National Park Service
U.S. Department of the Interior

Little Bighorn Battlefield National Monument
Montana

# Interim Visitor Center Plan
# Environmental Assessment /Assessment of Effect
**June 2006**

This page intentionally left blank.

# Environmental Assessment
# Assessment of Effect

---

# Interim Visitor Center Plan

## Little Bighorn Battlefield National Monument • Montana

**Summary**

The National Park Service is proposing to remove the observation room and interpretive patio from the Visitor Center at Little Bighorn Battlefield National Monument in order to facilitate the construction of an all weather multipurpose room on top of the same foot print. On a busy summer day the park will host 13 interpretive presentations with 100-200 individuals per presentation. Currently, the only place to host interpretive presentations is a patio under a fiberglass overhang outside of the observation room. Park visitors are exposed to the heat, cold, wind, rain, lightening, background noise from visitors' conversations, loud vehicular traffic, and associated air pollution. This environmental assessment examines in detail four alternatives: No Action, Replace the observation room & interpretive patio area with a multipurpose room (proposed action), Long term implementation of the *General Management and Development Concept Plans* 1986 (revised 1995), and Construct a new visitor center to be leased from GSA (General Services Administration) off the existing battlefield boundary at either Garryowen or another location near the junction of I-90 and Highway 212.

Public Comment

If you wish to comment on the environmental assessment, you may mail comments to the name and address below or post comments online at http://parkplanning.nps.gov/LIBI. This environmental assessment will be on public review for 30 days. It is the practice of the NPS to make all comments, including names and addresses of respondents who provide that information, available for public review following the conclusion of the environmental assessment process. Individuals may request that the NPS withhold their name and/or address from public disclosure. If you wish to do this, you must state this prominently at the beginning of your comment. Commentators using the website can make such a request by checking the box "keep my contact information private." NPS will honor such requests to the extent allowable by law, but you should be aware that NPS may still be required to disclose your name and address pursuant to the Freedom of Information Act. **We will make all submissions from organizations, businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses available for public inspection in their entirety.**

Superintendent
Little Bighorn Battlefield National Monument
P.O. Box 39
Crow Agency, MT 59022-0039

# TABLE OF CONTENTS

TABLE OF CONTENTS ..... ii
PURPOSE AND NEED ..... 1
purpose ..... 1
need ..... 2
Scoping ..... 2
Relationship Of The Proposed Action To Previous Planning Efforts ..... 4
Issues and Alternatives ..... 4
Issues identified during scoping ..... 4
New Alternatives or Elements ..... 5
Impact Topics Selected For Detailed Analysis ..... 6
Impact Topics Dismissed from Detailed Analysis ..... 7
Alternative A: NO-ACTION ..... 17
Alternative B: PReferred alternative ..... 17
Staging Area ..... 18
Sustainability ..... 18
ALTERNATIVE C: Long Term Implementation of the 1986 GMP ..... 18
Alternative D: Construct a new visitor center off the existing boundary ..... 20
Mitigating Measures ..... 20
ENVIRONMENTALLY PREFERRED ALTERNATIVE ..... 23
Comparative Summary of Alternatives ..... 28
Summary of Environmental Consequences ..... 30
Cumulative impacts ..... 32
Past Actions ..... 33
Current and Future Actions ..... 33
impairment of park resources or values ..... 33
IMPACTS TO CULTURAL RESOURCES AND §106 OF THE NATIONAL HISTORIC PRESERVATION ACT ..... 34
ARCHEOLOGICAL RESOURCES ..... 35
Affected Environment ..... 35
Methodology ..... 36
Regulations and Policies ..... 37
Alternative A: No Action ..... 37
Alternative B: Replace Observation Room and Interpretive Area with a Multipurpose Room (NPS Preferred Alternative) ..... 38
Alternative C: Long Term Implementation of the 1986 General Management Plan, revised in 1995 ..... 39
Alternative D: Construct a New Visitor Center Off of the Existing Battlefield Boundary in the Vicinity of either Garryowen or the Junction of I-90 and Highway 212 ..... 40

CULTURAL LANDSCAPES ..... 42
Affected Environment ..... 42
Methodology ..... 45
Regulations and Policies ..... 46
Alternative A: No Action ..... 47
Alternative B: Replace Observation Room and Interpretive Area with a Multipurpose Room (NPS Preferred Alternative) ..... 47
Alternative C: Long Term Implementation of the 1986 General Management Plan, revised in 1995 ..... 48
Alternative D: Construct a New Visitor Center Off of the Existing Battlefield Boundary in the Vicinity of either Garryowen or the Junction of I-90 and Highway 212 ..... 49
Visitor use and Experience ..... 51
Affected Environment ..... 51
Methodology ..... 51
Regulations and Policies ..... 52
Alternative A: No Action ..... 53
Alternative B: Replace Observation Room and Interpretive Area with a Multipurpose Room (NPS Preferred Alternative) ..... 54
Impact Analysis Alternative C: Long Term Implementation of the 1986 General Management Plan, revised in 1995 ..... 56
Alternative D: Construct a New Visitor Center Off of the Existing Battlefield Boundary in the Vicinity of either Garryowen or the Junction of I-90 and Highway 212 ..... 57
AGENCIES/TRIBES/ORGANIZATION/INDIVIDUALS CONTACTED ..... 60
PREPARERS ..... 60
list of recipie nts ..... 60
Federal Agencies ..... 60
Indian Tribes ..... 60
State and Local Agencies ..... 61
Organizations ..... 61
Individuals ..... 61
REFERENCES ..... 62

TABLES

1: Indian Groups Notified by Letter of Proposed Action During Scoping.....3
2: Comparative Summary of Alternatives.....26
3: Summary of Environmental Consequences.....27

This page intentionally left blank.

# PURPOSE AND NEED

## PURPOSE

"Based on the authorizing legislation, the 1935 Historic Sites Act, and mandate in the National Park Service Organic Act of 1916 to preserve, protect, and interpret cultural and natural resources, the purpose of Little Bighorn Battlefield National Monument is: To preserve and protect the historical and natural resources pertaining to the battle, and to provide visitors with an improved understanding of the events leading up to the battle, the sequence of activities by both military and Native American contingents on June 24-27, 1876, and the historical consequences of the results of those fateful days." (NPS 1997a).

Little Bighorn Battlefield National Monument was originally set aside as a national cemetery of the Fourth Class under General Order No. 78 United States Army on August 1, 1879. Executive Order 337443 formally set aside one square mile boundary for the cemetery. The Reno-Benteen Battlefield was acquired through the Act of April 14, 1926. In 1940, Custer Battlefield National Cemetery management was transferred to the National Park Service from the War Department. In 1946, Public Law 322 changed the name of the site to Custer Battlefield National Monument. Construction of a visitor center and museum was completed in 1952. In 1991, Public Law 102-201 enacted the name change to Little Bighorn Battlefield National Monument, and an Indian Memorial to honor Native American participation in the battle was authorized. Today the monument occupies 765.34 acres in south-central Montana. It consists of two separate parcels. The main parcel contains the ridge where Custer made his last stand against the Lakota, Cheyenne, and Arapaho Indians. The second parcel contains the site of the Reno-Benteen Battlefield defense perimeter. The two parcels are connected by 4.1 miles of paved national monument road.

The purpose of this project is to provide a quality National Park Service experience that is safe and accessible to all visitors. Existing conditions are so crowded that visitors are unable to obtain the full story including information about the events leading up to the battle, the battle, the life of a soldier in the cavalry, or the life of the Native Americans living in the area before and after the battle.

The visitor center was completed in 1952 for an annual visitation of about 100,000. Today the annual visitation has reached approximately 400,000. For the last four years, an average of 24,879 visitors annually, have been able to view the park's film. Most of the large volume of visitors cannot view the park's film or appreciate the interpretive presentations due to inadequate space in the visitor center.

The 1986 General Management Plan (GMP), revised in 1995, calls for an expansion of the boundaries of the monument and for the construction of a new larger visitor center in a location where the story of the battle can be illustrated. "A new visitor orientation/ administrative facility, located with convenient access from Interstate 90, would provide initial contact to the park visitor. Visitors would receive orientation of the park and be encouraged to proceed on a loop tour, or those with limited time could proceed directly to "Last Stand Hill." In either case, visitors could stop at the orientation

structure on their way out of the park to gain additional information." (NPS 1995a). This interim alterative project is viewed as a short-term solution to an immediate problem and is not intended to disrupt the momentum of meeting the goals established in the GMP.

## NEED

This project needs to solve several immediate issues. Park visitors currently gather outside underneath a fiberglass overhang that is attached to the observation room. This roof overhang helps to provide shade on hot sunny days. Although the overhang is noisy and leaks after a rain shower, it does offer limited shelter. Visitors must endure high winds and other weather phenomena along with noise and air pollution associated with the main park road that is less than 65-70 feet from this location. During the summer season up to 200 visitors try to crowd into this small space to observe one of up to thirteen daily interpretive presentations.

During the fall and spring, the park film is shown in a converted storage room in the basement of the visitor center. The public access this space using an exterior stairway, making the area inaccessible to visitors with mobility impairments and failing to meet the Architectural Barriers and Rehabilitation Act. The stairs leading down into this room are uneven and there is a false landing at the base that always trips visitors who take a few steps and believe that they have reached the bottom only to discover that there is one more step at the interior door threshold. During the winter the stairs are icy and slippery. The 45 seat audiovisual room cannot accommodate the current daily visitation during the summer months and does not have adequate ventilation for large numbers of visitors. For these reasons, the audiovisual room is only available in the spring and fall during favorable weather.

The observation room currently has large single pane windows that allow for the transfer of heat and cold. It is impossible to maintain a stable temperature in this room. Although the doors between the observation room and the museum exhibit room most often remain closed, the temperature fluctuations have a great impact on the objects in the museum exhibit area.

## SCOPING

Scoping is an early and open process to determine the breadth of environmental issues and alternatives to be addressed in an environmental assessment. Little Bighorn Battlefield National Monument conducted both internal scoping with appropriate National Park Service interdisciplinary staff and external scoping with the public, agencies, interested and affected groups.

Internal scoping was conducted by the staff of Little Bighorn Battlefield National Monument and resource professionals of the National Park Service's Denver regional office. This interdisciplinary process defined the purpose and need, identified potential actions to address the need, determined what the likely issues and impact topics consist, and identified the relationship, if any, of the proposed action to other planning efforts at the monument.

In 1997, a visitor center design plan was proposed to improve visitor services, interpretation, museum collection storage and displays. A lease agreement with GSA was explored and found to be too costly.

A project request was developed in 2003 for 80% Fee Demonstration funding to construct a multipurpose room. The Monument contracted preliminary design work to determine initial feasibility and cost estimates. An internal scoping meeting was conducted on June 14-15, 2005 with park staff and regional office staff to discuss project issues, procedures, and identify possible impacts.

In June 24, 2005 a presentation was made to the Custer Battlefield Historic Museum Association and others that described the proposed project.

The project has generated some interest, both pro and con, from visitors, local newspapers and special interest groups because the goals of the GMP have not been met.

The Coalition for Concerned Retirees sent a letter pointing out that the project is inconsistent with the park's GMP.

A press release inviting the public to attend the open house and discuss the proposed Interim Visitor Center Plan was sent out on November 14, 2005.

A scoping brochure describing the proposed action was sent to the park's mailing list, park neighbors, and local agencies, state historic preservation officer, park affiliated tribes, a local newspaper of record, and any other parties that may be interested. Brochures were mailed on November 15 & 16, 2005.

An open house was held on December 20, 2005 in the Little Bighorn Battlefield visitor center observation room.

The following Native American Indian tribes traditionally associated with the lands of Little Bighorn Battlefield National Monument and others with whom monument staff regularly consults were also apprised by letter of the proposed action on November 15 & 16, 2005 or January 13, 2006.

**Table 1: Indian Groups Notified By Letter of Proposed Action During Scoping**

| | | | |
|---|---|---|---|
| Fort Peck Assiniboine Tribe | Crow Tribe of Indians | Northern Arapaho Tribe | Standing Rock Tribe |
| Southern Cheyenne /Arapaho Tribes of Oklahoma | Crow Creek Sioux Tribe | Oglala Sioux Tribe | Three Affiliated Tribes/ Mandan Hidatsa Arikara Nation |
| Cheyenne River Sioux Tribe | Lower Brule Sioux Tribe | Rosebud Sioux Tribe | |

The undertakings described in this document are subject to §106 of the National Historic Preservation Act, as amended in 1992 (16 USC §470 *et seq.*). Consultations with the Montana State Historic Preservation

Office (SHPO) have been ongoing since the inception of the project. This environmental assessment/assessment of effect will also be submitted to the SHPO for review and comment to fulfill Little Bighorn Battlefield National Monument's obligations under §106 (36 CFR §800.8[c], *Use of the NEPA process for section 106 purposes*).

## Relationship Of The Proposed Action To Previous Planning Efforts

The 1986 General Management Plan (GMP), revised in 1995, calls for an expansion of the boundaries of the Monument and for the construction of a new larger visitor center and associated infrastructure in a location where the story of the battle can be illustrated. This proposed interim alteration project is viewed as a short-term solution to an immediate problem and is not intended to disrupt the momentum of meeting the goals established in the GMP.

## Issues and Alternatives

NPS staff conducted internal scoping that identified potential issues and impact topics that require additional investigation to address the requirements of the National Environmental Policy Act of 1969 and Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-making (NPS 2001a). These issues were identified from previous monument planning efforts, input from various interested public groups and individuals, and input from local, state and federal agencies. The issues identified were to provide an all weather space that is accessible to all, where staff can safely conduct interpretive programs and show the park's educational film.

Recreation Fee Demonstration Funding can be used for major development within a park. The project must meet the criteria for this program by addressing deferred maintenance or providing for high priority critical resource protection. This project would replace a room is too small to meet the interpretive needs and to correct several safety issues associated with showing the park film in a converted storage room in the basement of the visitor center. Moving interpretive programs to a universally accessible space would bring the park in compliance with the Architectural Barriers and Rehabilitation Act.

## Issues identified during scoping

Cultural Resources: Impact of Proposal & Alternatives

- Concern about damaging or destroying cultural resources in the vicinity of the visitor center.
- The increased size of the visitor center would be an intrusion on the historic cultural landscape.
- The original visitor center is an intrusion on the historic site and the proposed modification to the building would double the footprint of the building and increase the impact of the present visitor center.

Visitor Experience: Impact of Proposal & Alternatives

- The visitor center is in dire need of attention and is too small for the current level of visitation. The present hazards must be addressed.
- Current visitor center is not conducive to meeting the needs of the visitor and can not meet those needs of visitors since it was not able to present the Little Bighorn Battlefield story from the beginning through the end point of the battle.

- The impact of the visitor overcrowding needs to be dispersed throughout the site in order to decrease the impact to the site. Park visitors need to be given the opportunity to experience the solitude of this site.
- The park film is currently shown only during the shoulder seasons in a converted storage room in the basement due to safety concerns and overcrowding. The stairs leading to the basement are uneven and there is a false landing just inside the door that often trips visitors. Mobility impaired visitors can only see the film in the bookstore as shoppers move around the book sales area.

Integration of Planning, Design, & Compliance Process

- Did the park follow the appropriate process to ensure that the NEPA and § 106 requirements were addressed?

Socioeconomic Environment

- Can the park work with the state to improve access to the park that creates economic opportunity for local park neighbors?

Recreation Fee Demonstration Program

- Can Recreation Fee Demonstration Program funding be used for major development?

The criteria for using Recreation Fee Demonstration Funding require that the project address deferred maintenance or provides for high priority critical resource protection. This project would address several criteria of the Fee Demo Funding source including:

- Compliance with health and safety codes
- Accessibility compliance
- Rehabilitation to provide energy savings and sustainability
- Rehabilitation of interpretive assets, such as waysides and systems including audiovisual
- Rehabilitation of museum exhibit spaces in compliance with museum property mandates

This project would replace a functionally obsolete space, repair a leaking roof, meet compliance with health and safety codes, address the Architectural Barriers and Rehabilitation Acts, meet structural fire codes, rehabilitation of interpretive assets including audiovisual systems, and provide for a stable environment for the museum exhibit space.

## NEW ALTERNATIVES OR ELEMENTS

Public commenters suggested several new alternatives, many of which were either outside the scope of this project or failed to meet the project objectives.

Alternatives outside of the scope of this project

- Accepting the donation of a new visitor center and additional museum collections pertaining to the Battle of the Little Bighorn.

- Accept land donation that the Custer Battlefield Preservation Committee has offered to the park and additional funding up to $15,000,000 to be used towards the construction of a new visitor center.
- Proposed new infrastructure for a road from the Garryowen area through the battlefield ending up at Last Stand Hill.
- There may be too many artifacts in the Garryowen area, is there another site that could be considered?
- An observation deck on top of the current visitor center may provide a better view of the battlefield and accommodate more visitors. The deck could be covered and have sides to provide protection from the elements.
- For the NPS to work with the Montana Department of Transportation to move the rest area on I-90 near Fly Creek to the Crow Agency and construct a visitor center there with the state of Montana.

Alternatives that will not address the issues defined by this project

- Move some of the functions currently performed in the visitor center to another location to make room for a multipurpose room for interpretive presentations and to show the park film.
- Work with the Yellowtail Dam to try to make the introductory film from Little Bighorn Battlefield available for showing in their air conditioned theatre.

## Impact Topics Selected For Detailed Analysis

After external scoping, the issues and concerns potentially affecting the proposed action alternatives were refined into distinct impact topics to facilitate the analysis of environmental consequences. This allows for a standardized comparison between alternatives based on the most relevant information. A brief rationale for the selection of each impact topic is given below.

### Archeological Resources

Extensive archeological surveys of the Little Bighorn Battlefield National Monument were completed by the Midwest Archeological Center (MWAC) in 1984, 1985, 1989 and 1994. Ten archeological sites were identified within Little Bighorn Battlefield National Monument, and include nine prehistoric lithic scatter sites (located on the Custer Battlefield), and one archeological site pertaining to the historic Battle of the Little Bighorn that encompasses both the Custer and Reno-Benteen Battlefields. Archeological materials, including some human remains (associated with the original 1876-1881 Seventh Cavalry grave sites) from various Seventh Cavalry headstones, were identified, collected and analyzed. No Native American human remains or burial sites from Lakota Sioux, Cheyenne, and Arapaho casualties from the battle are known to be located in Little Bighorn Battlefield National Monument, including the project area. Because archeological resources have been found in proximity of the visitor center and must be addressed by all proposed alternatives, archeological resources is addressed as an impact topic in this environmental assessment / assessment of effect.

### Visitor Use and Experience

The mission of Little Bighorn Battlefield National Monument is to

provide visitors with an understanding of the historic events leading up to the battle, the encounter itself, and the consequences by both the military and Native American contingents, for the enjoyment of future generations (NPS 2002a). Visitor experience at Little Bighorn Battlefield National Monument includes interpretation and educational experiences associated with the Battle of the Little Bighorn, accessibility and circulation, and visitor safety while visiting the monument. All of the alternatives that are being considered have the potential to affect visitor experiences at Little Bighorn Battlefield National Monument. For this reason visitor experience is addressed as an impact topic in this environmental assessment / assessment of effect.

