the Historic Structures Report (NPS 2002) on the application of this system to the house including plans and elevations shaded to identify the assigned treatment zone.

Historic Integrity and Visual Character of Petersen House

This analysis of the contemporary historic integrity and visual quality of the Petersen House is separated into exterior and interior elements since each possesses distinct visual characters.

Exterior

The Petersen House is a three and one half story brick row house constructed in 1849. Subsequent alterations and repairs have been made since its construction, but generally, the NPS has preserved its appearance to resemble its 1865 condition. The front (east) elevation faces 10th Street, NW and is the primary point of entry into the Petersen House. This façade demonstrates the typical details of a Greek Revival town house such as columns and pilasters, ornamental cornices, and double-hung windows (NPS 2002). A curved brownstone stair with cast-iron railings leads from the ground level to the first-floor entrance (see figure 10).

The rear (west elevation) is partially obscured by a wood framed porch and "Ell", a two-story brick wing that is attached to the rear of the house and enframes the courtyard. Due to its less prominent visual position, the west façade has been less meticulously maintained than the east elevation; the windows have different styles of lintels and the wood sills are in visually poor condition. The wood porch is enclosed with wood casement windows on the upper level and wood panels and French doors leading to the courtyard on the lower level (see figure 11). The exterior courtyard is paved and enclosed on the west end by a brick wall.

Overall, the exterior of the building is in good condition, but certain areas are suffering from pervasive water damage, which has led to eroded joints, deteriorating brick and masonry, and compromised gutters and downspouts.

Figure 10. East Elevation of the Petersen House



Interior

The interior rooms of the Petersen House that are part of the main visitor sequence and primary contributing features include the entrance hall, front and back parlors, Death Room, rear porch, and portions of the basement. As the entrance hall, parlors, and Death Room are primary contributing elements and bore direct witness to the events of April 15, 1865, these rooms have been well maintained and refurbished to visually reflect as closely as possible the conditions in 1865. The furnishings, fixtures, wall and floor coverings are all visually consistent with the time period.

The rear porch is a narrow feature adjacent to the rear ell that transitions visitors from the Death Room to a staircase that leads down to the basement and out of the Petersen House. The porch is an enclosed wood framed structure that overlooks the back courtyard through six casement windows. The roof of the porch is deteriorating due to water leakage.

The remaining portions of the Petersen House, which are only accessible to NPS staff include the second and third floors, the basement, and back portions of the ell below and behind the Death Room. These secondary contributing features have been less well maintained and have suffered from the effects of pervasive moisture infiltration and a lack of reliable climate control system. In the upstairs and basement rooms, the interior plaster, paint and wall paper finishes, beams, and ceiling and floor boards have been damaged by moisture and humidity. Figure 12 shows multiple places on the upper and lower floors where interior water damage is visible.

Figure 11. West and South Ell Elevations of the Petersen House



Figure 12. Interior Water Damage in Various Places in the Petersen House



Upper-Floor Ceiling



Lower-Level Ell Window



Rear Porch Roof

MUSEUM OBJECTS

The Petersen House currently has almost 300 artifacts in its museum collection, ranging from period furniture to art to everyday household objects. After the death of Petersen and, shortly thereafter, of his wife in 1871, the furniture in the house was sold at auction and the house occupied by newspaper editor Louis Shade. The U.S. Government purchased the Petersen House in 1896 and Oldroyd's collection from Oldroyd in 1926. The collection was exhibited in the Petersen House until 1932, when it was moved into the Lincoln Museum in Ford's Theatre (NPS 1982). Currently, the furnishings in the Petersen House are not originals to the house but are accurate to the period of significance as it recreates the scene at the time of President Lincoln's death.

Currently, the park devotes a considerable portion of its resources to the maintenance of its collections. The fluctuating temperature and humidity levels within the Petersen house threaten to deteriorate the objects, especially furniture. The park currently has a Housekeeping Plan that is in need of updating but also follows a cleaning schedule outlines cleaning activities to be conducted daily, weekly, monthly, and a deep cleaning that occurs four times a year (Swift 2010).

ARCHEOLOGICAL RESOURCES

For this study, efforts to identify archeological resources included a review of studies and databases maintained by the NPS and the DC HPO. One previous archeological study was completed at the Petersen House, following the unanticipated discovery of a mid-nineteenth century refuse and fire debris deposit during excavation of a crawl space in the rear ell of the house. This discovery led to a program of archeological rescue in 1985-1986 that included the excavation of test units beneath the floor of the rear ell. All of this excavation was done inside the ell addition. These excavations documented a complex occupational history for the site, including archeological features and deposits that date to before the Petersen occupation. The most interesting discovery was a deposit of debris that included dietary bone, glass, ceramics, and other domestic objects mixed in an ashy, silty matrix of burned architectural debris; most of this material appeared to be associated with the mid-nineteenth century occupation of the property by William Petersen and his family and boarders. NPS archeologists determined the fire and refuse deposit point to a fire that occurred in the original ell addition, most likely in 1863. Other features included a brick floor and a builder's trench that document the physical history of the Petersen House (Virta 1991). Site number 51NW65 was assigned to the Petersen House as a result of the rescue operations.

In conjunction with the present EA, a combined Phase I/II investigation was (Shellenhamer et al.2010) carried out in the rear yard area, focusing on areas where possible impacts might occur as a result of the proposed drainage improvements and construction of the proposed exterior stairway. Areas of known disturbance were not tested.

During the 2010 testing, eight test units with a total area of 68 square feet were excavated. This excavation was done in the yard. The first five test units were dug in areas that may be disturbed by the proposed drainage improvements. These units were all adjacent to the walls of the ell addition. In these units, intact layers were found that contain artifacts dating to before the Petersen House was built in 1849. The artifacts include pieces of ceramic and glass. These artifacts were most likely discarded by the Young house, which lived on an adjacent lot. One test unit encountered the remnants of a fieldstone pavement that covered part of the yard before the ell was built.

Three test units were dug in the southern part of the yard, in the proposed locations of support piers for the exterior stair. Two of these units encountered a rich trash midden buried 2.5 to 3.0 feet below the ground surface. This midden is roughly 0.3 foot thick and contains hundreds of artifacts and pieces of animal bone. It dates to the mid nineteenth century, probably the 1840s or 1850s. This midden contains important data about life in the Petersen House around the time of the Civil War.

Together, the 1985-1986 and 2010 studies at the Petersen House site have demonstrated that the property contains archeological resources that are eligible for the NRHP.

VISITOR USE AND EXPERIENCE

The Ford's Theatre National Historic Site, which includes the Petersen House, hosts approximately 650,000 visitors annually. The number of annual visitors fluctuates, from a record 1.2 million visitors in 2001 to a recent low of 335,000 in 2008 when Ford's Theatre was closed for renovations (NPS nd-a). Of the total number of visitors to the historic site, a little over half visit both Ford's Theatre and the Petersen House. In 2009, there were approximately 337,000 visitors to the Petersen House (NPS 2009). The Ford's Theatre National Historic Site, located on both sides of 10th Street, NW within the District of Columbia,

provides visitors with an in-depth look into the presidency and assassination of President Abraham Lincoln.

The site offers a tour of the balcony area of Ford's Theatre and includes the Ford's Theatre Museum, which combines a collection of historic artifacts with a variety of interactive exhibits to tell the story of Abraham Lincoln's presidency (NPS 2010). Visitors then proceed across 10th Street, NW to the Petersen House.

The Petersen House is open daily from 9:30 to 5:30 daily. At the Petersen House, interpretive staff is assigned to two posts within the house to assist visitors in their enjoyment and understanding of the house as part of the Ford's Theatre Historic Site (NPS nd-a). One staff member is positioned at the door to greet each visitor and scan the required entry ticket. The second interpretive staff member is posted in the interior of the house to welcome visitors and provide a short interpretive program about the house, owners, and what occurred within the three rooms visitors can walk through (NPS nd-a).

The tour of the house includes viewing three rooms furnished in 1865 period pieces, although none of the furniture is original to the house (NPS 2008b).

Visitors enter the Petersen House and are directed through the front and back parlor areas where Mary Todd Lincoln spent the night of April 14-15, 1865 and where the Secretary of War began investigating President Lincoln's assassination. The exhibit areas are cordoned off by stanchions. From the parlor area, visitors enter into a small corner of the back bedroom, also known as the Death Room, where President Lincoln died. This room has a small four foot by five foot area where visitors can take pictures and read the small wayside. Plexiglass on the side where the bed is located and a low metal gate leading into the room identify the exhibit space and separate the visitor walk path and exhibit. After viewing the Death Room, visitors then exit the house onto an enclosed rear porch, down a flight of stairs and through a side alleyway back out to 10th Street, NW.

The public visiting areas in the house are small and to help protect the resource 15 people are allowed in the house at one time. The front door is shut behind them and a brief welcome and information about the events that took place is provided to the visitors. Once all the visitors have cleaned the back bedroom, where Lincoln died, and going down the exit stairs, the next set of visitors are invited in. Each of the three public rooms has a small wayside describing the events that occurred in each room. During peak season and when most of the school groups are visiting, the visitor experience is about ten minutes. During the winter months - late October through mid-February, visitors are much fewer and tend to ask many more questions and their stay is more extended in the Petersen House.

Formal and informal complaints have been made about water damaged walls and wall paper, too much heat in the summer months, too little heat in the colder months, high humidity levels, peeling paint, exposed wood on doors and windows, cracking and missing window glazing, and deteriorating wooden window features.

HUMAN HEALTH AND SAFETY

The NPS is committed to providing high quality opportunities for visitors and employees to enjoy parks in a safe and healthy environment. Furthermore, the NPS strives to protect human life and provide for injury-free visits. Safety applies to both park visitors and park employees.

VISITOR SAFETY

A visitor incident is defined as an unintentional event or mishap affecting any person, other than an NPS employee, that results in serious injury or illness requiring medical treatment. In this particular project area, visitor incidents have statistically been related to pedestrian circulation, fatigue, exposure to the elements, or recreational activities (sports-related injuries on adjacent athletic fields, bicycling accidents, etc.).

In 2009, there were two visitor safety incidences recorded at the Petersen House, however, no injury was associated with either event. On two different occasions, students visiting the Petersen House slipped on the interior stairs of the rear porch as they were walking down to exit the house. In both cases, the teachers accompanying the students stated the students were not paying attention and were tired. A similar incident was recorded in 2008. There are approximately one to two events related to slipping on the rear porch stairs each year. There have been no reported events in 2010 (Emerson 2010). Additionally, while there have been no recorded incidences, there are loose floorboards within the Petersen House that have been known to cause a tripping hazard to visitors.

There have not been any incident reports involving issues caused by lead-based paints; however, there is peeling paint in the interior of the house that is peeling and could potential cause harm to visitor and employee health, only if ingested.

EMPLOYEE SAFETY

In the past seven years, there has been no employee safety incidences at Ford's Theatre or the Petersen House (Emerson 2010).

ACCESSIBILITY

Accessibility describes the ease and convenience with which people with physical disabilities are able to enter and maneuver within structures, buildings, and landscapes. The concept is typically related to accessible points of entry, common areas, a features and fixtures that enable all persons to experience a space in the same way, to the maximum extent practicable.

The ADA and the Architectural Barriers Act of 1968 require that all public buildings, structures, and facilities comply with specific requirements related to architectural standards, policies, practices, and procedures that accommodate people with hearing, vision, or other disability; and other access requirements. Public facilities and places must remove barriers in existing buildings and landscapes, as necessary and where appropriate.

Director's Order 42 describes the NPS's comprehensive approach to achieving the highest level of accessibility that is reasonable, while ensuring consistency with the other legal mandates of conservation and protection of the natural, manmade, and historic resources that the NPS manages. The NPS employs the principles of universal design⁶, providing full access to persons with strollers and wheeled devices or impairments to sight, and sound.

Within historic structures, the Architectural Barriers Act and Architectural Barriers Act Accessibility Standard guidelines (USAB 2004) states that "in alterations, where compliance with applicable requirements is technically infeasible, the alteration shall comply with the requirements to the maximum extent feasible." Therefore, NPS endeavors to provide the highest level of accessibility that is reasonable without causing adverse impacts to historic features⁷.

Since the NPS has elected to restore and to interpret the Petersen House as it appeared in April of 1865 (the time of President Lincoln's death), any physical changes to the Petersen House to accommodate accessibility would potentially adversely affect the contributing features of the structure and compromise its historic significance (NPS 2002). The Petersen House has not undergone a considerable rehabilitation

⁶ Universal design is a concept wherein "direct access" to all features of a building, landscape, or structure is provided to all people, irrespective of whether they have a disability or not.

⁷ Typically additions or alterations to existing buildings must comply with ADA accessibility guidelines for new construction, but since the Petersen House is a federally owned historic building that is subject to the NHPA and review by the ACHP, alternative technical provisions may be permitted (NPS 2002).

since 1992 when the legislation mandating accessibility became effective. Consequently, compliance with ADA has not been expected to date (NPS 2002).

Currently, the Petersen House is not fully compliant with NPS policies for universal accessibility. In addition, there are numerous features and components within the Petersen House that are not compliant with building code because they are of insufficient width or height or lack handrails. Generally, building code requires 36-inch wide clear openings through doorways and 36-inch wide hallways. However, in historic structures, the rough opening width of doorways at 28-inch is acceptable in some cases.