### Cultural Landscapes

The National Historic Preservation Act of 1966, as amended (16USC 470 et seq.); the National Environmental Policy Act of 1969 (42 USC 4321 et seq.); NPS Director's Order #28: Cultural Resource Management Guideline (NPS 1998), NPS Management Policies 2001 (NPS 2000a), and NPS Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-making and its accompanying handbook (NPS 2001a) require the consideration of impacts on cultural landscapes listed in or eligible for listing in the National Register of Historic Places (NRHP).

The cultural landscape of Little Bighorn Battlefield National Monument is made up of two National Register historic districts - the Custer Battlefield Historic District and the Reno-Benteen Battlefield. Construction on the east end of the visitor center would have an impact on one area within the eastern most historic district. This area of the visitor center was excavated during the construction of the visitor center and experiences daily visitor impact as the area around the outside of the observation room is used as the interpretive patio for up to 13 interpretive presentations per day during the summer months. The integrity of the cultural landscape associated with the historic district needs to be considered. Cultural landscapes are included in the detailed analysis in this environmental assessment / assessment of effect.

## Impact Topics Dismissed from Detailed Analysis

The following impact topics were analyzed and dismissed from further consideration because either there would be no impacts or the effects are minor or less with no controversy:

### Prime and Unique Farmlands

In August 1980, the Council on Environmental Quality (CEQ) directed that federal agencies assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) as prime or unique (CEQ 1980). Under the Farmland Protection Policy Act (FPPA) (7 USC 4201), prime farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, and oil seed and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion (7 USC 4201 (c) (1) (B)). Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries,

fruits, and vegetables (7 USC 4201 (c) (1) (B)). According to NRCS, none of the soils in the project area are classified as prime and unique farmlands. Therefore, the topic of prime and unique farmlands was dismissed as an impact topic in this document.

## Socioeconomic Environment

The preferred alternative considered would not change local and regional land use or impact local businesses or other agencies in the long term. However, several of the proposed alternatives would provide a beneficial negligible short-term impact to the local economies of nearby Crow Agency (e.g. minimal increases in employment opportunities for the construction workforce and revenues for local businesses and government generated from construction activities and workers). Construction is proposed to occur September 2007 until April 2008 during the off season. One concessionaire, Apsaalooke Tours, runs private tours in the monument during the summer season. No other concessionaires operate within the monument. A part of the parking lot may be used by the contractor for holding construction equipment or materials. There would be no long-term adverse or beneficial impact for these alternatives. Therefore, socioeconomic environment will not be addressed as an impact topic in this document.

## Environmental Justice

According to the Council on Environmental Quality, environmental justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies (CEQ 1997). Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

Executive Order 12898, ("Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”) requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. The proposed action is located within the Crow Indian reservation; however, no houses, businesses or use of property would be impacted under the proposed project. The action alternatives would not have disproportionate health or environmental effects on minorities or low-income populations or communities as defined in the Environmental Protection Agency's Environmental Justice Guidance (EPA 1998). Therefore, environmental justice was dismissed as an impact topic in this document.

## Indian Trust Resources

Indian trust assets are owned by Native Americans but held in trust by the United States. Secretarial Order 3175 (“Identification, Conservation and Protection of Indian Trust Assets”) requires that any anticipated impacts to Indian trust resources due to a proposed project or action by agencies within the Department of the Interior be

explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to Native American Indian and Alaska Native tribes. The lands within the monument boundaries are not held in trust by the Secretary of the Interior for the benefit of Indians. For the preferred action alternative the proposed improvements to the visitor center are not within Indian trust resources. Therefore, Indian trust resources were dismissed from detailed analysis in this environmental assessment /assessment of effect.

## Ethnographic Resources

Native American Indian tribes that are affiliated with Little Bighorn Battlefield National Monument were contacted and invited to participate in the park open house or to present their concerns through the Scoping Brochure to Little Bighorn Battlefield National Historic Site staff. The Hidatsa, Mandan and Arikara Nations (Three Affiliated Tribes) contacted park service staff and inquired about the information presented in the scoping brochure. They said that they would contact the Crow Tribe and defer to their concerns and opinions. The Crow Tribal Executive Branch responded with a letter of support for the proposed expansion to the Little Bighorn Battlefield NHS visitor center as this would “enhance the visitor’s experience at the monument.” “The improvements of park facilities have benefited park visitors, enrolled members of the Crow Tribe and the surrounding communities.” Because no ethnographic concerns were identified, ethnographic resources were dismissed.

## Historic Structures

Many historic structures exist within Little Bighorn Battlefield National Monument. Near the east end of the visitor center, there are two historic structures identified on the park’s List of Classified Structures (LCS): the white marble headstones (LCS #11522), which mark the approximate location for the burial sites of U.S. military soldiers and the Seventh Cavalry Memorial (LCS # 11520) that was erected to memorialize and denote a mass grave for soldiers who lost their lives with the Seventh Cavalry against the Lakota, Cheyenne, and Arapaho at the battle of the Little Bighorn. It was set in place in July 1881. The visitor center was recently evaluated and was determined to be ineligible for listing on the National Register of Historic Places. The Montana State Historic Preservation Office concurred with the NPS determination. Therefore, historic structures were dismissed from detailed analysis in this environmental assessment/ assessment of effect.

## Threatened, Endangered, or Special Concern Species

The Endangered Species Act (ESA) (16 USC 1531 et seq.), as amended, requires an examination of impacts on all federally listed threatened or endangered species. NPS policy also requires examination of the impacts on federal candidate species, as well as state-listed threatened, endangered, candidate, rare, declining, and sensitive species (NPS 2000a).

According to the Little Bighorn Battlefield National Monument Environmental Assessment Biological Report prepared for the Rehabilitate Tour Road project (NPS 2005b), the whooping crane (federally endangered) and bald eagle (federally threatened) are the only federally listed species known to occur within or near the project area (DEA 2004).

Only the nearby Little Bighorn River riparian area provides potential stopover or foraging habitat for the whooping crane, however, use of the area is unlikely due to the presence of Interstate 90 to the west and heavy use of areas to the east by tourists. The proposed project would not impact any incidental use of the Little Bighorn River riparian area by whooping cranes; therefore there would be no impact to whooping cranes or their habitat.

Bald eagles may fly over the project area, but they are unlikely to forage or remain in the immediate project area due to high disturbance factors from foot and automobile traffic within the monument. The United States Fish and Wildlife Service - USFWS delineates 0.5 mile as the area of concern for bald eagles nests. No suitable bald eagle nesting habitat exists within the project area, and no known bald eagle nest sites exist within 0.5 mile of the project area. Bald eagle nest surveys would continue until project completion. If a nest or activity area is identified within 0.5 mile of the project area, the monument would contact USFWS and limit any activities that could impact bald eagles until a biological assessment (BA) pursuant to section (7) of the ESA is prepared and consultation is complete (DEA 2004). Based on current conditions, there would be no impact to bald eagles or their habitat.

NPS policies direct parks to address impacts to state-listed species of concern and potential habitat for state-listed species (NPS 2000a). Several state-listed species of concern occur within the monument and may nest within and adjacent to the project area, including Swainson's hawk, burrowing owl, Brewer's sparrow, Columbian sharp-tailed grouse, grasshopper sparrow, lark bunting, and Long-billed curlew. If active nests are located within 0.5 mile of the project area seasonal restrictions on construction activities would be implemented to minimize / mitigate direct impacts to nests or individuals. With implementation of NPS recommended mitigation, the short-term impacts on state-listed species of concern from human-related disturbance under the action alternatives would be adverse site-specific negligible, lasting only during the construction period.

Long-term impacts to state-listed species of concern from construction of the action alternatives would include habitat disturbance through the loss of vegetation. Long-term impacts to state-listed species of concern from construction of the action alternatives would be approximately 1.0 acre of mowed lawn. The majority of construction would occur in previously disturbed areas, such as parking areas and the area around the east end of the visitor center. These are areas that were disturbed when these features were originally constructed. The removal of vegetation in these areas would result in a negligible loss in the amount of habitat in the project area. If any construction activities would result in the taking of any migratory birds or nests, a Migratory Bird Permit from the U.S. Fish and Wildlife Service would be required. Because only a small amount of habitat would be affected by the proposed action, long-term impacts to state-listed species of concern from habitat disturbance would be adverse site-specific negligible.

A population of horned lizard occurs at Weir Point in the study area according to park personnel. This is the only known population of this species in the park. Weir Point would not be affected by construction on the east end of the visitor center. Therefore, threatened, endangered species, and special concern species were dismissed from detailed analysis in this environmental assessment / assessment of effect. This environmental assessment / assessment of effect would be submitted to the U.S. Fish and Wildlife Service, for review and comment.

## Designated Critical Habitat, Ecologically Critical Areas, Wild and Scenic Rivers, Other Unique Natural Areas

The grassland within Little Bighorn Battlefield National Monument has been designated as a pristine Unique Natural Area. It has been designated as such because of the intact native plant community representative of the Northern Mixed Grass Prairie of southeastern Montana and the exclusion from grazing.

Some exotic and other invasive species occur along the existing road corridor. This is especially prevalent on the road shoulders of areas disturbed by construction activities. An intense preconstruction control program consisting of timely herbicide applications, would be initiated in the fall of 2007 and continue through 2008. For two years post construction, the revegetated areas would be monitored. Re-occurring invasive species and noxious weeds would be eradicated by herbicide treatments and/or manual pulling. With these protective measures in place, this project would have a beneficial negligible long-term impact because it would improve the existing condition by eradicating invasive species that may degrade the pristine nature of the grassland. Therefore, this impact was dismissed from detailed analysis in this environmental assessment / assessment of effect.

## Wildlife

National Park Service *Management Policies 2001* require the protection of the components and processes of naturally occurring biotic communities, including the natural abundance, diversity, and ecological integrity of plants and animals (NPS 2000a). NEPA requires federal agencies to use all practicable means to restore and enhance the quality of the human environment and to avoid or minimize any possible adverse impacts of their actions on the environment.

Wildlife commonly found at Little Bighorn Battlefield National Monument include common species of rodents (mice, woodrats, voles, ground squirrels, etc.), coyote, mule deer, badger, pronghorn antelope, songbirds (western kingbird, American goldfinch, European starling, etc.), and amphibians and reptiles (tiger salamander, racer, gopher snake, rattlesnake, horned lizard, etc.). According to USFWS, there are no fish present in the three intermittent tributaries that cross the Tour Road via culverts (DEA 2004).

There would be both short- and long-term displacement of wildlife under the action alternatives. Short-term adverse negligible construction impacts would include displacement of wildlife from human-related noise and visual disturbance caused by construction activities. Long-term impacts to wildlife from construction of the action alternatives would be approximately 1.0 acre of habitat

disturbance through loss of lawn. The majority of construction would occur in previously disturbed areas, such as parking areas and the east end of the visitor center. These areas were disturbed when these features were originally constructed. The removal of vegetation in these areas would result in a negligible loss in the amount of habitat in the project area.

Any wildlife present in the area has unquestionably been long habituated to human activity, noise, and traffic. Wildlife would probably avoid the construction zone to a certain extent during construction. Some small animals could be killed or forced to temporarily relocate outside the project area; larger animals would probably avoid the site altogether. If any construction activities would result in the taking of any migratory birds or nests, a Migratory Bird Permit from the U.S. Fish and Wildlife Service would be required.

Short-term impacts on wildlife from human-related disturbance under the action alternatives would be adverse site-specific negligible, lasting only during the construction period. Because only a small amount of habitat would be affected by the proposed action, long-term impacts to wildlife from habitat disturbance would be adverse site-specific negligible. Therefore, wildlife was dismissed from detailed analysis in this environmental assessment / assessment of effect.

## Vegetation

*NPS Management Policies 2001* require the protection of the components and processes of naturally occurring biotic communities, including the natural abundance, diversity, and ecological integrity of vegetation (NPS 2000a). NEPA requires federal agencies to use all practicable means to restore and enhance the quality of the human environment and to avoid or minimize any possible adverse impacts of their actions on the environment.

Because the Custer Battlefield has been fenced since 1891, it is one of the most pristine prairie grasslands in the region. Sagebrush and yucca is a dominant vegetation cover of the area; however, due to a 1908 fire and recent fires in 1983, 1991, 1994, and 1995, these species have temporarily, become less dominant.

Blue bunch wheatgrass, Idaho fescue, Western wheatgrass, buffalo grass, green needle grass, and blue grama are the main grasses that are present or currently dominate the area. Much of the disturbance to vegetation and soil are from the battle and subsequent burials as well as post battle visitation to the area. Disturbed areas are evidenced by the invasion of yellow clover, Japanese brome, common salsify, prairie milk vetch, and broom snakeweed.

There would be both short- and long-term impacts to vegetation under the action alternatives. Short-term impacts would include disturbance of vegetation from construction activities. Once construction was complete, disturbed sites within the construction area would be returned to natural conditions, and the site topography would be returned to its preconstruction contours as much as possible. Ground surface treatment would include grading to natural contours, as well as, roughing / scarification and mulching to promote natural seeding. Areas disturbed by construction would be revegetated according to NPS standards and in coordination with the park staff to facilitate soil stability, help reduce runoff, channelization, and erosion, and to

help the soil restore itself to current conditions. The seed and plants used to revegetate the areas disturbed by the proposed visitor center construction would be the same seed variety as the present lawn.

To prevent the introduction of, and minimize the spread of non-native vegetation and noxious weeds, mitigation measures and best management practices would be implemented. Through the use of best management practices and mitigation measures, short-term impacts to vegetation from habitat disturbance would be adverse site-specific negligible. An intense preconstruction control program, consisting of timely herbicide applications, would be initiated in the fall of 2007 and continued through 2008. For two years post construction, the revegetated areas would be monitored. Re-occurring invasive species and noxious weeds would be eradicated by herbicide treatments and/or manual pulling.

Long-term impacts to vegetation under the action alternatives would be approximately 1.0 acre of previously disturbed vegetation. However, removal of vegetation would not adversely affect the viability or relative abundance of any vegetation species. There would be no changes in the current status of vegetative communities, either in terms of species composition or population dynamics, other than those brought about by natural environmental processes. The long-term impacts to the vegetative communities are adverse negligible. Therefore, vegetation was dismissed from detailed analysis in this environmental assessment / assessment of affect.

## Geology and Soils

*NPS Management Policies 2001* requires the protection of significant geologic and topographic features. In addition, the National Park Service would strive to understand and preserve the soil resources of park units and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources (NPS 2000a).

Elevations at Little Bighorn Battlefield National Monument range from 3,200 to 3,400 feet. The low sloping terrain is characteristic of the sedimentary plains of southeastern Montana Soils. The U. S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Big Horn County Area, Soil Survey identifies six soil types adjacent to the project area. Most of the project area is surrounded by hilly to rolling clay loams and silty clay loams. The NRCS has evaluated the erosion potential of different soil types and categorized them as being slight, moderate, or severe.

There would be both short-and long-term impacts to soils under either action alternatives. Short-term impacts to soils would include temporary disturbance of previously disturbed soils from construction activities. Once construction was complete, disturbed sites within the construction area would be returned to natural conditions, and the site topography would be returned to its preconstruction contours as much as possible. Areas disturbed by construction would be revegetated to facilitate soil stability, help reduce runoff, channelization, and erosion, and to help the soil restore itself to natural conditions. Through the use of best management practices and mitigation measures, short-term impacts to soils from disturbance would be adverse site specific negligible.

Long-term impacts to soils would be adverse site-specific negligible from the loss of soils due to construction. The loss of soils would be negligible when compared to the availability of soils within the resource area. Overall, the action alternatives would have no impact on geologic resources, and would result in adverse site-specific negligible short-and long-term impacts on soil resources within the project area. Therefore, the topic of geology and soils was dismissed from detailed analysis in this environmental assessment / assessment of effect.

## Air Quality

The 1963 Clean Air Act, as amended (42 *United States Code* (USC 7401 et seq.), requires that federal land managers have a responsibility to protect air quality related values from adverse air pollution impacts. §118 of the Clean Air Act requires parks to meet all federal, state, and local air pollution standards. §176(c) of the Clean Air Act requires all federal activities and projects to conform to state air quality implementation plans to attain and maintain national air quality standards. *NPS Management Policies 2001* addresses the need to analyze potential impacts to air quality during park planning (NPS 2000a).

Under either action alternative, local air quality would be temporarily affected by dust and construction vehicle emissions. Fugitive dust from construction equipment would intermittently increase airborne particulate in the area near the project site, but loading rates are expected to be low. Fugitive dust would be controlled by periodic watering as necessary. Operation of construction equipment would result in increased vehicle exhaust and emissions. Emissions of hydrocarbons, nitrous oxides, and sulfur dioxides would dissipate rapidly since air stagnation is rare within the project area. Construction equipment would not be allowed to idle for extended periods of time.

There would be no long-term impacts to air quality under the action alternatives. The visitor center improvements would not result in a measurable increase in air contaminants. Through the use of mitigation measures, impacts on local air quality would be adverse localized negligible short term; occurring only during the construction period. Therefore, air quality was dismissed from detailed analysis in this environmental assessment / assessment of effect.

## Soundscapes

In accordance with *NPS Management Policies 2001* (NPS 2000a) and *Directors Order #47: Sound Preservation and Noise Management* (NPS 2000b), an important part of the NPS mission is the preservation of natural soundscapes associated with national park units. Natural soundscapes exist in the absence of human-caused sound. The natural ambient soundscape is the aggregate of all the natural sounds that occur in park units, together with the physical capacity of transmitting natural sounds. The frequency, magnitude, and duration of human-caused sound considered acceptable varies among national park system units, as well as throughout each park unit (human-caused sounds being generally more acceptable in developed areas and less so in undeveloped areas).

Impacts to soundscapes from noise associated with construction equipment and activities under the proposed alternative would be adverse localized negligible short term. Construction activities would be scheduled so as to minimize adverse effects on visitor experiences. For the proposed alternative, this short-term impact would be adverse site-specific negligible; therefore, soundscapes was dismissed from detailed analysis in this environmental assessment / assessment of effect.

## Water Quality and Hydrology

The 1972 Federal 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 and to enhance the quality of water resources and to prevent, control, and abate water pollution. *NPS Management Policies 2001* provides direction for the preservation, use, and quality of water originating, flowing through, or adjacent to park boundaries (NPS 2000a). The National Park Service seeks to restore, maintain, and enhance the quality of all surface and ground waters within the parks consistent with the 1972 Federal Water Pollution Control Act, as amended, and other applicable federal, state, and local laws and regulations.

Sediment traps, silt fencing, erosion checks, and/or filters would be constructed preceding or following all coulees and in all other drainages (if required) before the water (runoff) leaves the project construction limits. Best management practices would be applied, thus diminishing any impact to hydrologic features. The action alternatives would result in adverse localized negligible short-term impacts to water quality from construction activities during runoff conditions. Therefore, water quality was dismissed from detailed analysis in this environmental assessment / assessment of affect.