Currently, the sole point of entry into the Petersen House is via the curved front steps off of 10th Street, NW; there is no ramp or lift to accommodate wheelchairs. Inside the Petersen House, the width of the doorways leading into the Death Room, both from the main hallway and the rear porch are 32 inches. On the rear porch, the wood staircase that leads to the basement level is only 30 inches wide and steeper than what is allowed by code. In the basement level, visitors must travel through a narrow alley to exit the Petersen House that is only 28 inches to reach 10th Street, NW.

The NPS offers an alternative way to experience the Petersen House for visitors who are unable to access house. At Ford's Theatre, a video is available that shows the interior of the Petersen House and the Death Room. Nevertheless, there is currently no means by which persons in wheelchairs may enter the Petersen House or have direct access to its resources.

PARK OPERATIONS AND MANAGEMENT

The Ford's Theatre National Historic Site, which includes the Petersen House, is an administrative unit of the national park system. Park management structure is divided into the Office of the Superintendent and several divisions including Interpretation, Education, and Visitor Services, Administration, Maintenance, and Cultural Resources Management, which includes resource management. Overall management decisions concerning the Petersen House and the resources within it are the responsibility of the Superintendent. Ford's Theatre National Historic Site employs seven full time personnel and nine seasonal personnel (Emerson 2010).

VISITOR SERVICES

The Petersen House is a highly visited venue within Ford's Theatre National Historic Site. Interpretive staff is assigned to two posts within the house to assist visitors in their enjoyment and understanding of the house as part of the Ford's Theatre Historic Site (NPS nd-a). One staff member is positioned at the door to greet each visitor and scan the required entry ticket. Fifteen visitors are allowed inside the home at one time. The second interpretive staff member is posted in the interior of the house to welcome visitors and provide a short interpretive program about the house, owners, and what occurred within the three rooms visitors can walk through (NPS nd-a).

PARK MAINTENANCE

The Ford's Theatre National Historic Site maintenance staff is responsible for the general upkeep of Ford's Theatre and the Petersen House, including trash pick-up, vacuuming, bulb replacement, house temperature, monitoring and maintaining all maintenance systems and coordinating service contracts (NPS nd-b).

PARK OPERATIONS

In 2009, the annual operating budget for Ford's Theatre National Historic Site was 2.4 million dollars (Emerson 2010). The Petersen House does not have its own budget line and is included within this operating budget.

CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

This “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 CEQ regulations implementing the NEPA, a summary of the environmental consequences for each alternative is provided in table 1 which can be found in “Chapter 2: Alternatives.” The resource topics presented in this chapter, and the organization of the topics, correspond to the resource discussions contained 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 providing for long-term protection, conservation, and restoration of historic resources at the Petersen House. This analysis incorporates the best available literature applicable to the setting and the actions being considered in the alternatives.

As described in “Chapter 1: Purpose and Need,” the NPS created an interdisciplinary science team to provide important input to 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 below.

Analysis Period. The analysis period for this assessment is the expected period of construction to implement the proposed repairs and rehabilitation activities at the Petersen House. Construction is expected to begin in November 2010 and last through May 2011. 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) for this assessment is the Petersen House, including the back yard. The area of analysis may

extend beyond the house's boundaries for some 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). Adverse impacts are also described in context; duration (short- or long-term); and intensity (negligible, minor, moderate, major). Definitions of these descriptors are included below.

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: Context is the affected environment within which an impact would occur, such as local, park-wide, 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 past, ongoing or reasonably foreseeable future projects and plans at Petersen House/Ford's Theater National Historic Site and, if applicable, the surrounding area. Table 3 summarizes these actions that could affect the various resources at the park, along with the plans and policies of both the park and surrounding jurisdictions, which were discussed in "Chapter 1: Purpose and Need." Additional explanation for most of these actions is provided in the narrative following the table.

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 at the top of table 2 and the spatial boundary for each resource topic is listed under each topic.

Step 3 — Identify Cumulative Action Scenario - Determine which past, present, and reasonably foreseeable future actions to include with each resource. These are listed in table 2 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 in this chapter.

Table 3. Actions that Contribute to Cumulative Impacts

Impact Topic	Study Area	Past Actions	Present Actions	Future Actions
Historic Districts and Structures,	The Petersen House	Previous renovations at the Petersen House	none	Construction of the CEL
Museum Objects	The Petersen House	none	none	none
Archeological Resources	The Petersen House	none	none	none
Visitor Use and Experience	Ford's Theatre National Historic Site	Renovation of Ford's Theater 10 th Street, NW Curbside Management Plan Previous renovations at the Petersen House	Local commercial businesses	Construction of the CEL
Human Health and Safety, including accessibility	Ford's Theatre National Historic Site	none	none	Construction of the CEL
Park Operations and Management	Ford's Theatre National Historic Site	Renovation of Ford's Theater Previous renovations at the Petersen House	none	Construction of the CEL

The following past, present, and reasonably foreseeable future actions at the Petersen House/Ford's Theater National Historic Site or in the surrounding area have been identified as having the potential to impact the resources evaluated in this EA.

- Renovation of Ford's Theater (completed in Spring 2009)
- 10th Street, NW Curbside Management Plan. This plan, completed in August 2009 by the District Department of Transportation looked at the reduction of on-street parking on 10th Street, NW
- Previous renovations at the Petersen House, including:
 - Roof replacement and asbestos pipe insulation abatement (1997)

- Fire suppression system and communications system upgrades (2000–2001)
 - Wall paper and roof replacement (2003–2004)
- Existing commercial businesses located in the historic district, which includes 10th Street NW
- Construction of the CEL museum – construction of this museum would occur regardless of the rehabilitation and repairs at the Petersen House. Construction activities associated with the CEL and the Petersen House would be concurrent (expected to open June 2011)

IMPAIRMENT ANALYSIS METHOD

“Chapter 1: Purpose and Need” describes the related federal acts and policies regarding the prohibition against impairing park resources and values in units of the national park system. 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, sec. 1.4.5). 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, sec. 1.4.5).

National park system units vary based on their enabling legislation, natural and cultural resources present, and park missions; likewise, the activities appropriate for each unit and for areas in each unit also vary. For example, an action appropriate in one unit could impair resources in another unit. Thus, this document analyzes the context, duration, and intensity of impacts of the alternatives, as well as the potential for resource impairment, as required by Director’s Order 12 (NPS 2001). As stated in the NPS *Management Policies 2006* (sec. 1.4.5), an impact on any park resource or value may constitute an impairment, but an impact would be more likely to constitute an 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;
- key to the natural or cultural integrity of the park; or
- identified as a goal in the park’s general management plan or other relevant NPS planning documents.

The following process was used to determine whether the proposed alternatives had the potential to impair park resources and values:

Step 1 — The enabling legislation [planning document] was reviewed to ascertain its purpose and significance, resource values, and resource management goals or desired conditions.

Step 2 — Resource management goals were identified.

Step 3 — Thresholds were established for each resource of concern to determine the context, intensity, and duration of impacts, as defined earlier in this chapter under “Impact Thresholds.”

Step 4 — An analysis was conducted to determine if the magnitude of impact would constitute “impairment,” as defined by NPS *Management Policies 2006* (NPS 2006).

The impact analysis includes findings of impairment of park resources for each of the management alternatives. Visitor use, park operations and management, and socioeconomic environment are not considered resources per se, although they are dependent on the conservation of park resources. Impairment findings are not included as part of the impact analysis for these topics.

CULTURAL RESOURCES

GUIDING REGULATIONS AND POLICIES

Federal actions that have the potential to affect cultural resources are subject to a variety of laws and regulations. The NHPA of 1966, as amended, is the principal legislative authority for managing cultural resources associated with NPS projects. Generally, Section 106 of the NHPA requires all federal agencies to consider the effects of their actions on cultural resources listed and/or determined eligible for listing in the NRHP. Such resources are termed “historic properties.” In addition, the NHPA requires that federal agencies take action to minimize harm to historic properties that would be adversely affected by a federal undertaking. Agencies must consult with the SHPO; THPO, if applicable; the ACHP, as required; and other interested parties in an effort to avoid, minimize, or mitigate adverse effects. Agreement on mitigation of adverse effects on historic properties is reached through consultation with relevant agencies, including the SHPO, the THPO, and ACHP, where appropriate. Because there are no federally recognized Indian tribes present in the District or with a connection to the site of the Petersen House projects, the Section 106 process does not, in this instance, involve a THPO.

In addition, the NPS is charged with the protection and management of cultural resources in its custody. This is furthered through the implementation of Director’s Order 28: Cultural Resources Management Guidelines (NPS 1998b), NPS *Management Policies 2006* (NPS 2006), and the 2008 NPS Programmatic Agreement with the ACHP and the National Conference of State Historic Preservation Officers (NPS 2008a). These documents charge NPS managers with avoiding, or minimizing to the greatest degree practicable, adverse impacts on park resources and values. Although the NPS has the discretion to allow certain impacts in parks, that discretion is limited by the statutory requirement that park resources and values remain unimpaired, unless a specific law directly provides otherwise.

GENERAL METHODOLOGY AND ASSUMPTIONS

The NPS categorizes cultural resources by the following categories: archeological resources, cultural landscapes, prehistoric and historic structures (including historic districts), museum objects, and ethnographic resources. Only impacts to historic districts and structures, museum objects, and archeological resources are of potential concern for this project. As noted in Chapters 1 and 3, cultural landscapes and ethnographic resources have been dismissed.

The analyses of effects on cultural resources that are presented in this section respond to the requirements of both NEPA and Section 106 of the NHPA. In accordance with ACHP regulations implementing Section 106 (36 CFR 800, Protection of Historic Properties), impacts on cultural resources were identified and evaluated by (1) determining the APE; (2) identifying cultural resources present in the APE that are either listed in or eligible to be listed in the NRHP (i.e., historic properties); (3) applying the criteria of adverse effect to affected historic properties; and (4) considering ways to avoid, minimize, or mitigate adverse effects. The assessment of effects to cultural resources is also taking place in a series of meetings with the DC HPO and theca, other interested federal agencies, and consulting parties invited by the NPS. Section 106 consultation letters were sent to the DC HPO and the CFA in May 2010 (see appendix A).

Under the implementing regulations for Section 106, a determination of either *adverse effect* or *no adverse effect* must also be made for affected historic properties. 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 proposal that would occur later, be farther removed in distance, or be cumulative (36 CFR 800.5). A determination of *no adverse effect* means there is either no effect or that the effect would not diminish, in any way, the characteristics of the cultural resource that qualify it for inclusion in the NRHP.

CEQ regulations and the NPS 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 nonrenewable 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 (NPS 2001) requires that impact assessment be scientific, accurate, and quantified to the extent possible. For cultural resources, it is rarely possible to measure impacts in quantifiable terms; therefore, impact thresholds must rely heavily on the professional judgment of resource experts.

A Section 106 summary is included in at the end of the cultural resources impact analysis section for historic districts and structures and for archeological resources. The impact analysis is an assessment of the effect of the undertaking (implementation of the alternatives) on NRHP-eligible or listed cultural resources only, based upon ACHP criteria of adverse effect.

Study Area

The study area for cultural resources is the APE as defined by the NPS under the Section 106 regulations. See the "Cultural Resources" section in "Chapter 3: Affected Environment." Of the many types of historic properties, the project has the potential to directly or indirectly impact two historic resources that are listed in the National Register: the Ford's Theatre National Historic Site, of which the Petersen House is a component and the Pennsylvania Avenue National Historic Site/Historic District. However, because of the miniscule changes to the public 10th Street façade of the Petersen House proposed in the undertaking, only the Ford's Theatre National Historic Site is actually affected. As indicated earlier the APE is the same as the Petersen House's property boundaries.

HISTORIC DISTRICTS AND STRUCTURES

Impact Thresholds

For a historic district or structure to be listed on the NRHP, it must possess significance (the meaning or value ascribed to the historic district or structure), and the features necessary to convey its significance must have integrity. For purposes of analyzing potential impacts on historic districts and structures, the thresholds of change for the intensity of an impact are defined as follows:

Negligible: The impact is at the lowest level of detection with neither adverse nor beneficial consequences. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Minor: Adverse impact - Alteration of a pattern(s) or feature(s) of a historic district or structure listed on or eligible for the NRHP would not diminish the integrity of a character-defining feature(s) or the overall integrity of the historic property. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Moderate: Adverse impact - The impact would alter a character-defining feature(s) of a historic district or structure and diminish the integrity of that feature(s) of the historic property. For purposes of Section 106, the determination of effect would be *adverse effect* but one which could be fairly easily avoided, minimized, or mitigated through an Agreement Document

Major: Adverse impact - The impact would alter a character-defining feature(s) of the historic district or structure and severely diminish the integrity of that feature(s) and the overall integrity of the historic property. For purposes of Section 106, the determination of effect would be *adverse effect*

and would present serious difficulty to avoid, minimize, or mitigate through an Agreement Document.

Beneficial impact - No levels of intensity for beneficial impacts are defined. The historic district or structure would be restored in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* to accurately depict its form, features, and character as it appeared during its period of significance. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Duration—Short-term impacts, obviously negative, are equivalent to the period of construction. The long-term impacts would be related to impacts to the historic district or structure following construction.

Secretary of Interior Standards: Relation to Assessing Effects

The *Secretary of the Interior's Standards for the Treatment of Historic Properties* and its guidelines apply in general to all of the projects to repair and rehabilitate the Petersen House. Work which would be done in accordance with the standards, particularly in the two less sensitive treatment zones would be automatically assumed to have no adverse effect under Section 106 of NHPA.

Therefore, the evaluation of the impacts of the alternatives on the Petersen House will concentrate on any aspect of an alternative or option, which appears to require discussion, in relation to either the Historic Structures Report (NPS 2002) treatment zones or its conformance to the Secretary's Standards.

Impacts of Alternative A: No Action

Analysis

Under the no action alternative a continuation of the existing conditions, operations, and maintenance of the Petersen House and a continuation of current practices regulating visitor use within the project area would occur. Exterior and interior rehabilitation and repair of the Petersen House, rehabilitation of the rear porch for accessibility; installation of new climate control system; and connection to the CEL would not occur. Therefore, water damage and lack of temperature and humidity control would continue to further impact the historic fabric of the building. Normal, but limited, levels of maintenance would continue at the Petersen House but would be inadequate to prevent further deterioration from water damage and temperature and humidity fluctuations. The current circulation pattern would continue, with visitors entering from the front door, passing through the double parlor and the Death Room, before exiting out through the rear porch, down a small flight of stairs, and down a narrow alleyway on the side of the building leading out to 10th Street, NW. Visitors would then using a separate entrance to the new CEL if they wished to visit that facility. The Petersen House would continue to remain not fully compliant with NPS policies for universal accessibility. Visitors who are unable to access the house from its sole point of entry via the curve front steps would continue to utilize the NPS's alternative way of experiencing the house; through a video that is available at Ford's Theatre that shows the interior of the Petersen House and the Death Room.

Impacts to the Exterior

The exterior envelope of the Petersen House includes the front façade (east elevation) and the rear elements of the Petersen House (west façade, rear ell, and porch).

East Elevation

Currently, the overall visual character of the front of the Petersen House is in good condition. As the public façade that fronts 10th Street, NW, the NPS has maintained the overall visual appearance to resemble, as closely, as possible, the conditions in 1865. The visual character does not appear dilapidated or compromised by the effects of water damage or time. The no action alternative, or continued

incremental spot maintenance on exterior features as needed, would maintain the overall visual character of the east elevation and would not substantially diminish or compromise the aesthetic integrity of the Petersen House. Long-term, minor, adverse impacts to the historic character would persist.

West Façade, Rear Ell, and Porch

The rear of the Petersen House is less visible to the public and has not received the same consistent level of maintenance to preserve the visual appearance of exterior elements. In many places, the paint is peeling, mortar joints are eroded, the bricks are cracked and chipped, and gutters and downspouts are corroded. The no action alternative would result in the continued deterioration of the rear elements, which would continue to substantially change the existing visual character of the west elevation and noticeably compromise the aesthetic integrity of the Petersen House. Long-term, moderate, adverse impacts to the historic character would persist.

Impacts to the Interior

The interior of the Petersen House is divided into both public and private areas. Currently, the publicly accessible areas include the primary contributing elements to the historic significance of the Petersen House, representing the rooms that bore direct witness to President Lincoln's death in April 1865. They include the first floor main hallway, front and rear parlors, Death Room and porch with limited access to portions of the basement and the alley leading to 10th Street NW.

The private areas include secondary contributing or non-contributing elements to the historic significance of the Petersen House that are only accessible to NPS staff. These areas include the remaining portions of the basement, first floor rear ell, and second and third floors.

Primary Contributing Elements

Due to their historic prominence and high degree of public visibility, the NPS has meticulously maintained, restored, and preserved the visual character to approximate the conditions of 1865. Although some portions of the finishes and trim have been compromised by moisture, the overall visual character of the interior primary contributing rooms at the Petersen House is good. The no action alternative, or continued incremental spot maintenance on interior features as needed, would maintain the overall visual and aesthetic character of the primary contributing rooms. However, the long-term toll of poor internal environmental controls and water infiltration elsewhere in the house would be expected to cause gradual degradation to the historic fabric of Petersen House even to the primary contributing elements and therefore, a long-term, moderate, adverse impact to its historic integrity.

Secondary or Non- Contributing Elements

In contrast to the public spaces, the upper floors, rear ell, and basement are suffering from the effects of extensive moisture infiltration, humidity, and condensation. The interior plaster, paint, and wall paper finishes have been compromised and the overall visual character is poor. Under the no action alternative, there would continue to be noticeable deficiencies in the visual quality of numerous components in the private interior spaces. The overall visual quality would continue to be compromised by the ubiquity of water stains, peeling paint and wallpaper, warped floorboards, and damaged plaster. These deficiencies would noticeably compromise the aesthetic integrity of the entire Petersen House. Long-term, moderate, adverse impacts to the historic integrity of the house would persist. There would be no short term impacts to the historic integrity of Petersen House from the no action alternative.

Cumulative Impacts

Recent renovations to the Petersen House have a long-term, beneficial impact as they restore the condition of the historic buildings and prevent further deterioration of the structures. The construction of the CEL within the adjacent building, but without an opening to the rear porch of Petersen House would have a negligible impact upon historic districts and structures including Petersen House.

When combined with the cumulative actions, the long-term, moderate, adverse impacts associated with the no action alternative would have a noticeable adverse contribution resulting in overall a long-term, minor to moderate, adverse impact historic districts and structures.

Conclusion

Under the no action alternative, there would be long-term, moderate, adverse impacts (*adverse effect* under Section 106) due to the on-going physical degradation of the historic Petersen House. The cumulative impacts from the other projects are primarily long-term and beneficial. When combined with the long-term, moderate, adverse impacts associated with the no action alternative, there is a net long-term, minor to moderate, adverse impact to historic districts and structures. Based on this impact analysis, the no action alternative is not likely to result in any impacts that would constitute impairment of historic districts and structures.

Impacts of Alternative B

Analysis

Alternative B includes multiple improvements to repair and rehabilitate the exterior envelope and interior spaces at the Petersen House. This alternative includes accommodating a connection from the Petersen House to the adjacent CEL at the rear porch.

Exterior

Elements of exterior repairs are outlined in “Chapter 2: Alternatives”. Exterior repairs of the Petersen House would be conducted in identified areas of the house to help maintain it and prevent further deterioration of the structure and related features from water damage. All exterior repairs would be accomplished in accordance with the Secretary of Interior’s Standards and NPS Preservation Briefs, including preservation approaches for the treatment and repair of historic windows and their associated features outlined in NPS Preservation Brief 9. Therefore, they would have beneficial impacts (*no adverse effect* under Section 106) to the historic house.

Replacement and repair of deteriorated wood window sills, shutter hardware, sashes, and glazing would be conducted. The work would be composed of the repair of 31 historic wood windows. It would also include the repair of ten pairs of wood shutters and six pairs of replica wood shutters. The work would also include removal of deteriorated lead-based paint to sound paint in preparation for repainting.

Park staff would oversee every stage of construction to ensure that historic fabric is not damaged by the construction contractors and that Petersen House is rehabilitated according to the Secretary of Interior Standards. Temporary fire detection and suppression systems would be put in place during construction, so there would be no “down time” with regard to fire and security.

The exterior repairs would create overall long-term beneficial impacts on the visual character of the east elevation and rear elements, including the west façade, rear ell, and porch by restoring the deteriorating condition of the windows, doors, brick, trim, and paint and enhancing the overall aesthetic integrity of the Petersen House.

The new climate control system would include the installation of three air condensing units behind the rear ell of the Petersen House. These new features would have a negligible impact (*no adverse effect* under Section 106) on the visual resources of the Petersen House since they would be located behind the rear ell in a location that is not visible to visitors or staff. The climate control system’s overall impact would be long-term and beneficial in terms of its preservation of the historic fabric and furnishings of Petersen House.

Interior

Elements of interior repairs are outlined in “Chapter 2: Alternatives”. The interior work would repair the water stains, peeling paint and wallpaper, warped floorboards, and damaged plaster which would enhance

the overall aesthetic integrity of the primary, secondary, and non-contributing elements of the Petersen House. All interior repairs would be accomplished in accordance with the Secretary of Interior's Standards and NPS Preservation Briefs.

Elements of the installation of the new climate control system would include installation of new mechanical equipment (boiler, air handlers, and ductwork) primarily in the attic, storage and mechanical rooms. Improvements would be made to the electrical system to accommodate new mechanical equipment. Three exterior condensing units, all of similar size, would be installed as part of the new climate management system. The three condensing units would be located against the west elevation of the Rear Ell (see figure 4). The component of the house called Rear Ell in the Historic Structures Report (NPS 2002) was likely constructed in the 1870s. This elevation and the garden are classified by the Historic Structures Report (NPS 2002) in the Treatment Zone for Rehabilitation implying that they are non-contributing resources (figure 13). The components of the new climate control system such as ducts, chases, and vents would be minimally visible from the public spaces inside the Petersen House and would not detract from the historic or visual integrity of the primary contributing elements and would have a negligible impact to the historic house (*no adverse effect* under Section 106).

Accommodate Connection between Petersen House and Center for Education and Leadership Building

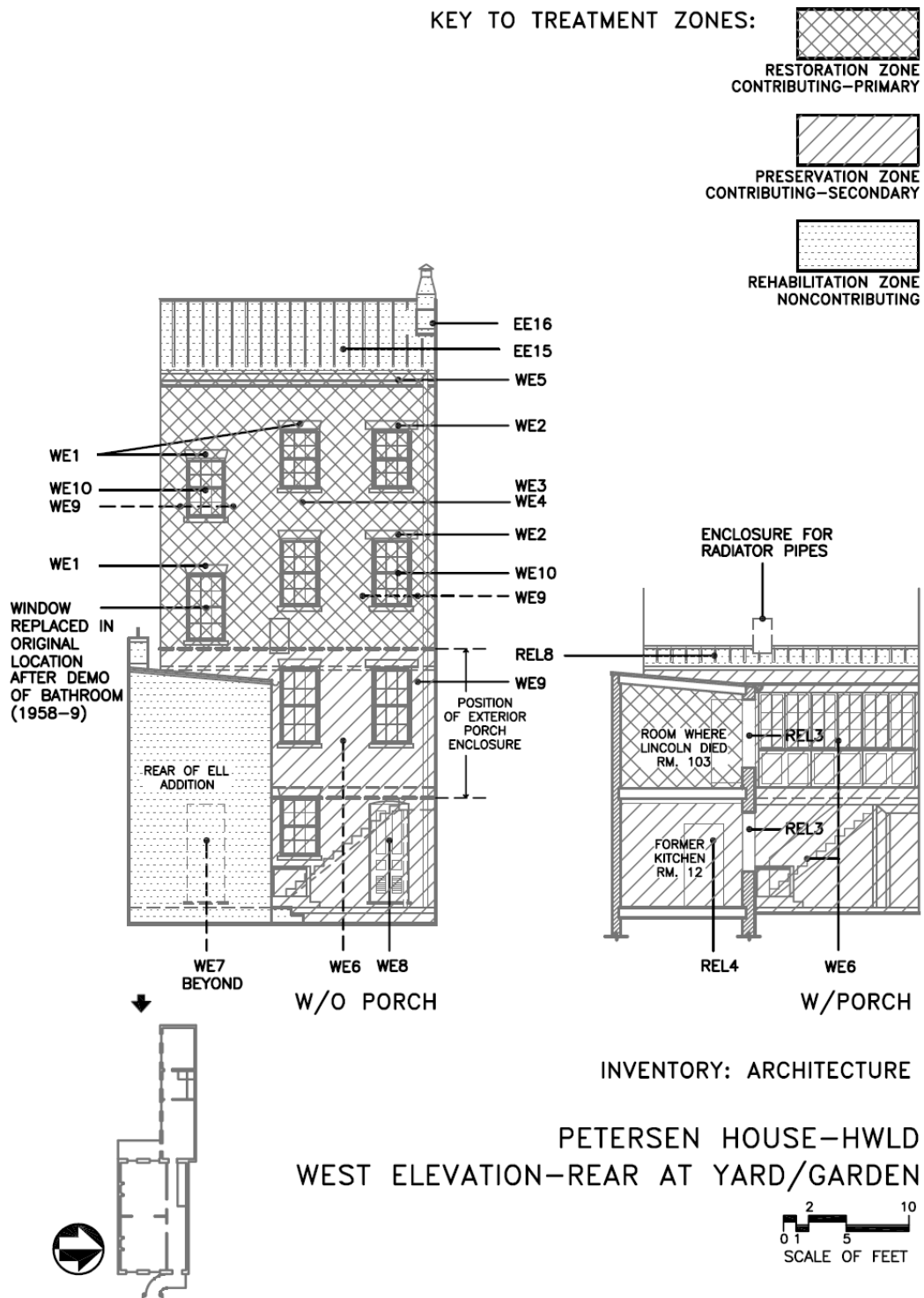
The actual construction of the proposed connection would be taken on by the Ford's Theatre Society; however, the NPS would need to accommodate for this opening and circulation pattern from the Petersen House. The proposed penetration to create the connection would be through the wall of the CEL and occur in the rear porch area of the Petersen House (see figure 6). The connection would bring visitors from the rear porch area of the Petersen House to a controlled access point at an elevator vestibule in the CEL. The new penetration would be a finished opening leading into the CEL; all other components of the back porch would remain the same. The new opening would create a noticeable impact on the visual character of the back porch, but not to a degree that would diminish or compromise the visual or historic integrity of the Petersen House. Therefore, the impact would be long-term, minor, and adverse. The rear porch is included (parenthetically) as part of the Rear Elevation in the summary list of the areas of Petersen House that are accorded Restoration Treatment Zone status or are primary contributing features. However, the graphic supporting information in the Historic Structures Report (see figure 13) designates the porch as Preservation Zone or secondary contributing. None of the more detailed tables that list the contributing status of individual features mention it. During the initial phase of construction, there would be a careful examination of the structural members of the porch roof to determine if any original fabric remains.