## Floodplains and Wetlands

Executive Orders 11988 ("Floodplain Management") and 11990 ("Protection of Wetlands") require an examination of impacts to floodplains and wetlands; of potential risk involved in placing facilities within floodplains, and protecting wetlands. NPS Management Policies 2001 and Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-making, Director's Order #77-2: Floodplain Management/Procedural Manual, and Director's Order #77-1: Wetland Protection/Wetland Procedural Manual provides guidelines on developments proposed in floodplains and wetlands.

There are no Flood Insurance Rate Maps (FIRM) for the Crow Indian Reservation (including land surrounding the monument). According to Big Horn County, the FIRM completed for the remaining portions of Big Horn County (lands other than Crow Indian Reservation land) were based largely in part on the 1978 flood (100 year "plus" flood). Photos taken of the Little Bighorn River during the 1978 flood event show the flood area located several hundred feet in elevation below the monument and several thousand feet horizontally to the south of the monument (NPS 2005b). In addition, never in the history of the national monument has the monument been flooded by the Little Bighorn River or its tributaries.

The action alternatives would not change floodplains associated with the Little Bighorn River and or the three intermittent tributaries. Because the project area lacks well-defined floodplains, the statistical parameters used for flood stage, flood frequency, and stream stage cannot be applied here and impacts to floodplains would be anticipated to be adverse site-specific negligible and short term in duration due to flooding events (including flash floods) associated with these water-bodies.

Under NPS standards [Director's Order #77-1: Wetland Protection / Wetland Procedure Manual (NPS 2002b)], the edges of these intermittent tributaries (unnamed stream, Deep Coulee, and Medicine Tail Coulee) would likely be considered wetlands. Under the action alternatives there would be no long-term impacts to wetlands from the interim visitor center plan. Therefore, floodplain and wetlands were dismissed from detailed analysis in this environmental assessment/ assessment of effect.

## Wilderness Values

The Wilderness Act of 1964 (16 USC 1131 et seq.) established a national wilderness preservation system composed of federally owned areas designated by Congress and administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness. No areas within or adjacent to the monument are designated wilderness areas. No wilderness values would be impacted from this project; therefore, wilderness values was dismissed from detailed analysis in this environmental assessment/ assessment of effect.

## Land Use Plans and Policies

Little Bighorn Battlefield National Monument consists of approximately 756 acres located in two parcels and is surrounded by Crow Tribe reservation. The northern parcel is the Custer Battlefield and the southern parcel is the Reno-Benteen Battlefield. The Tour Road connects the two battlefields by traversing Crow Tribe reservation lands and three private landholder's lands, which separate the two battlefields. Most of the land on the east bank of the Little Bighorn River between the two battlefields is used for livestock grazing (NPS 1999a). Under the action alternatives, all proposed work would occur within the battlefield portion within the National Park Service boundary.

Land use policies provide direction for future land use decisions. There would be no change to land use policies under the proposed project. Under the action alternatives, land use and land use policies would not be impacted or changed; therefore, land use plans and policies were dismissed from detailed analysis in this environmental assessment / assessment of effect.

# ALTERNATIVES CONSIDERED

## ALTERNATIVE A: NO-ACTION

The No-Action Alternative describes the action of continuing the present management operations. This alternative provides a basis for comparing the management direction and environmental consequences of the action alternatives. If the No-Action alternative was selected, the National Park Service would respond to future needs and conditions associated with the Interim Visitor Center Plan without substantial actions or policy changes. Day to day operations would be conducted as usual. Safety issues associated with showing the park film in the basement will continue to be managed by closing the audiovisual room and only showing the film to an average of 24,879, 1/16$^{th}$ of the total annual visitation during the shoulder seasons when the weather is fair. Visitors would continue to be subjected to overcrowding and the discomfort of inclement weather, and air and noise pollution associated with the proximity of the main park road to the out of doors interpretive patio year around. The temperature fluctuations of the observation room will continue to impact museum objects on display in the museum exhibit area.

## ALTERNATIVE B: PREFERRED ALTERNATIVE

Replace the existing observation room and interpretive patio area with a multipurpose room. (NPS Preferred Alternative) presents the NPS proposed action and defines the rationale for the action in terms of safety improvements, visitor experience, and resource protection and management. A multipurpose room would be constructed on the area currently occupied by the observation room and visitor patio by removing these spaces. The space between the existing visitor center and the sidewalk in front of the visitor center would be included in the proposed construction footprint and provide a waiting area for the multipurpose room and space for rotating exhibits.

The proposed alternative is the agency (NPS) preferred alternative (and is the proposed undertaking for §106 compliance) and defines the rationale for the action in terms of resource protection and management, visitor and operational use, costs, and other applicable factors. Although the proposed actions are not specifically described in the 1986 *Final General Management and Development Concept Plans for Little Bighorn Battlefield National Monument* (as revised in 1995), this proposal is viewed as an interim action to resolve current problems. The park's long term goal continues to be as described in the General Management Plan, revised 1995.

The preferred alternative is to demolish the existing observation room and interpretive patio area and construct a universally accessible multipurpose room over the same footprint. The goal is to accommodate more visitors with less staff by increasing the number of individuals that can attend interpretive programs at one time. A value analysis was conducted to assist the park in defining the size that the multipurpose room must be in order to address the overcrowding and safety issues of the current audiovisual room and the interpretive patio. There are 45 chairs in the audiovisual room and the bench seating on the interpretive patio will accommodate 80 individuals. Up to 200 individuals try to squeeze into the interpretive patio area

during late afternoon interpretive presentations. The multipurpose room would be designed to be large enough to accommodate seating for 200 individuals. The size of the multipurpose room would accommodate seating, circulation space, egress, and a podium area in the front of the room. The queuing area would be large enough to accommodate only half of the number of seats in the multipurpose room. The overflow could spill into the exhibit area and the book sales lobby. The north wall of the current visitor center would be moved towards the sidewalk. A tree located between the visitor center and the sidewalk would be removed. The east wall of the observation room would be moved east to the area of the interpretive patio that has already been substantially disturbed. The exact size of the multipurpose room has not been determined, but preliminary design indicates a space less than 2500 square feet. The 2003 cost estimate established by CTA Architects' preliminary design in 2003 was $797,000 and was recently updated to $1,136,000.

An all weather multipurpose room would provide visitors with a space that is easily accessible to all populations for the park to conduct interpretive presentations and to show the park film. This room would be constructed with energy efficient materials and would be economical to heat and cool. Having an environmentally controlled room next to the museum exhibit area would help to maintain consistent humidity and temperature levels that would promote the long term preservation of the museum objects on exhibit.

### STAGING AREA

The contractor would use existing overflow parking for staging to store equipment and building material. After mid September park visitation decreases and the extended parking area would not be needed for overflow visitor parking. Construction material would be stored away from the main visitor staging areas. The contractor would use barriers to block the construction area along the north and north eastern side of the visitor center to safely separate visitors from the construction zone.

### SUSTAINABILITY

The National Park Service has adopted the concept of sustainable design as a guiding principle of facility planning and development. The objectives of sustainability are to design park facilities to minimize adverse effects on natural and cultural values, to reflect their environmental setting, and to maintain and encourage biodiversity; to construct and retrofit facilities using energy-efficient materials and construction techniques; to operate and maintain facilities to promote their sustainability; and to illustrate and promote conservation principles and practices through sustainable design and ecologically sensitive use. Essentially, sustainability is living within the environment with the least impact on the environment. Alternative B: Replace Observation Room and Interpretive Area with a Multipurpose Room (NPS Preferred Alternative) subscribes to and supports the practice of sustainable planning, design, and use of Little Bighorn Battlefield National Monument.

## ALTERNATIVE C: LONG TERM IMPLEMENTATION OF THE 1986 GMP

Long-term implementation of the 1986 *General Management and Development Plans: Little Bighorn Battlefield National Monument*,

revised in 1995. This alternative would continue efforts to seek Congressional Legislation to expand the boundary of Little Bighorn Battlefield National Monument, acquire adjacent lands, remove the existing visitor center and associated facilities including sidewalks and parking, and build a new visitor center with supporting infrastructure including: roads, bridges, pull outs, wayside exhibits, sidewalks, and parking lots. This proposal would also return the site as nearly as possible to blend with the surrounding site condition.

The 1986 *Final General Management and Development Concept Plans for Little Bighorn Battlefield National Monument*, revised in 1995 calls for the park to expand its boundaries by 11,800 acres. Little Bighorn Battlefield National Monument is surrounded by Crow Tribal lands. About 150 ownerships are affected by the proposed boundary expansion. This includes an estimate of 4 parcels owned in trust for the Crow Tribe, approximately 62 parcels of Crow Indian lands and 84 parcels owned in fee by non-Indians. The state of Montana owns 450 acres. The Crow Tribe has stated in the *Final General Management and Development Concept Plans for Little Bighorn Battlefield National Monument*, revised in 1995 that "the leaders of the Crow Nation have gone on record expressing their unwillingness to "give up" any more base land." The National Park Service and the Crow Tribe have discussed the possibility of conducting a land exchange where Bighorn Canyon National Recreation Area would give up land to the Crow Tribe and Crow Tribal land would be added to the boundaries of Little Bighorn Battlefield NM. This proposal has not received endorsement from the Crow Tribe. The *Land Acquisition Plan Outline* completed circa 1992 estimates that 32 owner occupied dwellings, five residential tenants, and five businesses/ farms are located within the proposed boundary expansion area. See the Relocation Plan Outline for further information. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1979, as amended would be followed and relocation assistance, benefits and property acquisitions would be properly accommodated. The *Land Acquisition Plan Outline* estimates that the costs to obtain property rights for the proposed boundary expansion would be approximately $30 million. It would take additional time to obtain funding, and congressional legislation to acquire the full 11,800 acres of private and tribal lands. Funding would then need to be obtained to construct a new visitor center and associated infrastructure and the old visitor center next to Last Stand Hill would be demolished and the site returned to a more natural appearance. The 1986 General Management Plan, revised in 1995, estimates the cost for a 16,300 square foot visitor center to be $3,260,000 (in 1989 dollars) with the associated infrastructure listed at $3,497,000 (in 1989 dollars). A price escalation factor based on the Engineering News Record Building Cost Index for 1989 to 2006 is 1.65. When this factor is applied to the $3,260,000 cost estimate in 1989 for the visitor center the equivalent 2006 figure is $5,379,000. The revised 2006 estimated cost for associated infrastructure is $5,770,050. When the revised visitor center costs are combined with the associated infrastructure cost, the total cost estimate is $11,149,050. The 1986 cost estimate for Alternative C was based on a conceptual design can be expected to vary from -30% to +50%. The cost estimates for Alternative B and Alternative D were based on more developed designs. The accuracy of the cost estimates for Alternative B and Alternative D can be expected to vary from -15% to +30%.

## ALTERNATIVE D: CONSTRUCT A NEW VISITOR CENTER OFF THE EXISTING BOUNDARY

Construct a new visitor center off the existing battlefield boundary in the vicinity of either Garryowen or the junction of I-90 and Highway 212. Under this alternative the National Park Service would reinitiate efforts through the General Services Administration to design a new visitor center, lease or acquire lands, construct infrastructure and new facilities that would be leased back to Little Bighorn Battlefield National Monument. The amount of the lease agreement must be covered by park operations funds. The current visitor center would be demolished along with associated sidewalks and parking. The site would be restored to blend into the surrounding landscape.

In 2001, the staff at Little Bighorn Battlefield National Monument met with GSA and CTA Architects (Architectural - Engineering firm) to develop preliminary plans for a new visitor center that was being considered for construction in the Garryowen area by GSA. Preliminary plans for a visitor center were produced and a lease cost agreement was developed. The cost of the lease was more than the park operations funds could afford; the project was not further pursued. Additional funds would have been needed to address the costs of associated infrastructure that would be needed to fund a new road to connect the visitor center to the existing road at Reno-Benteen Battlefield site. The 2001 cost estimate for the GSA lease agreement was $831,729.36 per year for 16,824 square feet of space. For comparison purposes, based on the preliminary building design and the portion of the annual cost of the lease agreement offsetting the building construction cost, the cost for GSA to construct the visitor center was estimated to be $7,417,940. Applying a cost escalation factor to convert the 2001 cost estimate to a 2006 cost brings the estimate to $9,964,600. The 1986 cost estimate for Alternative C was based on a conceptual design. The accuracy of a cost estimate based on a conceptual design can be expected to vary from -30% to +50%. The cost estimates for Alternative B and Alternative D were based on more developed designs. The accuracy of the cost estimates for Alternative B and Alternative D can be expected to vary from -15% to +30%.

## MITIGATING MEASURES

The following mitigation measures have been developed to minimize the degree and/or severity of adverse effects, and would be implemented during construction of any of the action alternatives, as needed:

To minimize the amount of ground disturbance, staging and stockpiling areas would be in an already disturbed area such as the overflow parking across from the Stone House. All staging and stockpiling areas would be returned to pre-construction conditions following construction.

Construction equipment staging would occur within the overflow parking area or the park maintenance yard.

All material source / waste areas would be located outside of the monument. All demolition debris, including visible concrete and metal pieces, would be immediately hauled from the monument to an appropriate disposal location. All tools, equipment, barricades,

signs, surplus materials, and rubbish would be removed from the project work limits upon project completion. Any asphalt surfaces damaged due to work on the project would be repaired to original condition.

The contractor would be required to maintain strict garbage control so that scavengers (e.g., corvids) would not be attracted to the project area. No food scraps would be discarded or fed to wildlife.

Workers would be informed of the penalties for illegally collecting artifacts or intentionally damaging archeological or historic property. Workers would be informed of the correct notification procedures in the event that previously unknown resources were uncovered during construction. An NPS archeologist would monitor all ground disturbances.

If cultural material were uncovered during construction, work in the immediate area would be stopped, the site secured, and Little Bighorn Battlefield National Monument would consult according to 36 CFR 800.13.

If human remains were uncovered during construction, the park superintendent would be contacted immediately and work in the vicinity would be stopped. In compliance with the Native American Grave Protection and Repatriation Act of 1990 (NAGPRA), the National Park Service would also notify and consult representatives of Native American Indian tribes likely to be culturally affiliated for the proper treatment of human remains, funerary, and sacred objects should these be discovered during the project. Work could resume only after an appropriate mitigation strategy is developed in consultation with the Montana State Historic Preservation Office and after archeological clearances are obtained. Any human remains found in this area would more likely be a member of the Seventh Cavalry not a Native American Indian. The army buried and over the years reburied several bodies that had eroded or washed from their graves. The Native American Indians who died on the battlefield at Little Bighorn were removed by tribal members and given a proper burial.

The area around the north eastern side of the visitor center was excavated during the original construction of the Little Bighorn Battlefield visitor center which was completed in 1952. The soils and vegetation are already impacted to a degree by various human and natural activities. The preferred alternative would take advantage of building on a previously disturbed area. Soils within the project construction limits would be compacted and trampled by the presence of construction equipment and workers. Soils would be susceptible to erosion until revegetation takes place. Vegetation impacts and potential compaction and erosion of bare soils would be minimized by conserving topsoil in windrows. The use of conserved topsoil would help preserve micro-organisms and seeds of native plants. The topsoil would be respread in as near as original location as possible, and supplemented with scarification, mulching, seeding, and/or planting with species native to the immediate area. This would reduce construction scars and erosion.

Construction would occur during the fall and winter when bald eagles and other avian species of special concern would not be nesting. If nests were found within 0.5 mile of the project area, initiate consultation with USFWS and restrict all activities that may affect species. Seed collection for revegetation efforts would be done by

hand to avoid destroying ground nesting species. Prior to construction activities the area on the north east side of the visitor center would be inspected and evaluated by a NPS biologist to determine potential impacts to horned lizard. If potential conflicts with horned lizards in sensitive life stages were likely at this location, the NPS biologist would work in cooperation with the construction contractor to reduce impacts as much as possible. All construction related activities should be conducted to minimize impacting the species and its habitat. If revegetation is required, revegetation activity would be conducted in spring or fall during the wet season to minimize impacts during breeding season.

Disturbed areas, including areas adjacent to the north east side of the visitor center would be allowed to return to current lawn conditions.

Ground surface treatment would include grading to natural contours, as well as roughing / scarification and mulching to promote natural seeding.

Erosion and sediment control would be required. Disturbed sites within the construction area, including areas adjacent to the visitor center, overflow parking area, maintenance yard and any other area used as a holding area during construction would be returned to its preconstruction contours as much as possible. Areas disturbed by construction would be revegetated to facilitate soil stability, help reduce runoff, channelization, and erosion, and to help the soil restore itself to natural conditions.

Best management practices for drainage and sediment control would be implemented to prevent or reduce nonpoint source pollution and minimize soil loss and sedimentation in drainage areas and water resources. Use of best management practices in the project area for drainage area protection would include all or some of the following actions, depending on site specific requirements:

-Keeping disturbed areas as small as practical to minimize exposed soil and the potential for erosion.

-Conducting regular site inspections during the construction period to ensure that erosion-control measures were properly installed and are functioning effectively.

-Storing, using, and disposing of chemicals, fuels, and other toxic materials in a proper manner.

Contractors would coordinate with park staff to reduce disruption in normal park activities. Equipment would not be stored along the roadway overnight without prior approval of park staff. Construction workers and supervisors would be informed about the special sensitivity of park values, regulations, an appropriate housekeeping.

Construction zones would be identified and fenced with construction tape, snow fencing, or some similar material prior to any construction activity. The fencing would define the construction zone and confine activity to the minimum area required for construction. All protection measures would be clearly stated in the construction specifications and workers would be instructed to avoid conducting activities beyond the construction zone as defined by the construction zone fencing.

Temporary impacts associated with the visitor center construction would occur, such as soil and vegetation disturbance and the possibility of soil erosion. In an effort to avoid introduction of exotic plant species, no hay bales would be used. Hay often contains seed of undesirable or harmful alien plant species. Therefore, on a case-by-case basis the following materials may be used for any erosion control dams that may be necessary: rice straw, straws determined by NPS to be weed-free (e.g., Coors barley straw or Arizona winter wheat straw), cereal grain straw that has been fumigated to kill weed seed, and wood excelsior bales. Standard erosion control measures such as silt fences and/or sand bags would also be used to minimize any potential soil erosion.

## ENVIRONMENTALLY PREFERRED ALTERNATIVE

In accordance with DO #12 and the National Environmental Policy Act, the National Park Service is required to identify the environmentally preferred alternative (NPS 2001a). The Council on Environmental Quality defines the environmentally preferred alternative as "…the alternative that will promote the national environmental policy as expressed in the National Environmental Policy Act's §101." §101 of the National Environmental Policy Act states that "… it is the continuing responsibility of the Federal Government to:

(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

(3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

(4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;

(5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources."