A more considerable potential issue with the CEL entrance doorway might be its visibility from both the entrance to the Death Room and the windows of the rear room of the double parlor. The wall to be penetrated permitting access to the CEL is now not aesthetically appealing (concrete blocks painted white). However, as the feeling and association qualities of the Death Room and the Petersen House are all important, it would be important that the new access be simple in design and not visually distracting.

The accommodation of the new connection between the CEL to the existing rear porch of Petersen House would have a long-term, minor, adverse impact to the historic character of Petersen House (*no adverse effect* under Section 106).

Because, the construction lay down area for the renovation work would likely be in the rear courtyard and out of public view, the short-term adverse impact of the repair work to historic buildings and structures, including Peterson House would range from negligible to minor adverse.

Figure 13. Treatment Zones for the Petersen House



Source: NPS 2002

Cumulative Impact

Recent renovations to the Petersen House have had a long-term, beneficial impact as they partially restored the condition of the historic building and prevented further deterioration of the structures. The future CEL would alter the setting of the porch and could be anticipated to have a long-term, minor, adverse impact upon the historic house, particularly the feeling and association aspects of its integrity. The net cumulative impact is long-term and beneficial.

When combined with the cumulative actions, the long-term, beneficial impacts and the short- and long-term, minor, adverse impacts associated with alternative B would have a noticeable beneficial contribution resulting in an overall long-term, beneficial impact to Petersen House.

Conclusion

Short-term minor and long-term, beneficial impacts (*no adverse effect* under Section 106) would result from the implementation of exterior and interior repairs and repairs of the windows. Long-term, negligible impacts (also *no adverse effect* under Section 106) would result from the implementation of the new climate control system, as the AC condensing units would be placed at the rear ground elevation, which is a non-contributing resource. Alternative B would create long-term, minor, adverse impacts (*no adverse effect* under Section 106) from the accommodation of the new connection to the CEL; however the impacts could be easily mitigated by the careful design of the doorway to the CEL. Cumulative impacts under alternative B would be long-term and beneficial.

Based on this impact analysis, alternative B is not likely to result in any impacts that would constitute impairment of historic districts and structures.

Impacts of Alternative C

Analysis

As in alternative B, alternative C would include multiple improvements to repair and rehabilitate the historic windows and various areas of the Petersen House, install a new climate control system, and accommodate a connection between the Petersen House and the new CEL. In addition, alternative C proposes to rehabilitate the rear porch for an accessible route to Petersen House. The impacts (and effects under Section 106) upon historic structures from the repair projects would be the same as for Alternative B.

Construction work proposed under alternative C would be performed as an additional NPS project to rehabilitate the rear porch for an accessible route.

As indicated earlier, the Petersen House is not fully compliant with NPS policies for universal accessibility. Alternative C would create, for the first time, an accessible entrance into the building. Currently, the sole point of entry into the Petersen House is via the curved front steps off of 10th Street; and there is no ramp or lift to accommodate wheelchairs. Inside the Petersen House, the widths of the doorways leading into the Death Room, both from the main hallway and the rear porch are 32 inches. On the rear porch, the wood staircase that leads to the basement level is only 30 inches wide and steeper than what is allowed by building code. In the basement level, visitors must travel through a narrow alley to exit the Petersen House that is only 28 inches wide to reach 10th Street. The NPS's intention is to facilitate universal accessibility by having persons in wheelchairs enter and leave the rear porch via the CEL entrance and elevator.

Elements of the rear porch rehabilitation are detailed in "Chapter 2: Alternatives," and include elements such as:

- Maintaining the existing footprint and roof line of the current porch.
- Replacing the wood rear porch and eliminating the interior staircase.

- Replacing windows and doors with energy efficient units.
- Rehabilitate porch and construct a new exterior stair.

The preferred option for rehabilitation of the porch and placement of the new staircase is shown in figures 7 and 8.

The proposed action would demolish the existing porch and interior stair and reconstruct a new porch with a new exterior stair to the courtyard. The new porch would occupy the existing footprint and would accommodate the proposed penetration to the CEL and an emergency egress to grade. It would be visually and aesthetically consistent with the existing porch. The porch, as indicated earlier, is a secondary contributing feature of the Petersen House according to the Historic Structures Report. Moreover, it was extensively modified in 1958-59 as is clear from information and photographic documentation on Part 1A, page 20 of the Historic Structures Report of pre-1958 condition and on Part 1E, page 8 of the post-1958 condition. Windows on the upper level from 1908 were removed in 1958 and new windows and panels installed. There were originally no stairs to the ground level; these were added and appear in the fairly recent Historic Structures Report documentary photograph, although the area is not enclosed at ground level.

It seems that the existence of a rear porch at the first floor level has been a feature since 1865, but that its detailing, function, and materials have been modified. Also, the modification of the porch and the placement of a newly positioned staircase to the ground would not significantly impact the historic character of any other important feature of Petersen House.

The combination of the rehabilitated porch with the addition of the new exterior stair would introduce a noticeable impact on the rear elevation of the Petersen House. Although the porch would be rehabilitated in such a way as to maintain the historic character of the existing porch, the extension of the new exterior stair would alter the view of the west elevation and diminish the aesthetic and historic integrity of the Petersen House creating a long-term, minor, adverse impact on historic structures (*no adverse effect* under Section 106).

Cumulative Impact

Cumulative impacts from recent renovations to the Petersen House, and construction of the future CEL, would be the same as under the alternative B – with net long-term, beneficial cumulative impacts. When combined with the cumulative actions, the long-term beneficial and short- and long-term, minor, adverse impacts associated with alternative C would have a noticeable beneficial contribution an overall long-term, beneficial impact to the Petersen House.

Conclusion

Short-term minor and long-term, beneficial impacts (*no adverse effect* under Section 106) would result from the implementation of exterior and interior repairs and repairs of the windows. Long-term, minor, adverse impacts (*no adverse effect* under Section 106) would result from the implementation of the new climate control system, as the AC condensing units would be placed at the rear ground elevation, which is a non-contributing resource. Alternative C would create long-term, minor, adverse impacts from the accommodation of the new connection to the CEL; however the impacts could be easily mitigated by the careful design of the doorway to the CEL. Long-term, minor, adverse impacts would result from the rehabilitation of the rear porch for an accessible route. Cumulative impacts under alternative C would be long-term and beneficial.

Based on this impact analysis, alternative C is not likely to result in any impacts that would constitute impairment of historic districts and structures.

MUSEUM OBJECTS

Methodology and Assumptions

Potential impacts to museum objects are assessed according to the conditions under which they are displayed or stored. Environmental conditions such as temperature, humidity are important factors governing the stability of museum objects. Museum objects are most stable and secure when they are under storage in a facility that meets museum standards. They are subject to physical damage or loss when then must be moved or when they are stored or displayed in settings with inadequate or outdated environmental controls. Analysis of possible impacts to museum objects was based on examination of the facilities where the collections are stored and displayed as well as information provided by the NPS.

Study Area

The study area for museum objects consists of the facilities where the collections are displayed or stored. Artifacts of the Petersen House are currently stored at the house or displayed in the first floor of the house.

Impact Thresholds

Museum objects (prehistoric and historic objects, artifacts, works of art, archival documents, and natural history specimens) are generally ineligible for listing in the NRHP. As such, Section 106 determinations of effect are not provided for museum objects. However, museum objects may be threatened by fire, theft, vandalism, natural disasters, and careless acts, as well as the gradual deterioration that results from fluctuating environmental conditions. The preservation of objects is an ongoing process of preventative conservation, supplemented by conservation treatment, when necessary. The primary goal is preservation of artifacts in as stable condition as possible to prevent damage and minimize deterioration.

For the purpose of analyzing potential impacts, the thresholds of change for the intensity of an impact on museum collections are defined as follows:

Negligible: Adverse impact - Impact is at the lowest levels of detection, barely measurable with any perceptible consequences, either adverse or beneficial, to museum collections.

Minor: Adverse impact –would affect the integrity of few items in the museum collection, but would not degrade the usefulness of the collection for future research and interpretation.

Moderate: Adverse impact – would affect the integrity of many items in the museum collection and diminish the usefulness of the collection for future research and interpretation.

Major: Adverse impact –would affect the integrity of most items in the museum collection and destroy the usefulness of the collection for future research and interpretation.

Beneficial impact - No levels of intensity for beneficial impacts are defined. Beneficial impacts would occur when the condition of the collection as a whole or its constituent components from the threat of further degradation is secure.

Duration: In the short-term, the impacts to museum objects would be related to the activity and disruption associated with construction. The long-term impacts would be related to changes following construction.

Impacts of Alternative A: No Action

Analysis

Under the no action alternative, the NPS would continue with its current procedures for the preservation and conservation of the house artifacts, in accordance with the existing housekeeping plan and cleaning

schedule. However, while the, current practices would continue under the no action alternative, some long-term, moderate adverse impact to the collections is foreseeable under the no action alternative. This is attributable primarily to the environmental conditions within the Petersen House that threaten to deteriorate the artifacts, especially furniture. Given the lack of climate control system, artifacts housed in the Petersen House could be subject to further deterioration, which would be a moderate, adverse impact.

The primary environmental threats currently affecting artifacts stored or displayed at the Petersen House are related to temperature and relative humidity. Temperatures that are too high can cause gradual disintegration or discoloration of organic materials, while temperatures that are too low can cause desiccation that can lead to fracture of paints, adhesives, and other materials. Fluctuating temperatures can cause objects to expand and contract rapidly, resulting in fractures and de-lamination of brittle solid materials.

Humidity is directly related to temperature. High humidity can cause mold to form, cause rust and corrosion to metals, and can hydrate of some materials, which can cause swelling. Low humidity may lead to dehydration or desiccation of organic materials. Fluctuating levels of humidity causes shrinking and swelling of organic materials, leading to crushing or fracturing of organics, de-lamination of veneered furniture, and the loosening of joints in furniture.

The impacts of these factors on specific objects varies according to their material composition, there are some general principles which can be applied to the collection as a whole. Organic materials are most vulnerable to inappropriate levels of temperature and humidity; these include wood, paper, textiles, and leather, etc. Inorganic objects such as metals, ceramics, and glass are less vulnerable to inappropriate levels of temperature and humidity, but they may absorb contaminants and be subject to the adverse impacts of light. Many artifacts are of diverse (composite) materials and may react to environmental conditions in different ways and in opposition to each other.

Cumulative Impacts

None of the past, present and future projects included in the cumulative impact analysis would have any effect on the museum objects at the Petersen House Site, therefore, there would be no cumulative effects under the no action alternative.

Conclusion

Implementation of the no action alternative would likely result in long-term, moderate adverse impacts to the artifacts due to the lack of effective environmental controls. As the existing climate control system is inadequate, the artifacts are vulnerable to could be subject to further deterioration. However, the no action alternative is not likely to result in any impacts that would constitute impairment of museum objects.

Impacts of Alternative B

Analysis

For the duration of repair and rehabilitation activities associated with the interior treatments of the Petersen House, there would be some risk of inadvertent damage to the artifacts that are currently exhibited or stored within the building. NPS would mitigate this risk by removing these items and placing them in temporary storage.

Prior to construction, park curatorial staff and fine arts specialists would pack museum objects and transport them to a climate-controlled, secured storage facility, in accordance with Director's Order 24, NPS Museum Collections Management. Fixtures and paintings would be protected or removed for safety or security as a part of the initial preparatory preservation work to be performed by park staff.

The storage location would provide appropriate climate and fire suppression controls, as well as security to protect the artifacts during the storage period. Fixtures and paintings would be protected or removed for safety or security as a part of the initial preparatory preservation work to be performed by park staff.

Objects would be returned and reinstalled in the Petersen House only after construction documents indicate that all repairs and rehabilitation activities are complete and operating.

All museum objects handling would be performed by qualified, trained personnel, using proper equipment and tools, and collections would be protected at all stages of transport from potential environmental threats including water damage, rapid fluctuations in temperature and/or humidity, theft, excessive vibration, or other as noted by NPS museum standards.

The NPS curatorial staff would also oversee the protection of the architectural fabric of the house itself, including items such as the window treatments, mantels, and projecting wall corners, stairs, and banisters.

Overall, these actions would not result in foreseeable adverse impacts to the artifacts. While the collections would be at some short-term risk of accidental damage during the move to the storage facility, precautions would be undertaken to fully mitigate these risks. As a result there would be long-term, negligible, adverse impacts to museum objects. The improvement of the environmental conditions (temperature and humidity controls) through the implementation of a new climate control system would result in a long-term, beneficial impact to the objects that would be placed back and exhibited in the Petersen House.