The no action alternative, Alternative A, would continue to use the outside interpretive patio for all interpretive presentations. Visitors would be exposed to the weather, noise and air pollution from being so close to the main park thoroughfare. The park film would continue to be shown in the remodeled storage room in the basement during the shoulder season if the weather is fair. Many park visitors would continue to not receive information that could assist in their understanding of the story and visitors would not receive the safety message nor resource preservation information. There would continue to be impact from visitors due to the large concentrated numbers at one location and the inability to spread the visitors out within a large space thus lessening the visitor's impact to the resource. This is not the environmentally preferred alternative because it would:

not provide the opportunity for most visitors to obtain information that could assist in their understanding of the park story and the consequences of the events that transpired from this nationally significant event and visitors would not receive the park safety message nor resource preservation information (criteria 1, 2, 3, 4 would not be addressed); and

there would continue to be impacts to Last Stand Hill due to large volume of visitors in a small area (criteria 3, 4, 5, 6 would not be addressed).

Alternative B: Replace the observation room and interpretive patio with an all season multipurpose room (NPS Preferred Alternative) in the short term would meet the criteria established in the National Environmental Policy Act's §101. The resources near Last Stand Hill were impacted by the construction of the visitor center when it was completed in 1952. This project proposes to construct in an area that has already been disturbed. Several archeological surveys have been conducted in the area around the visitor center over the years; 1984, 1985, 1989, 1994, and 2004. The area around the visitor center is also impacted on a daily bases by visitor use. Park staff needs a place to provide a quality visitor experience that would allow the opportunity to better educate the public as to the events that led up to the battle, the battle, the life of a soldier in the cavalry, and the life of the Native Americans living in the area before and after the battle. Presently on average only 24,879 visitors annually are able to view the park film, only 1/16$^{th}$ of the annual visitation. Having an all weather space that is accessible by everyone would allow park staff to present the Little Bighorn Battlefield story to approximately 400,000 individuals annually. A good interpretive experience is an excellent way to share park resources and to educate the public on how to view this resource with the least impact and to understand how to avoid unsafe situations during their visit. The multipurpose room would have its own heating and cooling system which would enable the park to be able to maintain a more stable environment in the exhibit space that would promote the long term preservation of the museum objects on display. Based on the above criteria, the National Park Service has determined that Alternative B: Replace the observation room and interpretive patio with an all season multipurpose room is the preferred alternative because it would:

- provide a location where all visitors would be able to obtain a quality NPS experience to learn about and reflect on the events leading up to the battle of the Little Bighorn, the battle itself, and the aftermath of this nationally significant event. Visitors would gain information that would assist them in a safe visit that would have the least impact on the park's cultural and natural resources (criteria 1, 2, 3, 4, 5);

- construction would take place in an area that has already been disturbed by construction when the visitor center was originally constructed and has already experienced several archeological surveys over the years (criteria 3, 4, 6); and

- maintain a stable environment in the museum exhibit area that would enhance the preservation of exhibited museum objects (criteria 1, 4, 6).

Over the long term this project would not alleviate overcrowding of the Last Stand Hill area that moving the visitor center away from the

Indian Memorial and the Seventh Cavalry Monument would accomplish. If visitors were oriented in another location, away from Last Stand Hill, and then made their way through the monument to end up at Last Stand Hill, there would be smaller crowds throughout the day in this section of the park. Over the long term it is the park's goal to meet the requirements of the 1986 General Management Plan, revised in 1995.

Alternative C: Long Term Implementation of the 1986 General Management Plan, revised in 1995, requires the expansion of the park boundaries. Congressional legislation and additional funding would be needed in order to acquire additional lands bordering the current park boundaries. Funding would be required to construct a new visitor center and the associated infrastructure to support visitor services. In addition to a new visitor center, infrastructure such as utilities, roads, bridges, pull outs, wayside exhibits, and parking lots would need to be constructed to support moving visitors from the new visitor center towards the Last Stand Hill area. A new visitor center would be constructed in an area that has not been disturbed by prior construction. An archeological survey would assist in locating an area that contains fewer artifacts and information associated with the battle. The road construction would cross many areas that were impacted by the battle and contain both cultural and natural resources that must be considered. Alternative C would implement the goals established in the 1989 General Management Plan, revised in 1995 by increasing the size of the park boundary, building a visitor center and associated infrastructure closer to I-90 or Highway 212, demolishing the current visitor center and restoring the site to blend with the local landscape. This is not the environmentally preferred alternative because it would:

- build a new facility on land that has not been disturbed by construction. In order to meet the goals listed in the 1989 General Management Plan revised in 1995 additional infrastructure would need to be constructed including building a road from the visitor center to the Reno-Benteen Battlefield site. This road would allow park visitors to begin their orientation near the beginning of the battle and obtain an overview of the events leading up to the final skirmish at Last Stand Hill. Visitors would follow a one-way drive through the different battle sites ending up at Last Stand Hill and the Indian Memorial (criteria 3, 4, 6 would not be supported by this alternative).

Alternative D: Construct a New Visitor Center Off of the Existing Battlefield Boundary in the vicinity of either Garryowen or the Junction of I-90 and Highway 212 proposes that the National Park Service reinitiate efforts with the General Services Administration to lease or acquire lands, design a new visitor center, and construct associated infrastructure that would be leased back to the Little Bighorn Battlefield National Monument. An area off of the existing battlefield boundary in the vicinity of either Garryowen or the junction of I-90 and Highway 212 has been suggested. Under this proposal a new visitor center would be constructed in an area that has not been disturbed by prior construction. An archeological survey would assist in locating an area that contains fewer artifacts and information associated with the battle. The road construction would cross many areas that would need to be acquired by the National Park Service. Many of these areas were disturbed by the battle and contain both cultural and natural resources that must be considered. Archeological objects removed from land not belonging to the federal government, would belong to the landowner. These objects would not

necessarily end up in a museum to be preserved and maintained for the people of the United States. This is not the environmentally preferred alternative because it would:

- build a new facility on land that has not been disturbed by construction. Though this structure would not be within the boundaries of the Little Bighorn Battlefield National Monument, the associated infrastructure would still need to be in place to create the one-way loop road that would lead visitors through the battlefield ending up at Last Stand Hill and the Indian Memorial (criteria 3, 4, 6 would not be supported by this alternative).

## ALTERNATIVES CONSIDERED BUT DISMISSED

- Accepting a donation of a new visitor center and additional museum collections pertaining to the Battle of the Little Bighorn. This proposal has not been formally presented to the National Park Service and a clear definition of the giver's intent does not exist in writing. A donation of a visitor center and additional museum objects would require evaluation by the NPS Partnership Office and public participation and review. It is difficult to evaluate a proposal that has not been clearly defined.

- Accept land donation that the Custer Battlefield Preservation Committee has informally offered to the park and additional funding up to $15,000,000 to be used towards the construction of a new visitor center. This alternative has been verbally discussed several times but has not been formally presented to the National Park Service. No written documentation clearly defines the intent of this proposal. It is not clear if this amount of funds could be obtained. A land donation along with funding would require evaluation by the NPS Partnership Office and public participation and review.

- An observation deck on top of the current visitor center may provide a better view of the battlefield and accommodate more visitors. The deck could be covered and have sides to provide protection from the elements. This alternative would have an impact to the cultural landscape and the viewshed from Last Stand Hill within the Custer Battlefield Historic District. This proposal was dismissed from further consideration.

- The NPS and the Montana Department of Transportation could work together to move the rest area from near Fly Creek to the Crow Agency and construct a visitor center there and create more jobs for local park neighbors. This proposal would assist the park in its ability to expand its interpretive message, but this act would not resolve the overcrowding and safety issues associated with interpretive presentations and the environmental fluctuations in the museum exhibit area.

- Move some of the functions currently performed in the visitor center to another location to make room for a multipurpose room for interpretive presentations and to show the park film. Removing functions from the visitor center and expanding the visitor use area of the building have already been done including; removing the restrooms to a separate facility in the

1990s and moving all administrative functions to the newly remodeled superintendent's residence (now the Administrative Building). Removing other functions from the visitor center would not provide enough space to accommodate a universally accessible multipurpose room. Moving other functions out of the visitor center would not provide enough space to accommodate a multipurpose room. This option would not resolve the temperature and humidity fluctuations in the museum exhibit area.

- Work with the Yellowtail Dam to show the introductory film from Little Bighorn Battlefield NM in their air conditioned theatre. This alternative does not fully address all of the goals identified in this project proposal. It is an option that can be pursued and would expand the interpretive park message but would not resolve the overcrowding and safety issues with the interpretive presentations and the environmental fluctuations in the museum exhibit area.

## SUMMARIES/COSTS

A comparison of alternatives is provided below in Table 2 and Table 3. Included are a brief description of each alternative and an explanation of the degree to which each alternative accomplishes the purpose and need of the project.

## Comparative Summary of Alternatives

A comparison of alternatives is provided below in Table 2. Included area a brief description of each alternative and accomplishes the purpose and need of the project.

Table 2: Comparative Summary of Alternatives

| Objective | Alternative A: No Action | Alternative B: Replace Observation Room & Interpretive Area w/ Multipurpose Room | Alternative C: Long Term Implementation of 1986/1995 General Management Plan | Alternative D: Construct VC off Existing Park Boundary to be Leased to NPS |
|---|---|---|---|---|
| 1. Provide a quality NPS experience that is safe and accessible to all visitors with an improved understanding of the events leading up to the battle. | Park staff would continue to deal with overcrowding and year around weather conditions closing the audiovisual room and not presenting interpretive programs if the weather or situation is considered to be unsafe. Immobile visitors would continue to be allowed to view the park film in the book sales area when crowding conditions allow. | An all season universally accessible multipurpose room would allow all visitors to be able to view the park film and interpretive presentations. More visitors would receive a quality NPS experience after observing a balanced presentation of both sides of the battle and the implications that this event had on the history of the United States. | Moving the visitor center away from the Last Stand Hill area would over the long term provide better preservation of the historic district as less crowding would reduce the impact that visitors have on the area. A more comprehensive presentation of the battle might be presented from a different location especially if you could see how the troops and tribal warriors flanked each other until the final battle at Last Stand Hill. | Moving the visitor center away from the Last Stand Hill area would over the long term provide better preservation of the historic district as less crowding would reduce the impact that visitors have on the area. A more comprehensive presentation of the battle might be presented from a different location especially if you could see how the troops and tribal warriors flanked each other until the final battle at Last Stand Hill. |
| 2. Resolve overcrowding for the interpretive patio, and address leaking roof, sun glare, high winds, air and noise pollution. | This alternative does not address these concerns. | Overcrowding, leaky patio roof, negative weather phenomena and air and noise pollution from vehicles on the main park road would be alleviated. | A new visitor center would be designed to be accessible and have an all weather space to present interpretive programs. Visitors would be more dispersed throughout the monument and less crowding would mean less visitor impact of the historic district. | A new visitor center would be designed to be accessible and have an all weather space to present interpretive programs. Visitors would be more dispersed throughout the monument and less crowding would mean less visitor impact of the historic district. |
| 3. Create a place to show the park film that is safely accessible to all park visitors and is accessible regardless of the weather conditions and crowd levels. | This alternative does not address this concern. | The park film would be shown in a multipurpose room that is safely accessible to all visitors regardless of the weather and crowd level. | A new visitor center would have an accessible space for showing the park film and presenting interpretive programs. | A new visitor center would have an accessible space for showing the park film and presenting interpretive programs. |
| 4. Provide a situation where temperature and relative humidity is controlled and does not impact the museum objects exhibited in the visitor center. | This alternative does not address this concern. | The multipurpose room would have its own heating and cooling system which would stabilize the temperature and humidity fluctuations that currently occur in the observation room and impact the | A new visitor center would have a temperature and relative humidity controlled space to display museum objects. | A new visitor center would have a temperature and relative humidity controlled space to display museum objects. |

| Objective | Alternative A: No Action | Alternative B: Replace Observation Room & Interpretive Area w/ Multipurpose Room | Alternative C: Long Term Implementation of 1986/1995 General Management Plan | Alternative D: Construct VC off Existing Park Boundary to be Leased to NPS |
|---|---|---|---|---|
| | | museum exhibit space. | | |

## Summary of Environmental Consequences

A comparison of environmental consequences for each of the alternatives is provided below in Table 3.

Table 3: Summary of Environmental Consequences

| Impact Topic | Alternative A: No Action | Alternative B: Replace Observation Room & Interpretive Area w/ Multipurpose Room (NPS Preferred Alternative) | Alternative C: Long Term Implementation of 1986/1995 General Management Plan | Alternative D: Construct Visitor Center off Existing Park Boundary to be Leased to NPS |
|---|---|---|---|---|
| Archeological Resources | The No-Action Alternative would have no adverse effect on the archeological resource. | There would be no major impact of park resources or values related to archeological resources. | Impact to archeological resources would need to be evaluated and proposed building sites surveyed before construction of a visitor center is begun. | Impact to archeological resources would need to be evaluated and proposed building sites surveyed before construction of a visitor center is begun. |
| Cultural Landscapes | The No-Action Alternative would have no impact on cultural landscape resources. | The actual project would not directly impact any of the contributing landscape elements. No Adverse Effect. | The future location of the proposed visitor center would be determined in part by the impact that this site would have on the cultural landscape. | The future location of the proposed visitor center would be determined in part by the impact that this site would have on the cultural landscape. |
| Visitor Experience | The No-Action Alternative would allow visitors to receive a less than quality NPS experience. Visitors would continue to sit outside under the fiberglass overhang with loudspeakers to assist in hearing the Interpretive program. The park film would only be shown during the shoulder season by visitors that can negotiate the uneven stairs. | All visitors would have an all weather location to view the park film and interpretive presentations. Noise & air pollution from passing vehicular traffic would no longer impact interpretive programs. A heating & cooling system would be able to supplement the current system in the museum exhibit space to create a stable environment for long term preservation of museum objects on exhibit. Would not resolve overcrowding in historic district. Increase the size of the visitor center by enclosing the area around the visitor center that currently serves as the interpretive | Increased park boundaries would allow for the visitor center to be moved to a location where the Little Bighorn Battlefield story could be better illustrated. Associated infrastructure would be built to connect the VC to present Tour Road to create a one-way loop road between the new VC and the historic district. This would disperse visitors throughout the park and lessen the heavy impact of visitors to the historic district. The current visitor center and associated infrastructure would be removed from the historic district. The visual impact of a new visitor center and associated infrastructure | Visitor center would be moved off site to a location where the Little Bighorn Battlefield story could be better illustrated. Associated infrastructure would be built to connect the VC to the present Tour Road to create a one-way loop road between the new VC and the historic district. This would disperse visitors throughout the park and lessen the heavy impact of visitors to the historic district. The current visitor center and associated infrastructure would be removed from the historic district. The visual impact of a new visitor center and associated infrastructure would influence where this |

| | | | | |
|---|---|---|---|---|
| | | patio. Loud speakers, green fiberglass over-hang, benches would be replaced by a glass enclosed room that would better blend in with the current visitor center. | would influence where this building would be built. | building would be built. |

# ENVIRONMENTAL CONSEQUENCES

All alternatives were evaluated for their effects on the resources and values determined during the scoping process, and impact topics were developed. For each impact topic, impacts are defined in terms of context, intensity, duration, and timing. Direct, indirect, and cumulative effects are discussed in each impact topic. Definitions of intensity levels varied by impact topic, but, for all impact topics, the following definitions were applied.

*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 moves the resource away from a desired condition or detracts from its appearance or condition.

*Direct*: An effect that is caused by an action and occurs in the same time and place.

*Indirect*: An effect that is caused by an action but is later in time or farther removed in distance, but is still reasonably foreseeable.

*Short term*: An effect that within a short period of time (generally one or two years but no more than five years) would no longer be detectable as the resource returns to its predisturbance condition or appearance, generally fewer than five years.

*Long term*: A change in a resource or its condition that does not return to predisturbance condition or appearance and for all practical purposes is considered permanent.

## CUMULATIVE IMPACTS

The Council on Environmental Quality (CEQ) regulations implementing NEPA requires assessment of cumulative impacts in the decision-making process for federal projects. Cumulative effects are defined by the CEQ regulations 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 non-federal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative effects can result from individually minor, but collectively major, actions taking place over a period of time.

Cumulative impacts / analysis included projects both within and outside the monument. To determine potential cumulative impacts outside the monument, projects in the area surrounding Little Bighorn Battlefield National Monument were identified. The area included nearby lands administered by the Crow Tribe, state, county, private, etc. Potential projects identified as cumulative actions included any planning or development activity that was currently being implemented or that would be implemented in the reasonably foreseeable future. It was also necessary to identify other past and ongoing or reasonably foreseeable future projects at the monument.

These cumulative actions are evaluated in the cumulative impact analysis in conjunction with the impacts of each alternative to

determine if they would have any additive effects on a particular cultural resource or visitor use. When the overall cumulative analysis was moderate or major an additional level of analysis was conducted. This analysis determines how much the proposed alternative contributes to the overall cumulative impact. The proposed alternative contribution was identified as detectable, noticeable, or appreciable, in ascending order. Because some of these cumulative actions are in the early planning stages, the evaluation of cumulative effects was based on a general description of the project. Projects that make up the cumulative impact scenario are listed below under past actions, or current and future actions.

### PAST ACTIONS

*Improvements to Battle Ridge Trails* – Two historic trails on the Battle Ridge were studied in an environmental assessment (NPS 1999b). These trails were open to the public prior to 1991, but were closed due to concerns about resource damage. The trails provided access to two important areas of the battlefield and provided a valuable interpretive experience of the battle. These trails were reopened to the public in the summer of 1999.

### CURRENT AND FUTURE ACTIONS

*Rehabilitate Tour Road* – Improve the poor pavement and shoulder conditions on the Tour Road; enhance resource protection; provide a uniform and greater width to the Tour Road; and improve traffic flow and capacity at the visitor center and Reno-Benteen Battlefield parking area. The action is needed to repair structural deficiencies to the Tour Road, improve visitor experience and safety, and reduce resource damage along the Tour Road and at the visitor center and Reno-Benteen parking areas. This project is scheduled to be funded in 2008 to 2010.

*Indian Memorial Project* – Phase I of this project involved the construction of an Indian Memorial northeast of the visitor center. The Indian Memorial at Little Bighorn Battlefield was dedicated on June 25, 2003. Phase 2 of this project is currently underway and includes revegetation at the Memorial, a sidewalk, interpretive panels, development of a policy regarding offerings left at the memorial, and curatorial management of the offerings.

*Highway 212 Reconstruction* – The Montana Department of Transportation is reconstructing Highway 212, which runs north of the monument. As part of this reconstruction project, the intersection of Highway 212 and the monument entrance road is being reconstructed. Construction is planned for completion in 2006.

*State Rest Area Expansion and I-90 / Highway 212 Interchange* – The Montana Department of Transportation is studying improvements to the I-90 / Highway 212 interchange north of the monument and is planning to expand the state rest area to include a new state visitor center. The project is currently under study and will be documented in an environmental impact statement.

## IMPAIRMENT OF PARK RESOURCES OR VALUES

In addition to determining the environmental consequences of the preferred and other alternatives, *NPS Management Policies* 2001 require an analysis of potential effects to determine whether or not actions

would impair Little Bighorn Battlefield National Monument resources and values (NPS 2000a). The fundamental purpose of the national park system, as established by the NPS Organic Act (16 USC 1-4) and reaffirmed by the General Authorities Act of 1970, as amended (16 USC 1a-1 et seq.), begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values. However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values.

Although Congress has given the National Park Service the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values. An impact to any park resource or value may constitute impairment. However, an impact would be more likely to constitute an impairment to the extent that it has a major adverse effect on 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 Final General Management and Development Concept Plans or other relevant NPS planning documents.

Impairment may result from NPS activities in managing the monument, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the monument. In this "Environmental Consequences" section, a determination on impairment is made in the conclusion statement for archeological resources, historic structures, and ethnographic resources.

## IMPACTS TO CULTURAL RESOURCES AND §106 OF THE NATIONAL HISTORIC PRESERVATION ACT

Impacts to cultural resources are described in terms of type, context, duration, and intensity, which is consistent with the CEQ regulations for implementing the National Environmental Policy Act. However, the impact analysis also complies with the requirements of §106 of the National Historic Preservation Act, as amended (16 USC 470 et seq.). In accordance with the Advisory Council on Historic Preservation's (ACHP) regulations implementing §106 of the act (36 CFR 800), impacts to archeological resources, ethnographic resources, and cultural landscapes were identified and evaluated by (1) determining the area of potential effects; (2) identifying cultural resources present in the area of potential effects that were either listed on or eligible for listing on the National Register of Historic Places; (3) applying the criteria of adverse effect to affected cultural resources either

listed on or eligible for listing on the national register; and (4) considering ways to avoid, minimize or mitigate adverse effects.

Under the regulations of the ACHP a determination of either *adverse effect* or *no adverse effect* must also be made for affected national register eligible cultural resources. An *adverse effect* occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for inclusion on the national register (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 action alternatives that would occur later in time, be farther removed in distance, or be cumulative (36 CFR 800.5, Assessment of Adverse Effects). A determination of *no adverse effect* means there is an effect, but the effect would not diminish in any way the characteristics of the cultural resource that qualify it for inclusion on the national register. If there are no impacts to cultural resources, the determination is *no effect* on cultural resources.

CEQ regulations and NPS *Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-making* 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, e.g. reducing the intensity of an impact from major to moderate or minor (NPS 2001a). Any resultant reduction in intensity of an impact due to mitigation, however, is an estimate of the effectiveness of mitigation only under the National Environmental Policy Act. It does not suggest that the level of effect as defined by §106 would be similarly reduced. Although adverse effects under §106 could be mitigated, the effect would remain adverse.

A §106 summary is included in the impact analysis sections for archeological resources, cultural landscapes and ethnographic resources. A §106 summary is included in the impact analysis section under the preferred alternative. The §106 summary is intended to meet the requirements of §106 and is an assessment of the effect of the undertaking (implementation of the alternative) on cultural resources, based upon the criterion of effect and criteria of adverse effect found in the Advisory Council's regulations.

# ARCHEOLOGICAL RESOURCES

## AFFECTED ENVIRONMENT

Information on the archeological resources was compiled from the Final Negative Finding Report for the Archeological Inventory of the Little Bighorn Battlefield National Monument Visitor Center (Scott 2005a). Archeological Inventory of the Little Bighorn Battlefield National Monument Visitor Center, see Appendix B. An archeological inventory was conducted on September 23, 2004 on the grassy lawn adjacent to the visitor center. This area is currently a covered patio, north to the Tour Road, and north east to the edge of the grassy lawn. The legal location of the inventory project and inventory area is NW ¼, SW ¼, Sec. 17, T3S, R35E, encompassing approximately 1 acre. The inventory was conducted by metal detector and visual methods by Dr. Douglas Scott, Archeologist at the Midwest Archeological Center - MWAC and metal detector volunteers. The area was walked in a series of two meter wide transects until it was completely covered. During the 1984 archeological investigations this area was previously inventoried.

The only items found during 1984 and the 2004 investigations were modern items. No 19th century artifacts were found (Scott 2005a). Archeological Inventory of the Little Bighorn Battlefield National Monument Visitor Center, see Appendix B. The Little Bighorn Battlefield National Monument Cultural Sites Inventory at MWAC was consulted and no sites, features, or objects were recorded from this tract of land. Dr. Scott concluded that the area has been previously disturbed and no archeological integrity would be affected by the proposed visitor center rehabilitation project.

## METHODOLOGY

Certain important research questions about human history can only be answered by the actual physical material of cultural resources. Archeological resources have the potential to answer, in whole or in part, such research questions. In order for an archeological resource to be eligible for the National Register of Historic Places it must meet one or more of the following criteria of significance: A) associated with events that have made a significant contribution to the broad patterns of our history; B) associated with the lives of persons significant in our past; C) embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value, or represent a significant and distinguishable entity whose components may lack individual distinction; D) have yielded, or may be likely to yield, information important in prehistory or history. In addition, the archeological resource must possess integrity of location, design, setting, materials, workmanship, feeling, association (National Register Bulletin, Guidelines for Evaluating and Registering Archeological Properties). For purposes of analyzing impacts to archeological resources either listed in or eligible to be listed in the National Register, the thresholds of change for intensity of an impact are defined below:

*Negligible:* Impact is at the lowest levels of detection – barely measurable with any perceptible consequences, either adverse or beneficial, to archeological resources. For purposes of §106, the determination of effect would be no adverse effect.

*Minor*: **Adverse**: disturbance of a site(s) results in little, if any, loss of significance or integrity and the National Register eligibility of the site(s) is unaffected. For purposes of §106, the determination of effect would be no adverse effect.

**Beneficial**: maintenance preservation of a site(s). For purposes of §106, the determination of effect would be no adverse effect.

*Moderate*: **Adverse**: disturbance of a site(s) does not diminish the significance or integrity of the site(s) to the extent that its National Register eligibility is jeopardized. For purposes of §106, the determination of effect would be adverse effect.

**Beneficial**: stabilization of the site(s). For purposes of §106, the determination of effect would be no adverse effect

*Major*: **Adverse**: disturbance of a site(s) diminishes the significance and integrity of the site(s) to the extent that it is no longer eligible to be listed in the National Register. For purposes of §106, the determination of effect would be adverse effect.

**Beneficial**: active intervention to preserve the site. For purposes of §106, the determination of effect would be no adverse effect.

## REGULATIONS AND POLICIES

Current laws and policies require that the following conditions be achieved in the park:

| Desired Condition | Source |
|---|---|
| Archeological sites are identified and inventoried, and their significance is determined and documented<br><br>Archeological sites are protected in an undisturbed condition unless it is determined through formal processes that disturbance or natural deterioration is unavoidable<br><br>In those cases where disturbance or deterioration is unavoidable, the site is professionally documented and excavated. | National Historic Preservation Act; Executive Order 11593; Archeological and Historic Preservation Act; Archeological Resources Protection Act; the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation; Programmatic Memorandum of Agreement Among the NPS, Advisory Council on Historic Preservation, and the National Council of State Historic Preservation Officers (1995); NPS Management Policies |

## ALTERNATIVE A: NO ACTION

### Impact Analysis

The current site serves as the location where interpretive programs are presented to the public. The site was excavated in the early 1950s during the construction of the visitor center. Any archeological material in this area was disturbed at that time. The area is currently impacted by large numbers of park visitors walking and sitting in the designated area. The level of effect on archeological resources would be *no historic properties affected*.

### Cumulative Impacts

Past, present and reasonably foreseeable future actions with the potential to affect archeological resources include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212 Reconstruction, and Improvements to the Battle Ridge trails. Overall, the past, present, and reasonably foreseeable future actions, combined with the No Action Alternatives, would have *no effect* on cumulative impacts to archeological resources.

### Conclusion

The No Action Alternative would have *no effect* on archeological resources. The cumulative effects of these past, present, and reasonably foreseeable future actions, combined with the No Action Alterative, would have adverse site-specific long term negligible cumulative impacts on archeological resources. Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purpose identified in the establishing legislation of Little Bighorn Battlefield National Monument, (2) key to the natural or cultural integrity of the monument or to opportunities for enjoyment of the park, or (3) identified as a goal in the monument's *Final General Management and Development*

*Concept Plan* (NPS 1995a) or other relevant NPS planning documents, there would be no impairment of park resources or values related to archeological resources.

## ALTERNATIVE B: REPLACE OBSERVATION ROOM AND INTERPRETIVE AREA WITH A MULTIPURPOSE ROOM (NPS PREFERRED ALTERNATIVE)

### Impact Analysis

During the 1984 and 2004 archeological inventories no 19th century artifacts were found. The area was previously disturbed when the land was excavated during the visitor center construction in the early 1950s. The impacts to the archeological resource would be *no effect*. If no artifacts are found, there would be no impact to archeological resources.

### Cumulative Impacts

Past, present, and reasonably foreseeable future actions with the potential to affect archeological resources include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212 Reconstruction, and Improvements to the Battle Ridge trails. Overall, the past, present, and reasonably foreseeable future actions, combined with Alternative B, would have *no effect* on archeological resources. The proposed multipurpose room would only cover the area of the observation room and covered patio area already impacted by park visitors and in an area that was excavated in the early 1950s during the construction of the visitor center.

### Section 106 Summary

After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR 800.5), the National Park Service concludes that implementation of Alternative B: Replace Observation Room and Interpretive Area with a Multipurpose Room (NPS Preferred Alternative) would result in *no historic properties affected* for archeological resources.

If during the construction process previously undiscovered archeological resources are discovered, all work in the immediate vicinity of the discovery would be halted until the resource is identified and documented and an appropriate mitigation strategy developed, if necessary, in consultation with the Montana State Historic Preservation Office (SHPO). If human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (25 USC 3001) of 1990 would be followed.

### Conclusion

Implementation of Alternative B: Replace Observation Room and Interpretative Area with a Multipurpose Room (NPS Preferred Alternative) would result in *no historic properties affected*.

Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Little Bighorn

Battlefield National Monument, (2) key to the natural or cultural integrity of the monument or to opportunities for enjoyment of the park, or (3) though this project is not mentioned in the *Final General Management and Development Concept Plans: Little Bighorn Battlefield National Monument* (NPS 1995a) it is an interim solution to several immediate problems and would resolve these issues until the goals of the GMP can be met, there would be no impairment of park resources or values related to archeological resources.

## ALTERNATIVE C: LONG TERM IMPLEMENTATION OF THE 1986 GENERAL MANAGEMENT PLAN, REVISED IN 1995

### Impact Analysis

The *Final General Management and Development Concept Plans: Little Bighorn Battlefield National Monument* (NPS 1995a) calls for the boundary of Little Bighorn Battlefield NM to be increased by approximately 11,800 acres and for a visitor center to be constructed in a location where the events of the battle can be interpreted to the public in the vicinity of I-90 and/or Highway 212. "The existing visitor center building, built in 1952 would be obliterated along with all associated walks and parking. The site would be restored, as nearly as possible, to blend with surrounding site conditions." (NPS 1995a). Demolishing a structure could have an *adverse site-specific long term minor to moderate impact* on the archeological resources depending on how much the land has to be excavated to restore the site to blend with the surrounding landscape. The site where the new visitor center would be built would need to be surveyed and inventoried to determine if the archeological resources could be impacted during the excavation and construction of the new visitor center and associated infrastructure including: sidewalks, roads, pull outs, and the placement of wayside exhibits. Until a construction site has been selected and an archeological survey has been conducted *the impacts to the archeological resources can not be determined*.

### Cumulative Impacts

Past, present, and reasonably foreseeable future actions with the potential to affect archeological resources include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212 Reconstruction, and Improvements to the Battle Ridge trails. Overall, the past, present, and reasonably foreseeable future actions, combined with Alternative C, would have an adverse site-specific long term minor to moderate cumulative impacts on archeological resources associated with the excavation that would be needed to remove the current visitor center and blend the site into the landscape. The site where the new visitor center would be constructed would need to be surveyed and inventoried to determine the extent of archeological resources that could be impacted during the excavation and construction of the visitor center and associated infrastructure including: sidewalks, roads, pullouts, and the placement of wayside exhibits. Until a construction site has been selected and an archeological survey has been conducted *the impacts to the archeological resources can not be determined*.

### Conclusion

Alternative C: Long Term Implementation of the *Final General Management and Development Concept Plans: Little Bighorn Battlefield National Monument* (NPS 1995a) could have an adverse long term site-specific minor to moderate impact on the archeological resources.

There would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Little Bighorn Battlefield National Monument, (2) key to the natural or cultural integrity of the monument or to opportunities for enjoyment of the park, or (3) this project is the recommended goal listed in the monument's *Final General Management and Development Concept Plans* (NPS 1995a).

Due to the general proximity of the new visitor center construction the possibility exists that archeological resources could be present. To minimize any potential disturbance of unknown archeological resources, an exploratory trench would be hand dug. In addition, the monument would provide an archeologist to monitor all ground disturbances. If during construction previously undiscovered archeological resources are discovered, all work in the immediate vicinity of the discovery would be halted until the resources could be identified and documented and an appropriate mitigation strategy developed, if necessary, in consultation with the Montana State Historic Preservation Office. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (25 USC 3001) of 1990 would be followed.

If either significant archeological resources (i.e. those that are eligible to be listed in the National Register of Historic Places) or human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during trenching, all items would be left *in situ* and the trench would be rerouted to avoid further disturbance. Archeological resources determined ineligible for listing in the National Register would be recovered, documented and recorded before trenching would proceed. Until a construction site has been selected and an archeological survey has been conducted *the impacts to the archeological resources can not be determined*.

## ALTERNATIVE D: CONSTRUCT A NEW VISITOR CENTER OFF OF THE EXISTING BATTLEFIELD BOUNDARY IN THE VICINITY OF EITHER GARRYOWEN OR THE JUNCTION OF I-90 AND HIGHWAY 212

### Impact Analysis

This proposal calls for the construction of a new visitor center and associated infrastructure including: sidewalks, roads, pull outs, and the placement of wayside exhibits to be placed outside of the park boundaries away from the Little Bighorn Battlefield historic district. The visitor center would be leased back to the National Park Service. The visitor center and associated infrastructure would be placed in a location where the history of the battle can be better interpreted to the public in the vicinity of I-90 and/or Highway 212. "The existing visitor center building, built in the mid-1950's would be obliterated along with all associated walks and parking. The site would be restored, as nearly as possible, to blend with surrounding site conditions." (NPS 1995a). Demolishing a structure could have an adverse site-specific long term minor to moderate impact on the archeological resource depending on how much the land has to be

excavated to restore the site to blend with the surrounding landscape. The site where the new visitor center would be built would need to be surveyed and inventoried to determine if archeological resources could be impacted during the excavation and construction of the new visitor center and associated infrastructure including: sidewalks, roads, pull outs, and the placement of wayside exhibits. Until a construction site has been selected and an archeological survey has been conducted *the impacts to the archeological resources can not be determined*.

## Cumulative Impacts

Past, present, and reasonably foreseeable future actions with the potential to affect archeological resources include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212 Reconstruction, and Improvements to the Battle Ridge trails. Overall, the past, present, and reasonably foreseeable future actions, combined with Alternative D, *impacts to the archeological resources could not be determined* until a construction site has been selected and an archeological survey has been conducted.

Letters written in response to the scoping brochure mentioned concern about where the new visitor center would be located. The Garryowen area experienced parts of the battle and an archeological survey may turn up objects associated with the battle. Mitigation measures would need to be established when the park is ready to pursue the long term goals of the General Management Plan.

## Conclusion

Alternative D: Construct a New Visitor Center Off of the Existing Battlefield Boundary in the Vicinity of either Garryowen or the Junction of I-90 and Highway 212 could have adverse local long term minor to moderate impacts on archeological resources.

There would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Little Bighorn Battlefield National Monument, (2) key to the natural or cultural integrity of the monument or to opportunities for enjoyment of the park, or (3) though this project is not the NPS's preferred alternative of the recommended goals listed in the monument's *Final General Management and Development Concept Plans for Little Bighorn Battlefield National Monument* (NPS 1995a) it would meet several of the goals listed in the GMP. There would be no impairment of park resources or values related to archeological resources.

The Garryowen area was part of the Sitting Bull's village and burial ground. This area is also included in the 100 year flood plain. Parts of the battle occurred in this area and there may be archeological resources associated with the battle. Mitigation measures would need to be defined if this area is pursued to meet the long term goals of the General Management Plan.

Due to the general proximity of the new visitor center construction the possibility exists that archeological resources could be present. To minimize any potential disturbance of unknown archeological resources, an exploratory trench would be hand dug. In addition, the monument would provide an archeologist to monitor all ground

disturbances. If during construction previously undiscovered archeological resources are discovered, all work in the immediate vicinity of the discovery would be halted until the resources could be identified and documented and an appropriate mitigation strategy developed, if necessary, in consultation with the Montana State Historic Preservation Office. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (25 USC 3001) of 1990 would be followed.

If either significant archeological resources (i.e. those that are eligible to be listed in the National Register of Historic Places) or human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during trenching, all items would be left *in situ* and the trench would be rerouted to avoid further disturbance. Archeological resources determined ineligible for listing in the National Register would be recovered, documented and recorded before trenching would proceed. Until a construction site has been selected and an archeological survey has been conducted *the impacts to the archeological resources can not be determined*.

# CULTURAL LANDSCAPES

## AFFECTED ENVIRONMENT

Cultural landscapes are geographic areas that have meaning for people. Within cultural landscapes, people have been, and in some cases, still are, modifying, interacting with, and giving human meaning to the land. The National Park Service is primarily concerned with landscapes having historic and/or ethnographic significance in areas where the NPS has or plans to acquire legal interest. The landscape does not need to contain visible evidence of human manipulation to be considered a cultural landscape. 'Cultural Landscapes' refer to a way of seeing, where all aspects of a place -- natural and cultural -- are considered together as part of an integrated, holistic system."

The cultural landscape of the June 25, 1876 encounter between Sioux, Cheyenne, Arapaho and the Seventh Cavalry extends beyond NPS unit boundaries, and includes NPS, tribal, and private lands. This landscape is held as a place of honor and rembrance by descendants of those involved in the battle and many members of the public. Within this area, the cultural landscape of Little Bighorn Battlefield National Monument includes all lands within the two National Park Service subunits, which were listed on the National Register of Historic Places in 1987 as two nationally significant properties, the Custer Battlefield Historic District, and the Reno-Benteen Battlefield. The boundary of both areas—and of the cultural landscape of the monument--is the same as monument boundaries.

The existing National Register nominations indicate 1876 (the year of the battle) to 1946 (the year that the National Cemetery was reestablished, and renamed, as a National Monument) as the period of significance for the historic district. Historic significance relates to military and political activity, and to preservation and interpretation of the landscape. Both properties retain historic integrity.

The Custer Battlefield Historic District cultural landscape is made up of three (overlapping) landscape character areas -

- The memorial landscape and core activity area of Battle Ridge, Last Stand Hill, Indian memorial, and NPS facilities;

- The south-facing slope from higher ground down to and including the stretch of the Little Bighorn River riparian zone; and

- The historic designed landscape of the National Cemetery.

The Reno-Benteen Battlefield cultural landscape is made up of one landscape character area due to its smaller size and relative open visibility.