Cumulative Impacts

Cumulative actions for museum objects at the Petersen House would be the same as described in the no action alternative; there would be no cumulative effects under alternative B.

Conclusion

Implementation of alternative B would result in a beneficial long-term impact to the museum objects, due to the implementation of a new climate control system. There would be no cumulative impacts. Alternative B would not result in impairment of museum objects.

Impacts of Alternative C

Analysis

Impacts to museum objects under alternative C would be the same as alternative B. Rehabilitation of the rear porch for an accessible route would not have additional impacts (adverse or beneficial) to artifacts displayed within the house as those activities would be limited to the rear porch and back yard. The improvement of the environmental conditions (temperature and humidity controls) through the implementation of a new climate control system would result in a long-term, beneficial impact to the objects that would be placed back and exhibited in the Petersen House. The creation of an additional exit as a result of the rehabilitate porch could potentially create another point by which objects can be removed from the site in the event of an emergency, resulting in a long-term, beneficial impact.

Cumulative Impacts

Cumulative actions for museum objects at the Petersen House would be the same as described in the no action alternative and alternative B; there would be no cumulative effects under alternative C.

Conclusion

Implementation of alternative C would result in a beneficial long-term impact to the museum objects, due to the implementation of a new climate control system; no additional impacts are expected from the rehabilitation of the rear porch for accessibility. There would be no cumulative impacts. Alternative C would not result in impairment of museum objects.

ARCHEOLOGICAL RESOURCES

Methodology and Assumptions

The archeological resources at the Petersen House are buried beneath the ground. The layers close to the ground surface have been extensively disturbed within the past 50 years. Therefore, potential impacts to archeological resources are limited to those areas where there would be ground-disturbing activities such as excavation or grading. Analysis of possible impacts to archeological resources was based on a review of previous archeological studies, a Phase I/II archeological study (Shellenhamer et al. 2010) conducted for this EA, and consideration of the proposed design.

Study Area

The APE for archeological resources specifically is the open backyard area of the Petersen House property. Archeological study was focused on those parts of the yard that may actually be impacted by the ground-disturbing activities under alternatives B and C.

Impact Thresholds

Impacts to archeological resources occur when the proposed alternative results in whole or partial destruction of the resource, which is termed a loss of integrity in the context of Section 106. Impact thresholds for archeological resources consider both the extent to which the proposed alternative results in a loss of integrity and the degree to which these losses can be compensated by mitigating activities, such as preservation or archeological data recovery. The process begins with assessment of a resource according to its eligibility for the NRHP, as only sites considered significant enough for listing in the NRHP are protected by federal regulations.

Under federal guidelines, resources are eligible for the NRHP if they possess integrity and they meet one or more of the criteria of eligibility for inclusion in the NRHP. Most archeological resources found eligible for the NRHP significant under criterion D because they have the potential to provide important information about the history or prehistory. However, in some circumstances, archeological resources might be found significant because (i) they are associated with events that have made a significant contribution to the broad patterns of our history (NRHP criterion A), or (ii) because they are associated with the lives of persons significant in our past (NRHP criterion B), or (iii) because they embody distinctive characteristics of a type, period, or method of construction (NRHP criterion C). Criterion A can encompass ongoing “events,” such as “the ongoing participation of an ethnic or social group in area’s history, reflected in a neighborhood’s streetscapes, or patterns of social activity.” The Colored Union Benevolent Association cemetery served as the burial place for thousands of African Americans, and some African Americans from Washington and beyond visit the site. Many local African Americans have expressed interest in preserving this memorial to their ancestors and the site may soon be part of the Washington, the District’s African American Heritage Trail.

For purposes of analyzing impacts to archeological resources, thresholds of change for the intensity of an adverse impact are based on the foreseeable loss of integrity. All of these discussions consider only the direct impacts of construction, because operation of the facilities should have no ground disturbance activities and no additional effect on archeological resources under any of the alternatives under consideration. All impacts are considered long-term (e.g., lasting longer than the period of construction).

Negligible: Impact is at the lowest levels of detection with neither adverse nor beneficial consequences. The determination of effect for Section 106 would be *no adverse effect*.

Minor: Disturbance of a site(s) results in little, if any, loss of integrity. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Moderate: Disturbance of a site(s) results in loss of integrity to the extent that there is a partial loss of the character-defining features and information potential that form the basis of the site’s NRHP

eligibility. Mitigation is accomplished by a combination of archeological data recovery and in place preservation. The determination of effect for Section 106 would be *adverse effect*.

Major: Disturbance of a site(s) results in loss of integrity to the extent that it is no longer eligible for the NRHP. Its character-defining features and information potential are lost to the extent that archeological data recovery is the primary form of mitigation. The determination of effect for Section 106 would be *adverse effect*.

Beneficial: A beneficial impact would occur when actions were taken to actively preserve or stabilize a site in its pre-existing condition, or when it would be preserved in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* to accurately depict its form, features, and character as it appeared during its period of significance. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Duration: Short-term impacts would last for the duration of construction activities associated with the proposed alternative; long-term impacts would last beyond the construction activities. All impacts to archeological resources are considered long-term.

Impacts of Alternative A: No Action

Analysis

One NRHP-eligible archeological resource -- the Petersen House Site (51NW65) -- has been identified in the APE. Under the no action alternative, there would be no impacts to this resource (*no effect* under Section 106), as the current practices regarding visitor use, operations and maintenance would continue. As none of these activities would involve any ground-disturbing activities, the existing archeological resource would remain undisturbed. No impacts to archeological resources would occur under the no action alternative.

Cumulative Impacts

Since there would be no impacts to archaeological resources under the no action alternative, there would be no cumulative impacts.

Conclusion

Implementation of the no action alternative would result in no direct, indirect, beneficial or adverse impacts to archeological resources in the study area. Cumulative impacts under the no action alternative on archeological resources would not occur. Based on this impact analysis, the no action alternative is not likely to result in any impacts that would constitute impairment of archeological resources.

Impacts of Alternative B

Analysis

Alternative B includes improvements to the drainage in the Petersen House backyard. The proposed drainage improvements include the construction of French drains along the exterior walls of the ell addition, the installation of an underground collection box, and the installation of a drainage pipe extending from the box to the alley at the west end of the property. The route of the drainage pipe would be bored. The collection box would be installed in an already disturbed area, so impacts would be limited to the locations of the French drains and the location of the push pit for boring the drain line. The depth of the disturbance for all features would be less than 3.0 feet.

The combined Phase I/II investigation that was completed in conjunction with this EA (Shellenhamer et al. 2010) showed that intact archeological features and deposits associated with the Petersen House Site (51NW65) are present in the proposed location of the French drains. These consist of the remnants of a fieldstone pavement that extended over much of the yard before the ell addition was built, encountered

along the south wall of the ell, and deposits buried more than 2.0 feet below the surface that contain artifacts dating to before the Petersen House was built in 1849. These deposits were encountered along the west wall of the addition. The two test units dug in this location covered the entire south wall of the ell, beyond the limits of disturbance for the drainage improvements. Therefore, none of this archeological deposit is left within the project APE.

The remnants of fieldstone pavement were encountered in one test unit along the south wall of the ell addition. This unit was placed in what appeared to be the least disturbed location along the wall, and a second unit that was excavated to search for more of this feature encountered only disturbed soils. It appears that most of the surviving pavement was documented and removed in the one test unit.

The installation of a 4-inch drain line through the western part of the yard would involve directional boring, rather than open trench excavation. Impacts to archeological resources along this drain line would be negligible, providing that the push pit is confined to the area that has already been sampled by a test unit and found to be disturbed. Therefore, installation of the drain line would have negligible, adverse impacts (*no adverse effect* under Section 106) to any surviving archeological features or deposits along the drain line.

Because almost all of the area that would be impacted by the proposed drainage improvements has either been excavated during the Phase I/II testing, or documented as disturbed, any impacts to surviving archeological features or deposits associated with the Petersen House Site (51NW65) would be negligible. Should any considerable archeological resources be identified during construction, work would stop until NPS archeologists evaluated the resources. Appropriate measures would be undertaken to document or mitigate impacts.

To insure that the construction excavation activities are confined to areas of the site that are known to be disturbed or that have already been archeologically sampled, NPS would have an archeological monitor on site during construction, to mitigate the risk of possible impacts to the Petersen House Site (51NW65). Construction in areas outside locations of previously-documented archeological resources would be preceded by shovel testing and/or archeological monitoring to ensure no irreparable adverse impacts to considerable, newly-discovered archeological resources in these areas occur.

Cumulative Impacts

None of the past, present and future projects included in the cumulative impact analysis would have any effect on the Petersen House Site (51NW65), therefore no cumulative impacts on archeological resources would be anticipated from implementation of alternative B.

Conclusion

Ground-disturbing activities associated with alternative B are likely to result in negligible, adverse impacts (*no adverse effect* under Section 106) to the Petersen House Site. Archeological features and deposits within the area necessary for installation drainage improvements have been fully sampled, and these areas have been determined to be disturbed or fully excavated during the combined Phase I/II archeological study. Because there are no other recent or planned ground-disturbing projects, there are no cumulative impacts to archeological resources associated with Alternative B. Alternative B is not likely to result in any impacts that would constitute impairment of archeological resources.

Impacts of Alternative C

Analysis

Alternative C includes improvements to the drainage in the Petersen House backyard, same as under Alternative B, but includes the addition to rehabilitate the rear porch and construct an exterior stairway to improve egress from the house. Impacts from the installation of a new drainage system under alternative C would be the same as under alternative B – negligible and adverse (*no adverse effect* under Section 106).

The proposed exterior stairway would be placed in the southern part of the yard (see figure 6 in Chapter 2). Because the surface of the yard has been disturbed to a depth of 1.0 foot or greater, the only impacts from construction would be in the locations where subsurface excavations would be necessary to install footings for the stairway. The projected locations of the footers – based on preliminary concept drawings – were all tested during the recent Phase I/II archeological investigations (Shellenhamer et al. 2010.).

These excavations showed that a considerable archeological deposit associated with the Petersen House Site (51NW65) is present in the southern part of the yard. This is a household refuse midden dating to the mid 1800s. The midden is buried about 2.5 feet below the ground surface, and it is about 0.3 foot thick. It contains large amounts of broken pottery, glass, and other household artifacts, as well as animal bone and oyster shell. This midden is considered NRHP-eligible because it could provide important data about life in the Petersen household around the time of the Civil War.

In the projected locations of the stairway footers, the midden was entirely excavated during the recent Phase I/II testing. Excavation of the footers as planned would therefore have no impacts (*no effect* under Section 106) on the resource. In order to insure that there is no disturbance beyond the limits of the Phase I/II testing, the excavations necessary to install the footers would be monitored by an archeologist to insure that construction impacts are limited to areas that have already been documented archeologically. Mitigation measures under alternative C would be the same as under alternative B.

Cumulative Impacts

None of the past, present and future projects included in the cumulative impact analysis would have any impact on the Petersen House Site (51NW65), therefore, no cumulative impacts on archeological resources would be anticipated from implementation of alternative C.

Conclusion

Ground-disturbing activities associated with alternative C are likely to result in negligible, adverse impacts (*no adverse effect* under Section 106) to archeological resources, specifically the Petersen House Site (51NW65). As discussed under alternative B, the area that would be disturbed by installation of the drainage improvements has been extensively tested, and the areas with intact deposits were largely or entirely excavated during the recent testing. A considerable archeological deposit associated with the Petersen House Site has been identified along the southern margin of the yard in the approximate location of the footers for the exterior stairway and at a depth of approximately 2.5 feet below grade. However, this resource, a trash midden, has been entirely excavated in the projected locations of the footers, and archeological monitoring would be carried out to insure that there is no disturbance to this resource beyond the limits of the Phase I/II excavations. Moreover, the midden is so deeply buried that it would be out of harm's way with regard to the footer excavations. Archeological monitoring of construction would insure that the excavations necessary for a staircase construction are limited to areas that have already been archeologically sampled. Because there are no other recent or planned ground-disturbing projects, there would be no cumulative impacts to the Petersen House Site from alternative C. Alternative C is not likely to result in any impacts that would constitute impairment of archeological resources.

NATIONAL HISTORIC PRESERVATION ACT SECTION 106 SUMMARY

This EA analyzes the impacts of three alternatives on historic structures and archeology at the Petersen House / Ford's Theatre National Historic Site. The alternatives include a no action alternative and two action alternatives. The Petersen House is, for purposes of National Register status, a constituent of two listed National Register properties: the Ford's Theatre National Historic Site and the Pennsylvania Avenue National Historic Site/Historic District.

Alternative A: No action

Under the no action alternative, exterior and interior rehabilitation and repair of the Petersen House, rehabilitation of the rear porch for accessibility; installation of new climate control system; and

connection to the CEL would not occur at the Petersen House. Water damage and lack of temperature and humidity control would continue to further impact the historic fabric of the building. Normal, but limited, levels of maintenance would continue at the Petersen House but would be inadequate to prevent further deterioration from water damage and temperature and humidity fluctuations.