Cultural landscape includes natural systems and features (topography, riparian and prairie upland zones, native and historic vegetation) in addition to built elements (buildings, structures, circulation features). A Cultural Landscape Inventory (CLI) has not been completed for the monument; material on cultural landscapes in this EA is based on the two district nominations, a one-day site reconnaissance visit by IMR Cultural Landscapes Program staff on April 25, 2006, and discussions with park staff. Completion of a CLI is needed for definitive identification and Montana State Historic Preservation Office concurrence on the list of landscape elements that contribute to the National Register eligibility and historic integrity of the cultural landscape, and for reevaluation of the period of significance. Current National Register nominations, completed in 1985, list only the major structural features; a number of other landscape patterns, systems, features, and uses also contribute to historic integrity.

Based on this preliminary evaluation, elements that are believed to contribute to the significance and integrity of the Little Bighorn Battlefield National Monument cultural landscape are listed below.

Custer Battlefield Historic District cultural landscape (all three character areas) -- contributing landscape elements include:

Patterns and systems:

- natural ecosystem (riparian zone, coulees, upland prairie zone, native vegetation)
- the route/alignment of segments of the road leading to Battle Hill/Seventh Cavalry and Indian memorials to Reno-Benteen Battlefield memorial may be historic and contributing
- core memorial / activity area (cemetery, Indian memorial, Seventh Cavalry memorial in close proximity to each other, on high ground)
- white marble and red granite markers, and civilian headstones, spread within the landscape marking locations of fallen combatants
- views between Indian and Seventh Cavalry memorials, views between memorials and cemetery, sweeping views across prairie, restricted views between higher ground and river bottom

Landscape features:

- Indian memorial
- Seventh Cavalry memorial
- red granite and white marble markers indicating the location of fallen tribal warriors and U.S. officers and soldiers

- rock cairns marking location of fallen warriors
- Deep Ravine trail (route/location, not current concrete surface)
- Keogh/Crazy Horse trail
- cemetery markers, flagstaff, Superintendent's house, cemetery layout and circulation system, cemetery entrance gates, planted rows of trees

(Also, all related archeological and ethnographic resources are part of the overall landscapes. These resources are described, and impacts to evaluated, in other EA sections.)

Uses:

- memorialization / commemoration / interpretation of event

Non-contributing landscape elements include:

- museum and visitor center
- parking lot
- restroom facility in parking lot island
- entrance station
- interpretive waysides
- directional and regulatory signs
- current road surface, curbing, and parking areas along the road
- administration and maintenance buildings, monument housing, concrete pump house
- Reno-Benteen Battlefield cultural landscape contributing landscape elements include:

Patterns and systems:

- natural ecosystem (ravines and coulees, upland slopes, native vegetation)
- circulation corridor (approx. route of road, not road surface)
- open, sweeping views across prairie, view of Reno-Benteen Battlefield memorial from surrounding areas, and somewhat restricted views between memorial area and river

Landscape features:

- Reno-Benteen Battlefield memorial
- all granite markers marking location of fallen combatants
- battle-related markers (e.g. field hospital location marker)
- rifle pits and trenches
- the route of segments of the foot trail may be historic and contributing

(Also, all related archeological and ethnographic resources are part of the overall cultural landscape. These resources are described, and impacts to evaluated, in other EA sections)

Uses:

- memorialization / commemoration / interpretation

Non-contributing landscape elements include:

- road surface

- parking area
- interpretive waysides
- directional and regulatory signs

## METHODOLOGY

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

In order for a cultural landscape to be listed in the National Register, it must meet one or more of the following criteria of significance: A) associated with events that have made a significant contribution to the broad patterns of our history; B) associated with the lives of persons significant in our past; C) embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value, or represent a significant and distinguishable entity whose components may lack individual distinction; D) have yielded, or may be likely to yield, information important in prehistory or history (National Register Bulletin, *How to Apply the National Register Criteria for Evaluation*). The landscape must also have integrity of those patterns and features - spatial organization and land forms; topography; vegetation; circulation networks; water features; and structures/buildings, site furnishings or objects - necessary to convey its significance (Secretary of the Interior's *Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes*). For purposes of analyzing potential impacts to cultural landscapes, the thresholds of change for the intensity of an impact are defined as follows:

*Negligible*: Impact(s) is at the lowest levels of detection - barely perceptible and not measurable. For purposes of §106, the determination of effect would be *no adverse effect*

*Minor:* **Adverse**: impact would not affect a character defining pattern(s) or feature(s) of a National Register of Historic Places eligible or listed cultural landscape. For purposes of §106, the determination of effect would be *no adverse effect*.

**Beneficial**: preservation of character defining patterns and features in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes. For purposes of §106, the determination of effect would be no adverse effect.

*Moderate*: **Adverse**: impact would alter a character defining pattern (s) or feature(s) of the cultural landscape but would not

diminish the integrity of the landscape to the extent that its National Register eligibility is jeopardized. For purposes of §106, the determination of effect would be *no adverse effect*.

**Beneficial**: rehabilitation of a landscape or its patterns and features in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes. For purposes of §106, the determination of effect would be no adverse effect.

*Major*: **Adverse**: impact would alter a character defining pattern(s) or feature(s) of the cultural landscape to the extent that it is no longer eligible to be listed in the National Register. For purposes of §106, the determination of effect would be *adverse effect*.

**Beneficial**: restoration of a landscape or its patterns and features in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes. For purposes of §106, the determination of effect would be no adverse effect.

## REGULATIONS AND POLICIES

Current laws and policies require that the following conditions be achieved in the park:

| Desired Condition | Source |
|---|---|
| The treatment of a cultural landscape will preserve significant physical attributes, biotic systems, and uses when those uses contribute to historical significance. Treatment decisions will be based on a cultural landscape's historical significance over time, existing conditions, and use. Treatment decisions will consider both the natural and built characteristics and features of a landscape, the dynamics inherent in natural processes and continued use, and the concerns of traditionally associated peoples. | National Historic Preservation Act; Executive Order 11593; Archeological and Historic Preservation Act; the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation; Programmatic Memorandum of Agreement Among the NPS, Advisory Council on Historic Preservation, and the National Council of State Historic Preservation Officers (1995); NPS Management Policies |
| The treatment implemented will be based on sound preservation practices to enable long-term preservation of a resource's historic features, qualities, and materials. There are three types of treatment for extant cultural landscapes: preservation, rehabilitation, and restoration. | |
| Cultural landscapes are listed in the National Register when their significant cultural values have been documented and evaluated within appropriate thematic contexts and physical investigation determines that they retain integrity. Cultural | |

| Desired Condition | Source |
|---|---|
| landscapes are classified in the National Register as sites or districts or may be included as contributing elements of larger districts. | |

## ALTERNATIVE A: NO ACTION

### Impact Analysis

The visitor center would continue to serve as the main focal point for visitor park orientation. The Interpretive patio on the east side of the visitor center would continue to be used as the main location for the park's interpretive presentations. The current situation has an *adverse local long term negligible impact* on cultural landscape resources.

### Cumulative Effect

Past, present and reasonably foreseeable future actions with the potential to affect cultural landscape resources include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212 Reconstruction, and Improvements to the Battle Ridge trails. Overall, the past, present, and reasonably foreseeable future actions, combined with the No Action Alternative, would have an *adverse local long term negligible cumulative impact* on cultural landscape resources.

### Conclusion

The No Action Alternative would have no further effect on the cultural landscape resources than currently exist. The No Action Alternative would have an *adverse local long term negligible impact* on the cultural resource.

## ALTERNATIVE B: REPLACE OBSERVATION ROOM AND INTERPRETIVE AREA WITH A MULTIPURPOSE ROOM (NPS PREFERRED ALTERNATIVE)

### Impact Analysis

The proposed project to replace the observation room with a multipurpose room would not directly impact contributing landscape elements. While the project would increase the development footprint in the core of the Custer Battlefield Historic District cultural landscape and would increase the overall mass and visibility of the visitor center/ museum structure, this would be mitigated to a certain degree by the fact that the outside of the new visitor center multipurpose room would be glass, and so diminish the feeling of the building's mass, and the fact that commemoration/ interpretation, especially within this core area of the monument, is a historic and contributing use. There would be an *adverse local long term moderate impact* on the cultural resources.

### Cumulative Analysis

Past, present and reasonably foreseeable future actions with the potential to affect cultural landscape resources include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212

Reconstruction, and Improvements to the Battle Ridge trails. Overall, the past, present, and reasonably foreseeable future actions, combined with Alternative B, would have an *adverse local long term moderate cumulative impact* on cultural landscape resources.

## Section 106 Summary

The proposed visitor center project would have *no adverse effect* on monument landscape resources.

The actual project would not directly impact any of the contributing landscape elements. While the project would increase the development footprint in the core area of the Custer Battlefield Historic District cultural landscape and would increase the overall mass and visibility of the visitor center/museum structure, this would be mitigated to a certain degree by the fact that the outside of the new visitor center multipurpose room would be glass, and so diminish the feeling of the building's mass, and the fact that commemoration/interpretation, especially within this core area of the monument, is a historic and contributing use.

## Conclusion

Alternative B: Replace the Observation Room and Interpretive Area with a Multipurpose Room (NPS Preferred Alternative) would have an *adverse local long term moderate impact* on the cultural landscape resources and the §106 determination would be *no adverse effect.*

Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Little Bighorn Battlefield National Monument, (2) key to the natural or cultural integrity of the monument or to opportunities for enjoyment of the park, or (3) though this project is not in support of the recommended goals listed in the monument's *Final General Management and Development Concept Plans: Little Bighorn Battlefield National Monument* (NPS 1995a) is an interim solution to several immediate issues and would resolve these issues until the goals of the GMP can be met, there would be no impairment of park resources or values related to cultural landscape resources.

# ALTERNATIVE C: LONG TERM IMPLEMENTATION OF THE 1986 GENERAL MANAGEMENT PLAN, REVISED IN 1995

## Impact Analysis

The *Final General Management and Development Concept Plans: Little Bighorn Battlefield National Monument* (NPS 1995a) calls for the boundary of Little Bighorn Battlefield NM to be increased by approximately 11,800 acres and for a visitor center to be constructed in a location where the history of the battle could be interpreted to the public in the vicinity of I-90 and/or Highway 212. "The existing visitor center building, built in the mid-1950's would be obliterated along with all associated walks and parking. The site would be restored, as nearly as possible, to blend with surrounding site conditions." (NPS 1995a). Demolishing a structure could have an adverse local long term minor to moderate impact on the cultural

landscape resources depending on how much the land has to be excavated to restore the site to blend with the surrounding landscape. The site where the new visitor center would be built would need to be inventoried to determine if the cultural landscape resources would be impacted during the excavation and construction of the new visitor center and associated infrastructure including: sidewalks, roads, pull outs, and the placement of wayside exhibits. Until a construction site has been selected and a cultural landscape survey has been conducted *the impacts to the cultural landscape resources can not be determined*.

## Cumulative Analysis

Past, present and reasonably foreseeable future actions with the potential to affect cultural landscape resources include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212 Reconstruction, and Improvements to the Battle Ridge trails. Overall, the past, present, and reasonably foreseeable future actions, combined with Alternative C, *impacts to the cultural landscape resources can not be determined* until a construction site has been selected and a cultural landscape survey has been conducted.

## Conclusion

Alternative C: Long Term Implementation of the Final General Management and Development Concept Plans: Little Bighorn Battlefield National Monument (NPS 1995a) impacts to the cultural landscape resources can not be determined until a construction site has been selected and a cultural landscape survey has been completed.

There would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Little Bighorn Battlefield National Monument, (2) key to the natural or cultural integrity of the monument or to opportunities for enjoyment of the park, or (3) this project is the recommended goal listed in the monument's *Final General Management and Development Concept Plans* (NPS 1995a).

The impact to the cultural landscape must be considered and help to guide the location choice for the construction site of a new visitor center to ensure that the impacts to the current cultural landscape would be at an acceptable level. Until a construction site has been selected and a cultural landscape survey has been conducted *the impacts to the cultural landscape resources can not be determined*.

# ALTERNATIVE D: CONSTRUCT A NEW VISITOR CENTER OFF OF THE EXISTING BATTLEFIELD BOUNDARY IN THE VICINITY OF EITHER GARRYOWEN OR THE JUNCTION OF I-90 AND HIGHWAY 212

## Impact Analysis.

This proposal calls for the construction of a new visitor center and associated infrastructure including: sidewalks, roads, pull outs, and the placement of wayside exhibits to be placed outside of the park boundaries away from the Custer Battlefield Historic District. The visitor center would be leased back to the National Park Service. The visitor center and associated infrastructure would be placed in a location where the history of the battle can be better interpreted to

the public in the vicinity of I-90 and/or Highway 212. "The existing visitor center building, built in the mid-1950's would be obliterated along with all associated walks and parking. The site would be restored, as nearly as possible, to blend with surrounding site conditions." (NPS 1995a). Demolishing a structure could have an adverse local long term minor to moderate impact on the cultural landscape resources depending on how much the land has to be excavated to restore the site to blend with the surrounding landscape. The site where the new visitor center would be built would need to be evaluated so that a location that has the least impact on cultural landscape resources could be chosen. Construction of a new visitor center would involve excavation and construction of associated infrastructure including: sidewalks, roads, pull outs, and the placement of wayside exhibits. Until a construction site has been selected and a cultural landscape survey has been conducted *the impacts to the cultural landscape resources can not be determined*.

## Cumulative Analysis.

Past, present and reasonably foreseeable future actions with the potential to affect cultural landscape resources include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212 Reconstruction, and Improvements to the Battle Ridge trails. Overall, the past, present, and reasonably foreseeable future actions, combined with Alternative D, *the impacts to the cultural landscape resources can not be determined* until a construction site has been selected and a cultural landscape survey has been conducted.

## Conclusion

Alternative D: Construct a New Visitor Center Off of the Existing Battlefield Boundary in the Vicinity of either Garryowen or the Junction of I-90 and Highway *impacts to the cultural landscape can not be determined* until a construction site has been selected and a cultural landscape survey has been conducted.

There would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Little Bighorn Battlefield National Monument, (2) key to the natural or cultural integrity of the monument or to opportunities for enjoyment of the park, or (3) though this project is not the NPS's preferred alternative of the recommended goals listed in the monument's *Final General Management and Development Concept Plans for Little Bighorn Battlefield National Monument* (NPS 1995a) it would meet several of the goals listed in the GMP. There would be no impairment of park resources or values related to cultural landscape resources.

Due to the general proximity of the new visitor center construction the possibility exists that cultural landscape resources could be impacted. Impacts to cultural landscapes must be considered when choosing the site to build the proposed visitor center and associated infrastructure. If significant cultural landscape resources (i.e. those that are eligible to be listed in the National Register of Historic Places) are discovered during excavation the landscape would be appropriately documented and the Montana State Historic Preservation Office would be notified. Until a construction site has been selected and a cultural landscape survey has been conducted *the impacts to the cultural landscape resources can not be determined*.

# VISITOR USE AND EXPERIENCE

## AFFECTED ENVIRONMENT

The mission of Little Bighorn Battlefield National Monument is to provide visitors with an understanding of the historic events leading up to the battle, the battle itself, and the consequences faced by both the military and Native American Indian contingents (NPS 2002a). The visitor experience at Little Bighorn Battlefield National Monument includes interpretation and educational experiences associated with the Battle of the Little Bighorn, access and circulation, and visitor safety while visiting the monument.

Visitors currently have several different options to learn about the events that occurred at this site. At the visitor center a museum exhibiting objects belonging to Lieutenant Colonel George Armstrong Custer, items collected from the battlefield, and replicas of items that were used by participants of both sides of the battle. Up to 13 interpretive presentations of differing topics are given at the interpretive patio outside of the observation room during the day. A park film is shown only during the shoulder seasons, when the weather is nice, in the basement audiovisual room or in the books sales area of the visitor center for the mobility challenged visitor. Visitors can walk to the Seventh Cavalry Memorial and the Indian Memorial. A self guiding brochure is available to take along the Tour Road drive to the Reno-Benteen Battlefield. The only opportunity to engage in an in depth conversation or ask for clarification of a more complicated question about what happened during the battle would be at one of the interpretive presentations or the visitor orientation desk.

Public scoping, input from monument staff, and observation of visitation patterns, combined with an assessment of what resources are available to visitors under current management, were used to estimate the effects of the alternatives. The impact on the ability of visitors to experience a full range of Little Bighorn Battlefield National Monument resources was analyzed by examining resources and objectives presented in the monument's significance statement. All of the alternatives that are being considered have the potential to affect visitor experiences at Little Bighorn Battlefield National Monument. For this reason visitor experience is addressed as an impact topic in this environmental assessment / assessment of effect.

## METHODOLOGY

The 1986 *Final General Management and Development Concept Plans: Little Bighorn Battlefield National Monument*, revised in 1995 (NPS 1995a) calls for an increase to the park boundaries and moving the visitor center away from the historic district. By locating the new visitor center to a different location convenient to I-90, and adding the associated infrastructure including; sidewalks, roads, pull outs and the placement of wayside exhibits, visitors would be given the opportunity to view the battlefield in the battle's chronological order. By constructing a one-way loop road from the visitor center to the Reno-Benteen Battlefield where it would join the current Tour Road, visitors would be more evenly dispersed throughout the park lands. There would still be many who would only stop and visit the Seventh Cavalry Memorial and the Indian Memorial, but the numbers of visitors at the historic district at the same time would be lower. The impact to the historic district would decrease. The site would be able to handle the same volume of visitation with less impact because individuals would not be arriving at the same time.

Several individuals during the open house and via letters sent in responses to the scoping brochure have expressed concern about the visitor center encroaching on the historic district. The 1986 *Final General Management and Development Concept Plans*, revised in 1995 calls for the current visitor center, completed in 1952, to be obliterated along with the associated sidewalks and parking areas. The site would be restored to blend with the surrounding area. Visitors have commented that being able to stand in the battlefield and listen to the wind blow through the grass as one gazes across the ridges and ravines while considering the events of June 25 and 26, 1876 is an integral part of the visitor experience.

Park staff have mentioned concern about visitor/ rattlesnake interactions and safety issues. On several occasions rattlesnakes seeking shade and the cool concrete to have made their way to the area around the interpretive patio. When found these snakes are caught and moved to a different location in the park. Visitors will sometimes sit down on the lawn beside the interpretive patio. Interpretive staff caution visitors to be careful as they are next to a prairie environment and that rattlesnakes have been found in this area.

*Negligible*: Visitors would not be affected, or changes in visitor use and / or experience would be below or at the level of detection. Visitors would not likely be aware of the effects associated with the alternative.

*Minor*: Changes in visitor use and / or experiences would be detectable, although the changes would not be noticeable to visitors.

*Moderate*: Changes in visitor use and / or experience would be readily apparent and likely long term. Visitors would be aware of the effects associated with the alternative and would likely be able to express an opinion about the changes.

*Major*: Changes in visitor use and / or experience would be readily apparent, severely adverse, or exceptionally beneficial, and have important, long-term consequences. Visitors would be aware of the effects associated with the alternative and would likely express a strong opinion about the changes.