There would be long-term, moderate, adverse impacts to historic structures due to the on-going physical degradation of the Petersen House. Implementation of the no action alternative would result in an *adverse effect* on historic districts and structures.

Implementation of the no action alternative would result in no direct, indirect, beneficial or adverse impacts to archeological resources in the study area. Implementation of the no action alternative would result in a *no effect* on archeology.

Alternative B: Repair and Rehabilitate the Petersen House, Install New Climate Control System, and Accommodate Connection to the CEL

Under alternative B, multiple improvements to repair and rehabilitate the historic windows and various exterior and interior areas of the Petersen House and to install a new climate control system. Additionally, alternative B proposes to accommodate the connection from the Petersen House to the adjacent CEL.

Alternative B would create long-term, minor impacts from the accommodation of the new connection to the CEL. Negligible, adverse impacts would result from the implementation of the new climate control system, as the AC condensing units would be placed at the rear ground elevation, which is a non-contributing resource. Long-term, beneficial impacts would result from the implementation of exterior and interior repairs and repairs of the windows. Cumulative impacts under alternative B would be long-term and beneficial. Implementation of alternative B would result in a *no adverse effect* on historic districts and structures.

Ground-disturbing activities associated with alternative B are likely to result in negligible, adverse impacts to the Petersen House Site (51NW65). Archeological features and deposits within the area necessary for installation drainage improvements have been fully sampled, and these areas have been determined to be disturbed or fully excavated during the combined Phase I/II archeological study. Implementation of alternative B would result in a *no adverse effect* on archeology.

Alternative C: Repair and Rehabilitate the Petersen House, Rehabilitate the Rear Porch for Accessibility, Install New Climate Control System, and Accommodate Connection to the CEL

Under alternative C, multiple improvements to repair and rehabilitate the historic windows and various exterior and interior areas of the Petersen House and to install a new climate control system. Alternative C also proposes to accommodate the connection from the Petersen House to the adjacent CEL. In addition, alternative C proposes to rehabilitate the rear porch for an accessible route to Petersen House.

Alternative C would create long-term, minor, adverse impacts from the accommodation of the new connection to the CEL and from the rehabilitation of the rear porch for an accessible route. Implementation of the new climate control system would result in long-term, negligible, adverse impacts as the AC condensing units would be placed at the rear ground elevation, which is a non-contributing resource. Long-term, beneficial impacts would result from the implementation of exterior and interior repairs and repairs of the windows. Implementation of alternative C would result in a *no adverse effect* on historic districts and structures.

Ground-disturbing activities from the installation of the drainage improvements associated with alternative C are similar to alternative B and are likely to result in negligible, adverse impacts to archeological resources, specifically the Petersen House Site (51NW65). The area that would be disturbed by installation of the drainage improvements has been extensively tested, and the areas with intact deposits were largely or entirely excavated during the recent testing. A considerable archeological deposit associated with the Petersen House Site has been identified along the southern margin of the back yard in

the approximate location of the footers for the proposed exterior stairway and at a depth of approximately 2.5 feet below grade. However, this resource, a trash midden, has been entirely excavated in the projected locations of the footers, and archeological monitoring would be carried out to insure that there is no disturbance to this resource beyond the limits of the Phase I/II excavations. Moreover, the midden is so deeply buried that it would be out of harm's way with regard to the footer excavations. Archeological monitoring of construction would insure that the excavations necessary for a staircase construction are limited to areas that have already been archeologically sampled. Implementation of alternative C would result in a *no adverse effect* on archeology.

In accordance with Section 106 of the *National Historic Preservation Act*, potential adverse impacts (as defined in 36 CFR 800) on historic districts and structures or archeological resources listed on or eligible for listing in the National Register of Historic Places would be coordinated between the NPS and the DC HPO to determine the level of effect on the property and to determine any necessary mitigation measures.

Continuing implementation of the *Cultural Resource Management Guideline* (NPS 1998b) and adherence to *NPS Management Policies 2006* (NPS 2006) and the 2008 NPS Programmatic Agreement with the ACHP and the National Conference of State Historic Preservation Officers (NPS 2008a) would all aid in reducing the potential to adversely impact historic properties. Copies of this EA will be distributed to the DC HPO for review and comment related to compliance with Section 106 of the National Historic Preservation Act. A full description of agency consultation and coordination is available in chapter 5.

VISITOR USE AND EXPERIENCE

METHODOLOGY AND ASSUMPTIONS

The purpose of this impact analysis is to assess the effects of the alternatives on the visitor experience at Petersen House and visitor experience in the areas that would be affected by the rehabilitation and repair, installation of a climate control system, and accommodating the new connection to the CEL. To determine impacts, the current uses of the house were considered and the potential effects of the construction and implementation of the proposed actions on visitor experience and use were analyzed. Activities and the type of visitor experience and use/visitation that occur in the Petersen House and which 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 study area for visitor use and experience is the Petersen House. The study area for cumulative impacts analysis encompasses the Ford's Theatre National Historic Site and surrounding properties, including the CEL.

IMPACT THRESHOLDS

The following thresholds were defined for visitor use and experience:

Negligible: Visitors would likely be unaware of impacts associated with implementation of the alternative. There would be no noticeable change in visitor use and/or 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. If mitigation were needed, it would be relatively simple and would likely be successful.

Moderate: A few critical characteristics of the desired visitor experience would change and/or 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 pursue their choices in

other available local or regional areas. Visitor satisfaction would begin to decline. Mitigation measures would probably be necessary and would likely be successful.

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. Extensive mitigation measures would be needed, and success would not be guaranteed.

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 A: No Action

Analysis

Under the no action alternative, rehabilitation and repair of the Petersen House would not occur. Visitors would continue to experience the Petersen House in its current condition, with evidence of water damage and a lack of a climate control system.

Under this alternative, visitors would not be provided a direct connection to the CEL and would access the new CEL museum via 10th Street. Visitors may not be aware that this museum is available to them and could potentially miss the experience of the ‘Fourth Act’ of President Lincoln’s presidency and assassination.

Accessibility would not be improved and the house would continue to fail to meet basic compliance with accessibility and building code. Visitors who are unable to access the Petersen House would continue to be able to view a video at Ford’s Theatre that shows the interior of the house and the Death Room. The one-way circulation patterns within the Petersen House would not be affected. This would result in a long-term, minor adverse impact to visitor use and experience.

With the no action alternative, visitors to the Petersen House would continue to experience the site in its current state and may continue to experience discomfort due to the building being cooler in the winter months and humid in the summer. Complaints from visitors would likely continue, affecting visitor satisfaction of the Petersen House experience. The no action alternative would result in long-term, minor adverse impacts to visitor use and experience.

Cumulative Impacts

NPS projects within the vicinity of the Petersen House, such as the renovation of Ford’s Theatre and at Petersen House, and the 10th Street Curbside Management Plan are complete and have had beneficial impacts to visitor use and experience by improving park facilities and the facilities surrounding the park. Commercial businesses located in proximity to the Ford’s Theatre National Historic Site provide additional services and recreational opportunities for visitors. Future projects in the study area, including the construction of the CEL, would have beneficial impacts to visitor use and experience by expanding the interpretive experience of the Ford’s Theatre National Historic Site. The construction of the CEL would create the “Fourth Act” of Lincoln’s story and would be a universally accessible building that would enhance the visitor experience at the park, however, it would not offset adverse impacts to accessibility at the Petersen House in a measurable way and no penetration would be created between the Petersen House and the CEL.

The no action alternative would have long-term, minor, adverse impacts to visitor use and experience. When combined with the beneficial impacts from the cumulative actions, the no action alternative would have a noticeable adverse contribution resulting in an overall long-term, minor, adverse cumulative impact to visitor use and experience.

Conclusion

Implementation of the no action alternative would result in long-term, minor, adverse impacts to visitor use and experience from the continued interior and exterior damage visible to visitors at Petersen House, a lack of climate control system, and a lack of an accessible route. Combined with other projects in the study area, there would be long-term, moderate, and adverse impacts, as well as beneficial impacts.

Impacts of Alternative B

Analysis

Under alternative B, the Petersen House would be closed during the rehabilitation and repair construction period (November 2010 through May 2011). Construction activities associated with alternative B would add noise pollution from heavy machinery and air pollution from the operation of construction vehicles. However, the Petersen House is located in an urban corridor and noise from construction activities would not be expected to be noticeable to neighbors or people visiting Ford's Theatre. Visitors would be unable to experience the Petersen House during the construction period. Construction activities would have short-term, minor, adverse impacts on visitor use and experience.

Under alternative B, the Petersen House would undergo interior and exterior rehabilitation and repair, improving the appearance of the Petersen House. Visitor experience would benefit from the installation of a climate control system, which would prevent temperature extremes within the house. Alternative B would accommodate a direct connection to the CEL, allowing visitors improved circulation to experience the CEL exhibits on the 'Fourth Act.' During construction, the Petersen House would be closed to the public; however visitors would be able to view the video of the Petersen House available at Ford's Theatre to experience the interior of the house. Implementation of the interior and exterior rehabilitation and repairs, climate control system, and a direct connection to the Petersen House would result in long-term, beneficial, impacts to visitor use and experience. Accessibility would not be improved and the house would continue to fail to meet basic compliance with accessibility and building code. Visitors who are mobility impaired and unable to access the Petersen House would continue to be able to view a video at Ford's Theatre that shows the interior of the house and the Death Room. This would result in a long-term, moderate, adverse impact to visitor use and experience for people with mobility impairment. The number of visitors and one-way circulation patterns within the Petersen House would not be affected in the long-term.

Cumulative Impacts

Impacts to visitor use and experience from completed cumulative actions would be the similar to those under the no action alternative resulting in beneficial impacts to visitor use and experience. Commercial businesses located in proximity to the Ford's Theatre National Historic Site provide additional services and recreational opportunities for visitors. During the construction periods for the CEL and actions under alternative B, there would be a short-term, minor, adverse impact to visitor use and experience due to the temporary closure of the Petersen House. Alternative B would have short-term, minor, adverse but long-term, beneficial impacts to visitor use and experience. The accommodation of the proposed connection between the CEL and the Petersen House under alternative B would result in a long-term, beneficial impact, with an expanded visitor experience to the Ford's Theatre National Historic Site and long-term moderate adverse impacts from the lack of accessible route. When combined with the impacts from the cumulative actions, alternative B would have a noticeable beneficial contribution and slight adverse contribution resulting in an overall long-term, beneficial impact to visitor use and experience.

Conclusion

Implementation of alternative B would result in short-term, minor, adverse impacts to visitor use and experience as a result of construction activities. There would be long-term, moderate, adverse impact to visitor use and experience for people with mobility impairment as they would continue to not be able to

physically gain access to the Petersen House. In addition, alternative B would have long-term, beneficial impacts to visitor use and experience from the interior and exterior improvements at Petersen House and from the direct connection and circulation pattern to the CEL interpretive experience. Cumulative impacts to visitor use and experience would be long-term and beneficial with alternative B having a noticeable beneficial contribution.

Impacts of Alternative C

Analysis

The impacts to visitor use and experience under alternative C would be similar to those under the no action alternative. In addition to the beneficial impacts from the rehabilitation and repair of the Petersen House, alternative C would rehabilitate the rear porch for an accessible route to Petersen House, providing accessibility to the door of the Death Room for people with physical disabilities. While disabled visitors would not be able to enter the Petersen House, the visitors could see and experience the Death Room from the doorway. The increase in the number of visitors to the Petersen House is expected to be negligible. The doorways to the Death Room are not proposed to be widened to accommodate wheelchairs due to the potential significant, adverse impacts to the primary historic fabric and interpretation of the house. These improvements would result in long-term, beneficial impacts for visitor use and experience.

As a result of the improved accessibility, visitors may occasionally experience a disruption in the one-way circulation patterns within the Petersen House when a disabled visitor would approach the Death Room from the CEL. This circulation pattern disruption would result in a long-term, negligible, adverse impact to visitor use and experience.

Cumulative Impacts

Effects to visitor use and experience from completed cumulative actions would be the similar to those under the no action alternative, resulting in beneficial impacts to visitor use and experience. Commercial businesses located in proximity to the Ford's Theatre National Historic Site provide additional services and recreational opportunities for visitors. During the construction periods for the CEL and actions under alternative C, there would be a short-term, minor, adverse impact to visitor use and experience due to the temporary closure of the Petersen House. Alternative C would have short-term, minor, adverse impacts from construction activities but long-term, beneficial impacts from interior and exterior improvements and improved access. In addition, alternative C would have long-term, negligible, adverse impacts to visitor use and experience from disruptions in circulation patterns. The connection between the CEL and the Petersen House under alternative B would result in a long-term beneficial and long-term, negligible, adverse impacts, with an expanded visitor experience to the Ford's Theatre National Historic Site. The rear porch would provide access to the door of the Death Room to disabled visitors, but may occasionally disrupt the visitor circulation pattern. When combined with the beneficial impacts from the cumulative actions, alternative C would have a noticeable beneficial contribution resulting in an overall long-term, beneficial impact to visitor use and experience.

Conclusion

Implementation of alternative C would result in short-term, minor, adverse impacts on visitor use and experience as a result of construction activities. In addition, alternative C would have long-term beneficial impacts to visitor use and experience from the interior and exterior improvements at Petersen House and from the direction connection and circulation pattern to the CEL interpretive experience, including the ability for disabled visitors to access the door of the Death Room. There would be negligible, adverse impacts from the occasional disruption of the visitor circulation pattern when disabled visitors approach the Death Room from the CEL. Cumulative impacts to visitor use and experience would be long-term and beneficial with alternative C having a noticeable beneficial contribution.

HUMAN HEALTH AND SAFETY

METHODOLOGY AND ASSUMPTIONS

The analysis of public safety considers risks to NPS staff and the general public that are associated with hazards in the project area as well as the proposed rehabilitation and repair. Impacts for this resource area were analyzed qualitatively, using information provided by the project architects and NPS staff familiar with the current operation and maintenance within the project area.

STUDY AREA

The study area for visitor use and experience is the Petersen House. The study area for cumulative impacts analysis encompasses the Ford's Theatre National Historic Site and surrounding properties, including the CEL.

IMPACT THRESHOLDS

The impact intensities for the assessment of impacts on health and safety follow. Where impacts on health and safety become moderate, it is assumed that current visitor satisfaction and safety levels would begin to decline, and some of the site's long-term visitor goals would not be achieved.

Negligible: Impacts on health and safety and accessibility would not be measurable or perceptible.

Minor: Impacts on health and safety would be measurable or perceptible, but it would be limited to a relatively small number of visitors or employees at localized areas. Portions of the site would not be universally accessible but critical characteristics would be accessible to the majority of people with disabilities. Mitigation could be needed, but would be relatively simple and likely to be successful.

Moderate: Impacts on health and safety would be sufficient to cause a change in accident rates at existing low-accident locations or in areas that currently do not exhibit noticeable accident trends. The site would not be universally accessible, but features of the site would be available to visitors with disabilities through alternative means (e.g., virtual tours, offsite exhibitions, etc.). Mitigation measures would probably be necessary and would likely be successful.

Major: Impacts on health and safety would be substantial. Accident rates in areas usually limited to low accident potential are expected to substantially increase in the short- and long-term. Extensive mitigation measures would be needed, and success would not be guaranteed. The site would not be accessible and alternative means for persons with disabilities to appreciate site resources would not be available.

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 A: No Action

Analysis

Under the no action alternative, lead based paint removal would not occur and loose floorboards would continue to present a tripping hazard for visitors and NPS employees. Lead-based paints could potentially cause harm to visitors and employee health only if ingested. Therefore, long-term, adverse impacts associated with presence of lead-based paints in the house would be negligible. Staff at the Petersen House would continue to warn visitors to be aware of loose floorboards in the house and the steep rear porch stairs in order to prevent tripping and slipping incidents. Infrequent, minor incidents of tripping and slipping, similar to incidences in the past, would continue to occur; however, they would not be expected to cause injury. Overall, implementation of the no action alternative would result in long term, negligible, adverse impacts to human health and safety.

Accessibility

Under the no action alternative the Petersen House would continue to be non-accessible to persons in wheelchairs. The penetration to create the connection between the Petersen House and the CEL would not occur and visitors would not be provided a direct connection between the buildings. Additionally, the rear porch would not be rehabilitated to accommodate an accessible means of entry to the Petersen House. The NPS would continue to offer an alternative way to experience the Petersen House at Ford's Theatre National Historic Site, where a video is available that shows the interior of the Petersen House and the Death Room. Due to physical limitations that preclude universal accessibility in the Petersen House and the availability of an alternative exhibit at Ford's Theater, long-term moderate adverse impacts to accessibility would result from the no action alternative.

Cumulative Impacts

None of the past, present and future projects included in the cumulative impact analysis would have any effect on human health and safety at the Petersen House Site, therefore, there would be no cumulative effects under the no action alternative.

Conclusion

Under the no action alternative, the Petersen House would continue to be non-accessible to person in wheelchairs. An alternative way to experience the Petersen House would be available at Ford's Theatre, which would offset adverse impacts. Lead-based paint removal would not occur and loose floorboards would continue to present a tripping hazard – resulting in long-term, negligible impacts. The no action alternative would result long-term moderate adverse impacts to human health and safety due to the accessibility issues at the Petersen House. There would be no cumulative impacts.

Impacts of Alternative B

Analysis

Under alternative B, impacts to accessibility would be the same as under the no action alternative- As a result of rehabilitation and repair, deteriorated lead-based paint would be removed to sound paint, which would result in long-term beneficial impacts to health and safety of both visitors and park personnel. All lead based paint removal would be performed in accordance to the National Institute for Occupational Safety and Health (NIOSH) standards as required by NIOSH Publication No 98-112 *Protecting Workers Exposed to Lead-based Paint Hazards* (NIOSH 1997). The repair and rehabilitation projects would also address the loose floorboards, which are the result of a lack of climate control. A climate control system would be installed, preventing future floorboards from warping and creating additional tripping hazards. During construction (November 2010 through May 2011), the Petersen House would be closed to the public to protect visitors from any adverse effects from construction activities. Additionally, the construction contractor would follow NPS construction contract standards, including implementation of an accident prevention program, installation of warning signs at the construction site and along nearby roads, and installation and maintenance of construction fences around the construction sites to prevent non-contractors and the public from entering the construction areas. Overall, alternative B would result in long term beneficial impacts to human health and safety.

Accessibility

Under the alternative B the Petersen House would continue to be non-accessible to persons in wheelchairs. The NPS would continue to offer an alternative way to experience the Petersen House at Ford's Theatre National Historic Site, where a video is available that shows the interior of the Petersen House and the Death Room. Due to physical limitations that preclude universal accessibility in the Petersen House and the availability of an alternative exhibit at Ford's Theater, long-term moderate adverse impacts to accessibility would result from alternative B.

Cumulative Impacts

Cumulative actions for human health and safety at the Petersen House are the same as described in the no action alternative; there would be no cumulative effects under alternative B.

Conclusion

Under alternative B, repairs and rehabilitation of the house and installation of a new climate control system would result in long term beneficial impacts to human health and safety. There would be no changes to accessibility relative to current conditions and long-term, moderate, adverse impacts would persist. There would be no cumulative impacts.

Impacts of Alternative C***Analysis***

Overall impacts to human health and safety would be expected to be similar to alternative B, with in long term beneficial impacts to human health and safety due to the repair of tripping hazards and the removal of lead-based paint.

Accessibility

Under alternative C, the existing rear porch would be renovated and rebuilt to accommodate an accessible means of entry to the Petersen House. While the Petersen House would still lack universal accessibility, critical primary contributing features to the historic fabric (such as the Death Room) would be able to be appreciated in close proximity. While other portions of primary contributing fabric would remain inaccessible (such as the front and back parlors), implementation of alternative C would improve accessibility relative to current conditions and comply with ADA requirements to the greatest extent possible without having a significant, adverse impact to the historic fabric. Implementation of alternative C would result in long-term, beneficial impacts to accessibility at the Petersen House.

Mitigation

Mitigation measures under alternative C would be the same as alternative B.

Cumulative Impacts

Cumulative actions for human health and safety at the Petersen House are the same as described in the alternative B; there would be no cumulative effects under alternative C.

Conclusion

Alternative C would improve accessibility relative to current conditions and would result in long-term beneficial impacts to accessibility at the Petersen House. Similar to the no action alternative, cumulative projects would have no impact on accessibility. Overall, alternative C would result in long-term, beneficial impacts to human health and safety. There would be no cumulative impacts.

PARK OPERATIONS AND MANAGEMENT**METHODOLOGY AND ASSUMPTIONS**

Park management and operations, for the purpose of this analysis, refers to the quality and effectiveness of the park staff to maintain and administer park resources and facilities and to provide for an effective visitor experience. This includes an analysis of the condition and maintenance of the facilities. Facilities included in this project include the Petersen House and Ford's Theatre. Park staff who are knowledgeable of these issues were members of the planning team that evaluated the impacts of each alternative. The impact analysis is based on the current description of park operations presented in "Chapter 3: Affected Environment" of this document.

STUDY AREA

The study area for park Operations and Management is the Ford's Theatre National Historic District Site.

IMPACT THRESHOLDS

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

Negligible: Park operations would not be impacted or the impact would not have a noticeable or appreciable impact on park operations.

Minor: Impacts would be detectable and noticeable, but would be of a magnitude that would not result in an appreciable or measurable change to park operations. If mitigation was needed to offset adverse effects, it would be simple and likely successful.

Moderate: Impacts would be readily apparent and result in a substantial change in park operations that would be noticeable to staff and the public. Mitigation measures could be necessary to offset adverse effects and would likely be successful.

Major: Impacts would be readily apparent and would result in a substantial change in park operations that would be noticeable to staff and the public and would require the park to readdress its ability to sustain current park operations. Mitigation measures to offset adverse effects would be needed and extensive, and success could not be guaranteed.

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 A: No Action

Analysis

Under the no action alternative, rehabilitation and repair of the Petersen House would not occur. Maintenance activities at the Petersen House would not change. Visitor Services at the Petersen House would continue to require one or two personnel daily.

With the no action alternative, park staff would continue to maintain Petersen House in its current state. The staff member located at the door to the Petersen House may have to direct visitors to the CEL as they exit the alleyway. The Petersen House would continue to operate without an adequate climate management system. As a result of a continued lack of climate control and the increased job responsibility of directing visitors to the CEL, the no action alternative would result in long-term, negligible, adverse impacts to park operations and management.

Cumulative Impacts

NPS projects within the vicinity of the Petersen House, such as the renovation of Ford's Theatre and previous renovations at Petersen House, have already been completed and have had beneficial impacts to park operations and management by improving park facilities. On-going projects in the study area, including the construction of the CEL, would have beneficial impacts to park operations and management by expanding the interpretive capability of the Ford's Theatre National Historic Site. The no action alternative would have long-term, negligible, adverse impacts to park operations and management. When combined with the impacts from the cumulative actions, the no action alternative would result in long-term, beneficial cumulative adverse impact to park operations and management.

Conclusion

Implementation of the no action alternative would result in long-term, negligible, adverse impacts to park operations and management from the additional direction required by park staff to guide visitors exiting

the Petersen House to the adjacent CEL as a result of a lack of direction connection between the two buildings. Cumulative impacts to visitor use and experience with the no action alternative would be long-term, negligible, and adverse.

Impacts of Alternative B

Analysis

Under alternative B, the Petersen House would be closed during the rehabilitation and repair construction period. During this time, no staff members would be needed for maintenance or interpretation at the Petersen House. Since construction would be expected to occur mostly during the off-peak season (November 2010 – May 2011), the closure of Petersen House would not be expected to impact the number of seasonal employees hired at the Ford's Theatre National Historic Site. The site would maintain the current number of employees during the construction period. The duties and responsibilities of staff may change slightly during the construction period, resulting in short-term, negligible, adverse impacts.

Once construction is completed, normal maintenance activities would continue; however, it would be at a reduced level. The interior of the house would not be affected as greatly, as under the no action alternative, from fluctuating temperature or humidity once the new climate control system is in place. Exterior and interior maintenance would also be at a lesser level due to installation of a new drainage system that would drain water away from the building walls. Impacts as a result would be long-term and beneficial to park operations and management.

Alternative B would include a direct connection to the CEL, which would impact the current circulation pattern for visitors at the Petersen House. As a result of the new connection, visitors would have a choice to either exit the Petersen House through the rear porch and out the side alleyway, or enter directly into an elevator vestibule in the CEL from the rear porch. An additional staff member may be required at this exit in the rear porch to interpret to the visitor what they would expect if they entered into CEL and inform them if they decide not to enter CEL they may leave through the side alley back to 10th Street. These additional staffing responsibilities would result in long-term, minor, adverse impacts to park operations and management.

Cumulative Impacts

Impacts to park operations and management from completed cumulative actions would be the similar to those under the no action alternative, resulting result in long-term, beneficial impacts. During the construction periods for the CEL and actions under alternative B, there would be a short-term, negligible adverse impact to park operations and management since all staff members would be, yet their duties and responsibilities may change slightly. Normal maintenance activities would continue at the house at a reduced level, which would result in long-term beneficial impacts to park operations. The new connection between the CEL and the Petersen House would have long-term, minor, adverse impacts to park operations and management as a result of a change in visitor circulation and the possibility of needing an additional staff member. When combined with the beneficial impacts from the cumulative actions, alternative B would result in an overall long-term, minor, adverse cumulative impact to park operations and management.

Conclusion

Implementation of alternative B would result in short-term, negligible, adverse impacts to park operations and management during construction activities. In addition, alternative B would have long-term beneficial impacts from reduced levels of maintenance and long-term, minor, adverse impacts to park operations and management from the direct connection and visitor circulation pattern to the CEL. Cumulative impacts to park operations and management would be long-term minor, adverse with alternative B.

Impacts of Alternative C

Analysis

The impacts to park operations and management under alternative C would be similar to those under alternative B. In addition to the impacts from the rehabilitation and repair of the Petersen House, alternative C would rehabilitate the rear porch for an accessible route to the house, providing accessibility to the door of the Death Room for people with physical disabilities. While disabled visitors would not be able to enter the Petersen House, these visitors would be able to approach the Death Room doorway from the CEL through the rear porch. The doorways to the Death Room are not proposed to be widened to accommodate wheelchairs due to the potential significant, adverse impacts to the primary historic fabric and interpretation of the house.