## REGULATIONS AND POLICIES

Current laws and policies require that the following conditions be achieved in the park:

| Desired Condition | Source |
|---|---|
| Visitor and employee safety and health are protected. | NPS Management Policies, National Environmental Policy Act |
| Visitors understand and appreciate park values and resources and have the information necessary to adapt to park environments; visitors have opportunities to enjoy the parks in ways that leave park resources unimpaired for future generations. | NPS Organic Act; Monuments' enabling legislation; NPS Management Policies |
| Park recreational uses are promoted and regulated and basic visitor needs are met in keeping with park purposes. | NPS Organic Act; Monuments' enabling legislation; Title 36 of the Code of Federal Regulations; NPS Management |

| Desired Condition | Source |
|---|---|
| | Policies |
| All reasonable efforts will be made to make NPS facilities, programs, and services accessible to and usable by all people, including those with disabilities. | Americans with Disabilities Act; Architectural Barriers Act; Rehabilitation Act; NPS Management Policies |
| Visitors who use federal facilities and services for outdoor recreation may be required to pay a greater share of the cost of providing those opportunities than the population as a whole. | NPS Management Policies; 1998 Executive Summary to Congress, Recreational Fee Demonstration Program, Progress Report to Congress, Volume I -- Overview and Summary (U.S. Department of the Interior, National Park Service, U.S. Fish and Wildlife Service, Bureau of Land Management; U.S. Department of Agriculture, Forest Service) |
| The park has identified implementation commitments for visitor carrying capacities for all areas of the unit. | 1978 National Parks and Recreation Act (P.L. 95-625); NPS Management Policies |

## ALTERNATIVE A: NO ACTION

### Impact Analysis

The visitor center is located just north of the military cemetery and west of the Seventh Cavalry Memorial and the Indian Memorial. The observation room was constructed with large windows so that the Seventh Cavalry Memorial could be viewed from the visitor center. Visitation in 1952 was around 100,000. Over the last 50 years the visitation has increased to about 400,000. Currently, the visitor center is located in the Custer Battlefield Historic District just a short walk from the Seventh Cavalry Memorial and the Indian Memorial. Visitors park their vehicles, use the facilities, gain access to visitor orientation and the museum, and attend interpretive programs within a small geographical area. The Tour Road is a dead end drive and each vehicle that follows the Tour Road must return along the same path to gain access to the park exit. Many visitors do not stop at the visitor center due to overcrowding. Many are not able to attend one of the interpretive presentations due to crowding and lack of space to sit or find refuge from the weather under the fiberglass overhang. The park film is only shown during the shoulder season if the weather is fair due to safety concerns with the uneven stairs and overcrowding. Visitors that are unable to negotiate the stairs may view the park film in the bookstore as shoppers move around the display area. Rattlesnakes that approach the interpretive patio area seeking shade and the cool concrete would continue to be captured and relocated to another location in the park to protect visitors.

The no action alternative would not address these concerns. Business would continue as usual. Safety issues surrounding the audiovisual room would continue to be mitigated by not showing the film during the crowded season nor during the times when the stairs may be slippery due to rain or ice. Visitors will continue to have a less than quality experience that is an *adverse local long term minor impact* as the interpretive staff continues to use loud speakers to compete with car noise as vehicles drive pass toward the Tour Road and to deliver their presentations to visitors crowded onto the interpretive patio underneath the fiberglass overhang.

## Cumulative Effects

Past, present and reasonably foreseeable future actions with the potential to affect visitor experiences include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212 Reconstruction, and Improvements to the Battle Ridge trails. Overall, the past, present, and reasonably foreseeable future actions, combined with the No Action Alternatives, would have an *adverse local long term minor cumulative impact* on the visitor experience. As visitation continues to increase, the crowding will become more severe and the impact to the historic district due to the crowding will increase.

## Conclusion

The No Action Alternative would have an *adverse local long term minor impact* on the visitor experience. The cumulative effects of these past, present, and reasonably foreseeable future actions, combined with the No Action Alternative, would have adverse local long term minor impacts on the visitor experience. The visitation of Little Bighorn Battlefield National Monument was around 100,000 in 1952. Today, the visitation is approximately 400,000. Because the visitor center is in a historic district, interpretive programs, museum, and all visitor services are located within a very small geographic area. It is not possible to spread the impact of large numbers of visitors around such a small area. As visitation increases the impact to the historic district would continue to take a toll on this area. Alternative A, the no action alternative, would allow the current policies to continue. Safety issues would continue to be addressed by closing the audiovisual room during times when it may not be safe to access this space and moving rattlesnakes to other locations in the park. Interpretive programs would continue to only be accessible to those who can get themselves to the areas where movies and interpretive presentations are delivered. Visitors would continue to try to participate in the interpretive programs by crowding onto the interpretive patio underneath the fiberglass overhang. The interpreters must continue to use loud speakers in order increase their voices enough to be heard over the vehicle noise, wind, and visitors talking in the background. Business would continue as usual.

# ALTERNATIVE B: REPLACE OBSERVATION ROOM AND INTERPRETIVE AREA WITH A MULTIPURPOSE ROOM (NPS PREFERRED ALTERNATIVE)

## Impact Analysis

Alternative B is proposed as an interim action to resolve current issues while the park continues to work towards the goals of the 1986 *Final General Management and Development Concept Plans: Little Bighorn Battlefield National Monument*, revised 1995. (NPS 1995a) As an interim action this project would resolve some of the overcrowding issues and safety concerns associated with the audiovisual space.

Park staff mentioned that over the years several rattlesnakes have been found in the patio area. They come to this area seeking the shade of the covered patio and the cool concrete. On more than one occasion visitors have come into contact with these local residents. So far the rattlesnakes have been captured and relocated to other areas of the park. An indoor multipurpose room would provide a safe location for visitors to have a quality NPS interpretive experience and to be able to learn about the local fauna without having to meet a

rattlesnake face to face. Having an indoor location for visitors to gather would provide a safer environment for rattlesnakes by removing large groups of visitors from a location that is known to attract them.

The long term goals of spreading the number of visitors throughout the park would not be met by this interim project. Alternative B would provide current visitors with an opportunity to have a quality visitor experience. Visitors would be able to view the park film and attend interpretive presentations in an all weather room without vehicle noise, air pollution, and unpleasant weather events. This space would be accessible to all visitors and the safety concerns with the icy uneven stairs and overcrowding in the basement audiovisual room would be eliminated. The room would be environmentally controlled, and would enhance the current heating and cooling system in the museum exhibit space. The enhancement of the heating and cooling system in the museum exhibit space would allow for a more stable environment with fewer temperature and humidity fluctuations that would provide for the long term preservation of the objects in this space. Alternative B would not address the overcrowding to the historic district. Though, the visitor center would be more accessible and less crowded, this would not help to disperse the large numbers of visitors throughout the monument. The preferred alternative would be a *beneficial local short term negligible impact* on the visitor experience.

## Cumulative Effects

Past, present, and reasonably foreseeable future actions with the potential to affect visitor experience include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212 Reconstruction, and Improvements to the Battle Ridge trails. The past, present, and reasonably foreseeable future actions combined with the Preferred Alternative, would have a *beneficial local short term negligible impact* on the visitor experience. The park is proposing to replace the observation room, visitor patio area, and the area north to the sidewalk with a multipurpose room. This would provide the park with a place that would be accessible to all visitors. The park film and interpretive programs would be presented in a location where visitors could comfortably receive the story of the events leading up to, including, and following the battle. This would be an interim solution that would correct safety issues associated with the audiovisual room in the basement, make all interpretive programs available to all visitors, and assist in allowing the park to maintain a stable environment in the museum exhibit area that would assist in the long term preservation of these objects. The visitor center has been determined not to be eligible for listing on the National Register of Historic Places. The contributing landscape elements would not be directly impacted by the proposed project. The visitor impacts to the historic district would continue to negatively influence this area and would increase as visitation numbers increases.

## Conclusion

Alternative B would have a *beneficial local short term negligible impact* on the visitor experience. Replacing the observation room and interpretive patio with a multipurpose room would provide an accessible location for all visitors to have a safe and quality

visitor experience. Interpretive staff would be able to meet the goals of the 1997 *Interpretive Prospectus* "To preserve and protect the historical and natural resources pertaining to the battle, and to provide visitors with an improved understanding of the events leading up to the battle, the sequence of activities by both military and Native American contingents on June 24-27, 1876, and the historical consequences of the results of those fateful days." The contributing elements to the Cultural Landscape would not be directly impacted by the proposed project. The historic district is heavily impacted by the number of visitors that utilize this area at the same time. This alternative is viewed as an interim solution to several immediate problems until the goals of the General Management Plan can be realized.

## IMPACT ANALYSIS ALTERNATIVE C: LONG TERM IMPLEMENTATION OF THE 1986 GENERAL MANAGEMENT PLAN, REVISED IN 1995

### Impact Analysis

The 1986 *Final General Management and Development Concept Plans: Little Bighorn Battlefield National Monument* (NPS 1995) calls for the boundary of Little Bighorn Battlefield National M0nument to be increased by approximately 11,800 acres and for the visitor center to be relocated where the events of the battle can be better interpreted to the public in the vicinity of I-90 and / or Highway 212. The existing visitor center along with associated infrastructure would be obliterated and the site restored to blend into the surrounding landscape. A new visitor center would provide an all weather location that would be universally accessible for all visitors to view the park film and interpretive presentations. Safety issues associated with the current overcrowded conditions and hazardous access/ egress to the basement audiovisual space would be eliminated. It is proposed that a one-way tour road would join the new visitor center to the Reno-Benteen Battlefield and visitors would continue to loop around to end up at the Seventh Cavalry Memorial and the Indian Memorial. Because of the change of the visitor orientation location and the creation of a one-way road through the park, visitors would be more evenly dispersed, lessening the impact of large numbers as smaller groups would move through the park. This would enable the park to sustain an increase in visitation without having as much of an impact on both the cultural and natural resources. Creating the associated infrastructure to connect a new visitor center to the historic district would have an adverse impact on the resources in the locations where roads, pull outs, sidewalks, parking lots, and wayside exhibits are placed. Mitigation measures would need to be developed at that time to accommodate these changes. Implementing the goals of the General Management Plan would have a *beneficial local long term negligible impact* to the visitor experience.

### Cumulative Effects

Past, present, and reasonably foreseeable future actions with the potential to affect visitor experience include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212 Reconstruction, and Improvements to the Battle Ridge trails. Overall the past, present, and reasonably foreseeable future actions, combined with Alternative C, would have a *beneficial local long term negligible impact* on the visitor experience. Many of these events play a small role in meeting some of the needs of the associated infrastructure so that when the National Park Service is able to acquire the additional 11,800 acres

and build a new visitor center in a location where the story could be illustrated, the logistics within the rest of the park would be ready to accommodate the change.

## Conclusion

Alternative C: Long Term Implementation of the 1986 General Management Plan, revised in 1995 calls for increasing the park boundaries by 11,800 acres, constructing a visitor center in a location where the story of the battle could be illustrated. A new visitor center would provide an all weather location that would be universally accessible for all visitors to view the park film and interpretive presentations. Safety issues associated with the current overcrowded conditions and hazardous access/ egress to the basement audiovisual space would be eliminated. After an orientation to the events leading up to the battle, the battle, and the historical consequences of this event can be presented, park visitors would be directed to drive a one-way tour road that would join with the current Tour Road at the Reno-Benteen Battlefield. A one way tour road would provide a way to disperse visitors throughout the monument so that the impact of visitor numbers is lessened. This would allow visitors to tour the battlefield in a manner that more closely follows the chronological order of the battle. Alternative C would have a *beneficial local long term negligible impact* to the visitor experience.

# ALTERNATIVE D: CONSTRUCT A NEW VISITOR CENTER OFF OF THE EXISTING BATTLEFIELD BOUNDARY IN THE VICINITY OF EITHER GARRYOWEN OR THE JUNCTION OF I-90 AND HIGHWAY 212

## Impact Analysis

Alternative D, calls for the construction of a new visitor center off of the existing battlefield boundary in the vicinity of Garryowen or the junction of I-90 and Highway 212. Associated infrastructure including: sidewalks, roads, pull outs, and the placement of wayside exhibits would need to be included in this project. The visitor center would be leased back to the National Park Service. The visitor center and associated infrastructure would be placed in a location where the events of the battle could be illustrated to the public in the vicinity of I-90 and Highway 212. The existing visitor center along with associated infrastructure would be obliterated and the site restored to blend into the surrounding landscape. A new visitor center would provide an all weather location that would be universally accessible for all visitors to view the park film and interpretive presentations. Safety issues associated with the current overcrowded conditions and hazardous access/ egress to the basement audiovisual space would be eliminated. It is proposed that a one-way tour road would join the new visitor center to the Reno-Benteen Battlefield and visitors would continue to follow the original Tour Road to the Seventh Cavalry Memorial and the Indian Memorial. Because the visitor orientation location and the creation of a one-way road, visitors would be more evenly dispersed throughout the park, lessening the impact of large numbers as smaller groups would move through the park. This would enable the park to sustain an increase in visitation without having as much of an impact on both the cultural and natural resources. Creating the associated infrastructure to connect a new

visitor center to the historic district would have an adverse impact on the resources in the locations where roads, pull outs, sidewalks, parking lots, and wayside exhibits are placed. Mitigation measures would need to be developed at that time to accommodate these changes. Implementing the goals of the General Management Plan would have a *beneficial local long term negligible impact* to the visitor experience.

## Cumulative Effects

Past, present, and reasonably foreseeable future actions with the potential to affect visitor experience include the Rehabilitate Tour Road project, Indian Memorial project, Highway 212 Reconstruction, and Improvements to the Battle Ridge trails. Overall the past, present, and reasonably foreseeable future actions, combined with Alternative D, would have a *beneficial local long term negligible impact* on the visitor experience. Many of these events play a small role in meeting some of the needs of the associated infrastructure so that if the National Park Service would be able to acquire right of way for a one-way tour road to connect the new visitor center with the existing Tour Road at the Reno-Benteen Battlefield, visitors would be able to follow the battle in a chronological order. Visitors would also move through the park in smaller groups spreading the number of visitors across the monument and having a smaller impact on the historic district. The new visitor center would be in a location where the park story could be illustrated. The projects mentioned above would play a small role in altering the infrastructure to implement the goals of the GMP so the park would be ready to accommodate the future change.

## Conclusion

Alternative D - Construct a visitor center off of the existing battlefield boundary in the vicinity of Garryowen or the junction of I-90 and Highway 212. Leasing a visitor center in a location where the story of the battle could better illustrate the events leading up to the battle, the battle, and the historical consequences of this nationally significant event would provide visitor experiences with a *beneficial local long term minor impact* to the visitor experience. A new visitor center would provide an all weather location that would be universally accessible for all visitors to view the park film and interpretive presentations. Safety issues associated with the current overcrowded conditions and hazardous access/ egress to the basement audiovisual space would be eliminated. After the National Park Service obtained right of way to build and use a one-way tour road that would join the visitor center with the current Tour Road at the Reno-Benteen Battlefield. This would allow visitors to tour the battlefield in a manner that more closely follows the chronological order of the battle. In 2001, the staff at Little Bighorn Battlefield National Monument met with GSA and CTA Architectural - Engineering firm to develop preliminary plans for a new visitor center that was being considered for construction in Garryown by GSA. Preliminary plans for a visitor center were produced and a lease cost agreement was developed. The cost of the lease exceeded park operations funds. Additional funding would be needed to cover the costs of associated infrastructure to tie the new visitor center to the Tour Road at the Reno-Benteen Battlefield. Because the cost of the lease was greater than park operation funds, the project was not further pursued. Implementing the goals of the General Management Plan would have a *beneficial local long term minor impact* to the visitor experience.

# CONSULTATION/COORDINATION

## AGENCIES/TRIBES/ORGANIZATION/INDIVIDUALS CONTACTED

Fish and Wildlife Service

Montana State Historic Preservation Office

Advisory Council on Historic Preservation

## PREPARERS

Linda Clement, Line Item Construction Compliance Specialist, Intermountain Regional Office – Denver, National Park Service. MBS – Museum Studies, BA – Anthropology and American History. Responsible for writing Little Bighorn Battlefield National Monument Environmental Assessment for Interim Visitor Center project.

Jill Cowley, Historical Landscape Architect and Program Lead, Intermountain Regional Office – Santa Fe, National Park Service. MLA and BLA – Landscape Architecture, BA – Cultural Anthropology, PhD Candidate – American Studies. Provided input on EA sections on cultural landscapes.

## LIST OF RECIPIENTS

### FEDERAL AGENCIES

Advisory Council on Historic Preservation
Department of Agriculture
    Natural Resource and Conservation Service
Department of Interior
    Fish and Wildlife Service

### INDIAN TRIBES

Cheyenne River Sioux Tribe
Crow Creek Sioux Tribe
Crow Tribe of Indians
Fort Peck Assiniboine Tribe
Lower Brule Sioux Tribe
Northern Arapaho Tribe
Northern Cheyenne Tribe
Oglala Sioux Tribe
Rosebud Sioux Tribe
Southern Cheyenne/Arapaho Tribes of Oklahoma
Standing Rock Tribe
Three Affiliated Tribes/ Mandan Hidatsa Arikara Nation

## State and Local Agencies

State Historic Preservation Office of Archeology and Historic Preservation
(office of State Historic Preservation Officer)
Montana Fish, Wildlife and Parks
Montana Natural Heritage Program
Montana Natural Resource Information System
Big Horn County
Chief Dull Knife Memorial College
Little Bighorn College
Welcome Visitor Center - Gloria Webster
Western Heritage Center

## Organizations

Big Horn County Museum
Custer Battlefield Historical and Museum Association (CBHMA)
Custer Battlefield Museum
Custer Battlefield Preservation Association
Custer Memorial Association
Friends of the Little Bighorn Battlefield
Little Bighorn Associates
National Parks Conservation Association
7th Ranch RV Camp & Historical Tours

## Individuals

Barbara (Hammett) Chavez
James V. Court
Lewis Gundlach
Nathan G. Hoover
John Keck
Ronald H. Nichols
Vern G. Smalley
Harold Stanton
Loretta Thomas
Robert M. Utley

## REFERENCES


Council on Environmental Quality (CEQ)

1997 "Environmental Justice, Guidance under the National Environmental Policy Act." December 10, 1997. Washington, D.C.

1980 "Prime and Unique Agricultural Lands and the National Environmental Policy Act." August 11, 1980. Washington, D.C.

David Evans and Associated, Inc. (DEA).

2004 *Little Bighorn Battlefield National Monument Environmental Assessment Biological Report.* November 2004. Denver, CO.

DuBray Land Services, Inc. (DUB)

C1992 *Land Acquisition Plan Outline*. C1992. Billings, Montana

Federal Highway Administration

2004 Memorandum from Timothy J. Binder, Division Counsel, to James Brophy, Right-of-Way and Utilities Coordinator, December 6, 2004, regarding Little Bighorn Battlefield-Width of Road.

Scott, Douglas and Richard Fox, Jr.