As a result of the accessibility option, an additional park staff member would be needed to coordinate visitor circulation patterns, as some visitors may be approaching the Petersen House from the CEL and not the 10th Street, NW entrance. This circulation pattern addition would result in a long-term, minor, adverse impact to park operations and management. Overall, impacts to park operations and management under alternative C would be long-term minor, and adverse. No impacts would be expected during construction.

Cumulative Impacts

Impacts to visitor use and experience from completed cumulative actions would be the similar to those under alternative B, resulting result in beneficial impacts to park operations and management. During the construction periods for the CEL and actions under alternative C, there would be would be a short-term, negligible, adverse impact on park operations and management. The proposed connection between the CEL and the Petersen House under alternative C would result in a long-term, negligible, adverse impact to park operations and management due to the need for additional park staffing at the site of the connection. When combined with the impacts from the cumulative actions, alternative C would result in an overall long-term, negligible, adverse cumulative impact to park operations and management.

Conclusion

Implementation of alternative C would result in short-term, negligible, adverse impacts to park operations and management during the construction period. After construction is completed, alternative C would have long-term, beneficial as a result of repairs and rehabilitation activities and minor, adverse impacts to park operations and management as a result of the direct connection and visitor circulation pattern to the CEL and from the new accessible route. Cumulative impacts to park operations and management would be long-term, minor, and adverse with alternative C.

CHAPTER 5: CONSULTATION AND COORDINATION

Coordination with state and federal agencies was conducted during the NEPA process to identify issues and/or concerns related to natural and cultural resources within the Ford's Theatre National Historic Site.

All consultations with the DC HPO, as mandated in Section 106 of the NHPA of 1966, are occurring as part of the development of this EA. The Ford's Theatre National Historic Site (Ford's Theatre and the Petersen House) is listed on the NRHP as historic structures. The 1982 National Register nomination was prepared by Gary Scott, NPS architectural historian. The nomination's period of significance was given as 1800-1899 and, specifically, as April 14-15, 1865 and the area of significance as Politics/Government and Theater. The text indicates that "Ford's Theatre is significant because it was the location of the assassination of Abraham Lincoln on the night of April 14, 1865, while President and Mrs. Lincoln were attending a performance of the play 'Our American Cousin'" and that "The Petersen House is significant in that it is the house where President Lincoln died."

The NPS began coordination with the DC HPO in April 2010. Section 106 consultation letters to the DC HPO and CFA were sent in May 2010 (see appendix A). A response has not been received and coordination and consultation is still on-going. This EA includes an Assessment of Effect under Section 106 of the NHPA in the "Environmental Consequences" section under "Cultural Resources" and a copy of this EA will be sent to the DC HPO and CFA to complete the Section 106 compliance.

During public scoping period, the NPS received one comment from the public regarding the proposed action. The commenter expressed concerns regarding the preservation of the historic nature of the building and the purpose in which the Petersen House is to be connected to the CEL. These concerns have been addressed in the discussions of the Purpose and Need for the Action and the Environmental Consequences.

This EA will be made available to the public and distributed to affected/interested agencies for a 30-day review and comment period. Notice of its availability will be posted on the NPS "Planning, Environment, and Public Comment" (PEPC) website at www.parkplanning.gov/FOTH.

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CHAPTER 7: GLOSSARY AND ACRONYMS

GLOSSARY OF TERMS

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

Archeological resource — Any material remnants or physical evidence of past human life or activities which are of archeological interest, including the record of the effects of human activities on the environment. They are capable of revealing scientific or humanistic information through archeological research. Any material remnants of human life or activities which are at least 100 years of age, and which are of archeological interest (32 CFR 229.3(a)).

Archeological survey — Archeological survey is the process of using explicitly specified methods to prospect for archeological sites- appropriate survey methods vary widely for different environments and archeological resource types.

Artifact — A material object made or modified in whole or in part by man. Among the most common artifacts on archeological sites are fragments of broken pottery (sherds), stone tools, chips (debitage), projectile points, and similar lithic debris.

Consultation — The act of seeking and considering the opinions and recommendations of appropriate parties about undertakings that might affect properties on the National Register. Appropriate parties ordinarily include the State Historic Preservation Officer and Advisory Council on Historic Preservation. Consultation is very formal and procedurally oriented. Correct procedures are promulgated in 36 CFR 800.

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

Council on Environmental Quality (CEQ) — Established by Congress within the Executive Office of the President with passage of the National Environmental Policy Act of 1969. CEQ coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives.

Criteria of effect — Standards promulgated by Advisory Council on Historic Preservation (NRHP) in (36 CFR 800) and applied to determine whether an undertaking will affect any property on NRHP.
Effect: The Federal action on a NRHP property or eligible property that results in a change, beneficial or adverse, in the quality or characteristics that qualify the property for inclusion on the NRHP. Adverse
Effect: action that results in the total or partial destruction or alteration on a NRHP property or eligible property. Adverse effect may also result if a property is isolated from its surrounding environment, if neglect of the property results in the deterioration or destruction of the property, and/or if the land occupied by the property is sold or transferred, and there are no provisions in the deed or transfer agreement to provide for the preservation, maintenance, or use of the property, etc.

Cultural landscape — 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.

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.

Ell — An ell is a wing of a building that is adjacent to the main portion of the building.

Enabling legislation — National Park Service legislation setting forth the legal parameters by which each park may operate.

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

Ethnographic resource — A site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it.

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 (FONSI) — 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 Environmental Impact Statement. A FONSI is based on the results of an environmental assessment.

Flashing — Thin sheet or strip of water-resistant material that's installed at roof intersections and projections, around windows and doors, and along the tops of foundation walls in order to direct water flow away from the building.

Historic district — A geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, landscapes, structures, or objects, united by past events or aesthetically by plan or physical developments. A district may also be composed of individual elements separated geographically but linked by association or history.

Historic Fabric — Physical material remains of a historic structure or object, whether original materials or materials incorporated in a subsequent historically significant period.

Historic property — A district, site, structure, or landscape significant in American history, architecture, engineering, archeology, or culture that meets National Register significance criteria.

Integrity — The authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during its historic or prehistoric period; the extent to which a property retains its historic appearance.

Lintel — A lintel is a horizontal structural member over an opening (such as a window or doorway), which carries the weight of the wall above it.

Midden — Any kind of feature containing waste products relating to day-to-day human life.

Museum object — Assemblage of archeological objects, objects, works of art, historic documents, and/or natural history specimens collected according to a rational scheme and maintained so they can be preserved, studied, and interpreted for public benefit. Museum objects normally are kept in park museums, although they may also be maintained in archeological and historic preservation centers.

National Environmental Policy Act of 1969 (USC 432 1-4347) (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 which are less damaging to the environment.

National Historic Preservation Act of 1966 (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 or National Register) — 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. The National Register provides for three levels of significance: national, state, and local.

National Historic Landmark (NHL) — A property designated by the Secretary of the Interior under authority of the Historic Sites Act of 1935 as having exceptional significance in the nation's history. NHLs are automatically listed on the NRHP and subject to all preservation requirements.

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

Period of significance — The span of time in which a property attained the significance for which it meets the National Register criteria.

Planning, Environment, and Public Comment — The National Park Service website for public involvement. This site provides access to current plans, environmental impact analyses, and related documents on public review. Users of the site can submit comments for documents available for public review.

Plinth — The projection base of a wall or column pedestal.

Programmatic Agreement — A written agreement among a federal agency, State Historic Preservation Officer, and Advisory Council on Historic Preservation that stipulates how a program or a class of undertakings repetitive in nature or similar in effect will be carried out so as to avoid or mitigate adverse effects on cultural resources.

Rehabilitation — The act or process of making possible an efficient compatible use for a historic structure or landscape through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural and architectural values.

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

Section 106 — Refers to Section 106 of the National Historic Preservation Act of 1966, which requires federal agencies to take into account the effects of their proposed undertakings on properties included or eligible for inclusion in the National Register of Historic Places and give the ACHP a reasonable opportunity to comment on the proposed undertakings.

Significance — Significance of cultural resources is evaluated in terms of NRHP criteria published in 36 CFR 60.

State Historic Preservation Officer (SHPO) — Official appointed by the governor of each state and U.S. Territory, responsible for certain responsibilities relating to federal undertakings within the state.

ACRONYMS

AC	Air Conditioning
ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disabilities Act
APE	Area of Potential Effects
CEL	Center for Education and Leadership
CEQ	Council on Environmental Quality
CFA	U.S. Commission of Fine Arts
CFR	Code of Federal Regulations
DC HPO	District of Columbia Historic Preservation Officer
DM	Departmental Manual
EA	Environmental Assessment
FONSI	Finding of No Significant Impact
NCPC	National Capital Planning Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NHL	National Historic Landmark
NIOSH	National Institute for Occupational Safety and Health
NPS	National Park Service
NRHP	National Register of Historic Places (or National Register)
PEPC	Planning, Environment and Public Comment
PMIS	NPS Project Management Information System
SHPO	State Historic Preservation Officer
TCP	Traditional Cultural Property
THPO	Tribal Historic Preservation Officer
USC	United States

CHAPTER 8: BIBLIOGRAPHY

Council on Environmental Quality (CEQ)

- 1978 Executive Office of the President. 1978. Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. Code of Federal Regulations Title 40, Parts 1500-1508. Washington D.C.
- 1997 Considering Cumulative Effects Under the National Environmental Policy Act. January 1997.

Cowardin, L.M., Carter, V., Golet, F.C., LaRoe, E.T.

- 1979 Classification of Wetlands and Deepwater Habitats of the United States. U. S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

District of Columbia Preservation League

- 1998 Guidelines for Archaeological Investigations in the District of Columbia. As amended. Prepared for the District of Columbia Department of Consumer and Regulatory Affairs, Historic Preservation Division.

District Office of Planning (DCOP)

- 2008 Map of Downtown Historic District. February 13, 2008.

Emerson, Rae

- 2010 Email Communication between Rae Emerson, Deputy Superintendent, Ford's Theatre National Historic Site, and Rudi Byron, The Louis Berger Group, Inc. on May 5, 2010

National Capital Planning Commission (NCPC)

- 2004 Comprehensive Plan for the National Capital: Federal Elements. Washington, D.C.

National Park Service

- 1962 Historic Structures Report, Restoration of Ford's Theatre
- 1982 National Register Nomination – Ford's Theatre.
- 1998a National Register Bulletin #38, Guidelines for Evaluating and Documenting Traditional Cultural Properties. Accessible at:
<http://www.nps.gov/history/nR/publications/bulletins/nrb38/>.
- 1998b Director's Order 28: Cultural Resources Management Guideline
- 2000 Director's Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services
- 2001 Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making and Handbook.
- 2002 *Historic Structures Report for the Petersen House* – House Where Lincoln Died. Ford's Theatre National Historic Site.

- 2003 Director's Order 77-2: *Floodplain Management*.
- 2006 Management Policies 2006. Accessed online at: <http://www.nps.gov/policy/MP2006.pdf>.
- 2008a Programmatic Agreement Among the National Park Service (U.S. Department of the Interior), The Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers for Compliance with Section 106 of the National Historic Preservation Act.
- 2008b The National Park Service. Ford's Theatre Brochure.
- 2009 The National Park Service. Public Use Statistics Office: Ford's Theatre National Historic Site. Year to Date Visitation: Report Date December 2009.
<http://www.nature.nps.gov/stats/viewReport.cfm> (it won't go directly to the site without inputs)
- 2010 The National Park Service. Ford's Theatre National Historic Site Website. Available: <http://www.nps.gov/foth/index.htm>. Accessed May 4, 2010.
- nd-a The National Park Service. Public Use Statistics Office: Ford's Theatre National Historic Site. Annual Park Visitation. No date.
- nd-b The National Park Service. Petersen House Standard Operating Procedures. No Date.

National Institute for Occupational Safety and Health (NIOSH)

- 1997 Publication No 98-112: Protecting Workers Exposed to Lead-based Paint Hazards. A Report to Congress. Chapter 4. January 1997. Available AT:
<http://www.cdc.gov/niosh/c4b98112.html>.

Oehrlein & Associates

- 2007 *Petersen House Condition Assessment & Recommendations*. Ford's Theatre National Historic Site, National Mall and Memorial.

Parker, Patricia L., and Thomas F. King

- 1998 *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. National Register Bulletin 38. National Register of Historic Places, Washington, D.C.

Shellenhamer, Jason, John Bedell, and Charles LeeDecker

- 2010 Draft Archeological Investigations at Petersen House (51NW65), Ford's Theatre National Historic Site, Washington, D.C. June 2010. Prepared For National Capital Region, National Park Service by The Louis Berger Group, Inc., Washington, D.C.

Swift, Gloria

- 2010 Email Communication between Gloria Swift, Museum Curator, Ford's Theatre National Historic Site, and Julia Yuan, The Louis Berger Group, Inc. on May 20, 2010.

Virta, Matthew R.

- 1991 Archeology at the Petersen House: Unearthing an Alternate History. On file, at the National Park Service, National Capital Region, Washington, D.C.

United States Access Board (USAB)

- 2004 Americans with Disabilities Act and Architectural Barriers Act Guidelines. July 23, 2004.
Available online at: <http://www.access-board.gov/ADA-ABA/final.pdf>. Accessed April 19, 2010.



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 major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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