1987 *Archaeological Insights into the Custer Battle: An Assessment of the 1984 Field Season*. University of Oklahoma Press, Norman, OK.

Scott, Douglas, Richard Fox, Jr., Melissa Connor, and Dick Harmon.

1989 *Archaeological Perspectives on the Battle of the Little Bighorn*. University of Oklahoma Press, Norman, OK.

National Park Service, United States Department of the Interior (NPS).

1982 *LIBI List of Classified Structures (LCS) document: Little Bighorn Battlefield National Monument Historic Resources Notebook, List of Classified Structures.* National Park Service, Rocky Mountain Region. November 1992.

1995a *Final General Management and Development Concept Plans: Little Bighorn Battlefield National Monument*. August 1986, updated May 1995. Intermountain Region, Denver, Colorado.

1997a *Interpretive Prospectus - Little Bighorn Battlefield National Monument*. Harpers Ferry Center, Harpers Ferry, WV.

1998a *Director's Order #28: Cultural Resource Management Guideline*. Washington, D.C.

1999a *Little Bighorn Battlefield National Monument, Resource Management Plan*.

1999b *Little Bighorn Battlefield National Monument, Deep Ravine and Keogh / Crazy Horse Trails Environmental Assessment*. February 1999.

2000a *Management Policies, 2001*. Washington, D.C.

2000b *Director's Order #47: Sound Preservation and Noise Management*. Washington, D.C.

2001a *Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-making* and Handbook. Washington, D.C.

2002a *Annual Performance Plan, Little Bighorn Battlefield National Monument*. November 2002.

2002b *Director's Order #77-1: Wetland Protection / Wetland Procedural Manual*. Washington, D.C.

2003 *Director's Order #77-2: Floodplain Management*. Washington, D.C.

2004a *Air Resources Information System*. Available at http://www2.nature.nps.gov/air/Permits/ARIS/index.htm . Accessed October 2004.

2004b *Director's Order #77: Natural Resource Management Reference Manual*. Updated November. Washington, D.C.

2005a *Archeological Inventory of the Little Bighorn Battlefield National Monument Visitor Center Final Negative Finding Report*. July 6, 2005. Midwest Archeological Center. Lincoln, NE.

2005b *Little Bighorn Battlefield National Monument Environmental Assessment / Assessment of Effect, Rehabilitate Tour Road*. June 2005. Denver, Colorado.

Scott and Fox

1987 *Archaeological Insights into the Custer Battle*. University of Oklahoma Press, Norman, Oklahoma. 1987

Scott, Fox, Connor, and Harmon

1989 *Archaeological Perspectives on the Battle of the Little Bighorn*. University of Oklahoma Press, Norman, Oklahoma. 1989.

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS)

*Soil Survey Geographic (SSURGO) database for Big Horn County Area, Montana*. September 2004. Available at http://SoilDataMart.nrcs.usda.gov/.

United States Environmental Protection Agency (EPA)

1998 Final Guidance for Incorporating Environmental Justice Concern's in EPA's NEPA Compliance Analysis. April. Washington, D.C.

# APPENDIX A: CULTURAL RESOURCES SPECIALISTS REVIEW

I have reviewed this preferred alternative for conformity with requirements for the §106 process, with the 1995 Servicewide Programmatic Agreement (if applicable), and applicable parts of the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, NPS *Management Policies*, and *DO-28*. I have stated any additional stipulations that should apply, and I concur in the recommended assessment of effect above.

Signed: Steven DeVan — Archeologist — Date: 24 May 2006

Comments: (see attached comments)

Signed: Jill Cooley — Cultural Landscape Architect — Date: June 6, 2006

Comments: No Adverse Effect (alt B, interim VC plan).

Signed: Linda P. Ernst — Curator — Date: 12 June 2006

Comments:

Signed: John R. Doerner — Historian — Date: 06/12/06

Comments: (See my comments attached) — Comments addressed in Final Document

Approved: See signature above, John Doerner — Park Compliance Coordinator — Date:

Approved: Darrell J. Cook — Superintendent — Date: 6/12/06

# APPENDIX B: CULTURAL RESOURCES SECTION 106 DOCUMENTATION

# United States Department of the Interior

NATIONAL PARK SERVICE
Little Bighorn Battlefield National Monument
Post Office Box 39
Crow Agency, Montana 59022-0039


IN REPLY REFER TO:
D30 (LIBI)

July 7, 2005

Mr. Mark Baumler, Preservation Officer
State Historic Preservation Office
P.O. Box 201202
Helena, MT 59620-1202

Dear Mr. Baumler:

In complying with Section 106 of the National Historic Preservation Act, as amended, Little Bighorn Battlefield N.M. is taking this opportunity to advise the State Historic Preservation office of our preliminary interest in modifying the existing visitor center at the monument. Even though we are in the early planning stage of the proposed undertaking, it is nevertheless beneficial for the monument to begin taking a multidisciplinary approach by consulting with your office.

As part of our preservation commitment to the resources, we look forward in consulting further with your office regarding the proposed undertaking and the eligibility of the existing building for the National Register of Historic Places. In the interim and for your information, after reviewing several historical records of the visitor center we find that since the building's inception in 1950, there have been numerous internal and external alterations. Some of the major structural changes are the following: (1) In 1955 the front exterior was expanded to include an entrance vestibule; (2) North wing addition with basement and theater were added in 1965; (3) Fiberglass roof added and concrete patio with sidewalks built in 1966; and (4) in 1999 the interior and exterior were modified to allow additional space for the bookstore. Based on these changes to the visitor center, it is our determination that the original structural integrity is compromised and therefore not eligible, under the existing criteria, for inclusion to the National Register of Historic Places.

Later in the year, the monument plans to amend or revise the current general management plan through an environmental assessment; thereby, allowing the general public an opportunity to comment through this process. This process may set the basis to begin resolving some of the perplexing issues we have encountered with the 1986 General Management Plan for Little Bighorn Battlefield, including the issue surrounding a proposed visitor center and boundary expansion.

Enclosed is an Archeological Project Report prepared by Douglas D. Scott for Little Bighorn Battlefield National Monument for your review and comment. The survey was conducted on September 23, 2004 and no cultural resources were identified during the survey.

Please direct any inquiries to the Superintendent at (406) 638-3204.

Sincerely,

Darrell J. Cook

Darrell J. Cook
Superintendent

Enc.

## ARCHEOLOGICAL PROJECT REPORT

PARK: LIBI
DATE: November 4, 1999

[] PRELIMINARY REPORT - TARGET DATE FOR FINAL REPORT:

[x] FINAL NEGATIVE FINDING REPORT

[x] SMALL PROJECT REPORT

PROJECT and/or REPORT TITLE: Archeological Inventory of the Little Bighorn Battlefield National Monument Visitors Center.

PARK: Little Bighorn Battlefield National Monument

PROJECT/PACKAGE: N/A DATES OF FIELD WORK: September 23, 2004

PURPOSE OF ARCHEOLOGICAL WORK PER SOW and PROJECT DESIGN:

Superintendent Darrell Cook and the park staff are considering the potential of expanding the current visitors center. The possible expansion would require ground disturbance on northeast side of the building which is currently a grassy lawn.

ARCHEOLOGICAL PROJECT LOCATION AND AREA OF INVENTORY OR EXTENT OF TESTING (include site map or topographic map as appropriate that clearly delineate area surveyed):

The inventory was conducted on the grassy lawn adjacent to the visitors center, roughly the area from the current covered patio to the tour road and northeast to the edge of the grassy lawn. The legal location of the inventory project and inventory area is NW 1/4, SW 1/4, Sec. 17, T3S, R35E, encompassing approximately 1 acre.

ARCHEOLOGICAL PROJECT PERSONNEL (names and affiliation:

Douglas D. Scott, MWAC
Metal Detector Volunteers

ENVIRONMENTAL DESCRIPTION OF PROJECT AREA:

The area where the data collection equipment is to be constructed is located adjacent to the park visitors center and entirely vegetated in short grass.

GENERAL DESCRIPTION OF THE ARCHEOLOGICAL PROJECT and METHODS:

**Overall Research Design:**

Inventory, by metal detector and visual methods, the area to be potential disturbed by the construction. The work was guided by the research design developed in conjunction with the previous investigations of the Little Bighorn Battlefield National Monument (Scott and Fox 1987; Scott et al. 1989)

**Description of Investigations:**

The approximately 1 acres were visually inventoried and metal detected by the volunteer crew. The area was walked in a series of 2 meter wide transects until it was completely covered.

**Field Methods:** see above

**Previous Work:**

The area was inventoried during the 1984 archeological investigations of then Custer Battlefield National Monument (Scot and Fox 1984). The only things found at that time were relatively modern debris. No 19th century artifacts were located during the 1984 work.

**Site File Search - Date and Results:**

The LIBI CSI located at the Midwest Archeological Center was consulted. The site maps on file at MWAC were also consulted. No sites, features, or objects were recorded in the subject tract.

DESCRIPTION OF CULTURAL RESOURCES LOCATED (for projects with several/many sites synthesize information into tables/charts; include statement if no resources were found):

No prehistoric or historic sites, features, or objects were found during the inventory effort. The metal detectors found numerous objects dating to the post-1950 use of the area as a visitors center. The metal objects were buried to depths of 0-3 inches.

NATIONAL REGISTER EVALUATION OF CULTURAL RESOURCES LOCATED:

**National Register Recommendations with Justifications for eligible, not eligible, need more information from testing, etc. -- include State/Park Contexts and Research Design applicable to justify NRHP recommendation:**

The qualities that justify the park for inclusion on the National Register will not be affected by the proposed construction.

**Site Integrity and conservation/stabilization/avoidance recommendations:**

The area is previously disturbed and no archeological integrity will be affected

EFFECTS OF PROJECT ON RESOURCES:

None

LOCATION OF ARTIFACTUAL MATERIALS (should not usually be collected) AND RECORDS FROM THE WORK:

Records relating to the project will be housed at the Midwest Archeological Center until such time as they are returned to the park. No artifacts were found or collected.

REFERENCES CITED:

Scott, Douglas D. and Richard A. Fox, Jr.
1987 Archaeological Insights into the Custer Battle. University of Oklahoma Press, Norman.

Scott, Douglas D., Richard A. Fox, Jr., Melissa Connor, and Dick Harmon
1989 Archaeological Perspectives on the Battle of the Little Bighorn. University of Oklahoma Press, Norman.

SUMMARY MANAGEMENT RECOMMENDATIONS:

[] CLEARANCE NOT RECOMMENDED (explain):

[x] CLEARANCE RECOMMENDED (explain):

[] CLEARANCE RECOMMENDED WITH CONDITIONS (explain):

ENCLOSURES:

[ ] USGS TOPOGRAPHIC MAP

[] ARCHEOLOGICAL BASE MAP

[] PROJECT DESIGN DATA

[] PROJECT MAP SCALE

[] SITE FORMS AND PHOTOGRAPHS

PREPARED BY: Douglas D. Scott

ORGANIZATION : Midwest Archeological Center, National Park Service

DATE: July 6, 2005

United States Department of the Interior
NATIONAL PARK SERVICE
INTERMOUNTAIN REGION
12795 West Alameda Parkway
PO Box 25287
Denver, Colorado 80225-0287

H4217

JAN 05 2006

Dr. Stan Wilmoth
Acting State Historic Preservation Officer
1410 8th Avenue
P.O. Box 201202
Helena, MT 59620-1202

Dear Dr. Wilmoth:

Little Bighorn Battlefield National Monument proposes to construct an enclosed weather-resistant multi-purpose room to facilitate the park's interpretive programs, park film, and improve visitor services. The observation room and interpretive patio would be demolished to accommodate the footprint of the multi-purpose room. The area between the museum exhibit area and the sidewalk next to the main park road would be enclosed to provide a visitor queuing area to access to the multi-purpose room and to provide space for temporary interpretive displays of the park's museum collections for visitor appreciation.

The park has requested that I prepare an environmental assessment (EA) for the proposed project. Preparation of an EA is necessary to meet the requirements of the National Environmental Policy Act. In addition, the process and documentation required for preparation of the EA will be used to comply with §106 of the National Historic Preservation Act. In accordance with section 800.8) of the Advisory Council on Historic Preservation's regulations (36 CFR Part 800), I am notifying your office in advance of the park's intention to use the EA to meet its obligations under §106.

If you should have any questions, please contact me at (303) 987-6691.

Sincerely,

Linda Clement

Linda Clement
Line Item Construction, Compliance Specialist

cc:
Darrell Cook – Superintendent Little Bighorn Battlefield National Monument
John Keck, Montana/Wyoming State Coordinator
→Don Klima, Advisory Council on Historic Preservation
Chris Turk, Intermountain Region Environmental Quality Coordinator
Becky Debs, Intermountain Region Line Item Construction Manager

Sent out
5 Jan. 2006

# MONTANA HISTORICAL SOCIETY

225 North Roberts ◆ P.O. Box 201201 ◆ Helena, MT 59620-1201
◆ (406) 444-2694 ◆ FAX (406) 444-2696 ◆ www.montanahistoricalsociety.org ◆


March 7, 2006

Mr. Darrell Cook
Superintendent
Little Bighorn Battlefield
PO Box 39
Crow Agency, MT 59022

Ref: Determination of Eligibility for Little Bighorn Visitor Center

Dear Superintendent Cook:

We reviewed the site form for the above referenced property that you submitted to us. Based on this we concur with you that the non-historic additions and removal of historic character defining features from the Visitor Center make it not eligible for National Register listing.

In December of last year you sent us a set of 65% complete drawings showing an expanded Visitor Center. There was no cover letter with these drawings initiating an undertaking. **An agency has not initiated the Section 106 review process if the agency does not submit a letter to the SHPO explaining the undertaking and its effects.** Without that cover letter we have nothing upon which to comment. We anticipate more information from you on the proposed modifications to the Visitor Center and what effects it might have on the National Historic Landmark Little Bighorn Battlefield.

Sincerely,

Pete

Pete Brown
Historic Architecture Specialist
Montana SHPO
406-444-7718

File: NPS-LBH-2006030208


STATE HISTORIC PRESERVATION OFFICE ◆ 1410 8th Ave ◆ P.O. Box 201202 ◆ Helena, MT 59620-1202
◆ (406) 444-7715 ◆ FAX (406) 444-6575

Crow Country

Office of the Chairman

# CROW TRIBAL EXECUTIVE BRANCH

Bachecitche Avenue
P.O. BOX 159
Crow Agency, MT 59022
Phone: (406) 638-3715, Fax: (406) 638-3773

Carl E. Venne, Chairman
Cedric Black Eagle, Vice Chairman
Andrew Old Elk, Secretary
Darrin Old Coyote, Vice Secretary

April 21, 2006

Mr. Michael Snyder, Regional Direcctor
National Park Service
Intermountain Field Office
12795 West Alameda Parkway
Denver, CO 80225

Dear Mr. Snyder:

This letter is in support of the National Park Service's proposal for the expansion of the Visitor Center at the Little Bighorn Battlefield National Monument, Crow Agency, Montana. The expansion of approximately 790 square feet will enhance the visitor's experience at the Monument. The Crow Tribe is in favor of this expansion.

As the elected Crow Tribal Chairman, I appreciate the efforts of Mr. Cook, Superintendent at Little Bighorn Battlefield National Monument and Bighorn Canyon National Recreation Area. The improvements of park facilities have benefited park visitors, enrolled members of the Crow Tribe and the surrounding communities.

The Superintendent has worked effectively for many years with the Indian Tribes of the region, as well as the diverse interest groups. I endorse Superintendent Cook's efforts to expand the Visitor Center.

You can contact me at 406/638-3715 if I can provide further assistance.

Sincerely,

Carl Venne,
Crow Tribal Chairman

Cc: Darrell Cook, P.O. Box 39, National Park Service, Crow Agency, MT.

Mailed 4-24-06 Ci

Crow Country

Office of the Chairman

# CROW TRIBAL EXECUTIVE BRANCH

**Bacheeitche Avenue**
**P.O. BOX 159**
**Crow Agency, MT 59022**
**Phone: (406) 638-3715, Fax: (406) 638-3773**

Carl E. Venne, Chairman
Cedric Black Eagle, Vice Chairman
Andrew Old Elk, Secretary
Darrin Old Coyote, Vice Secretary

May 25, 2006

Mr. Michael Snyder, Regional Director
National Park Service
Intermountain Field Office
12795 West Alameda Parkway
Denver, CO 80225

Dear Mr. Snyder:

In reference to the enclosed correspondence dated April 21, 2006, this letter is to reiterate our support of the expansion efforts at the existing Little Bighorn Battlefield room dimensions, we are still in support of the proposed interim visitor center plan.

You can contact me at (406) 638-3715 if I can provide further assistance.

Sincerely,

Carl Venne
Crow Tribal Chairman

CC: Darrell Cook, P.O. Box 39, National Park Service, Crow Agency, Montana 59022

# APPENDIX C – DETERMINATION OF ELIGIBILITY FOR THE LITTLE BIGHORN BATTLEFIELD NATIONAL MONUMENT VISITOR CENTER

# United States Department of the Interior

NATIONAL PARK SERVICE
Little Bighorn Battlefield National Monument
Post Office Box 39
Crow Agency, Montana 59022-0039

IN REPLY REFER TO:

LIBI (D22)

February 22, 2006

Dr. Stan Wilmoth
Acting State Historic Preservation Officer
Montana Historical Society
Historic Preservation Office
1410 8th Avenue
P.O. Box 201202
Helena, MT 59620-1202

Dear Dr. Wilmoth:

Enclosed is a copy of the Montana Historic Property Record form, about which Pete Brown of your staff had a discussion with the preparer Rodd L. Wheaton. On Mr. Brown's advice, we are providing two attachments, a Statement of Significance and an Architectural Description, as supplementary documentation. As demonstrated, we also have evaluated the building under the criteria established by the National Park Service in 2000 for visitor center construction during the Mission 66-construction period of significance.

Furthermore, as per the requirements of the Property Record form, we are providing copies of six historic photographs from our park archive and nine photographs recently taken by Ken Woody, Chief of Interpretation and Visitor Services, for the preparation of the documentation. To complete the package we are including a sketch map of the site, taken from the 1965 construction documents, and a copy of an USGS map of the park. Additional photographs from 1999, prior to the most recent revision, may be seen in the website listed in the Bibliography on the Historic Property Record form.

Therefore, Little Bighorn Battlefield National Monument is seeking your concurrence that the Museum & Administration Building/Visitor Center, built 1950-1951/1965, is not eligible for listing on the National Register of Historic Places. As detailed in the aforementioned documentation, the structure located in the park does not have integrity because of additional alterations and an even later attachment to the facade. In addition, it does not meet the criterion for "exceptional significance," considering that the later additions are less than fifty years old.

We look forward to receiving your reply on this matter at your earliest convenience, please contact James Charles of my staff if you need additional information, he can be reached at (406) 666-3308 or 638-3218.

Sincerely,

Darrell J. Cook

Darrell Cook
Superintendent

Enclosures

# MONTANA HISTORIC PROPERTY RECORD

**For the Montana National Register of Historic Places Program and State Antiquities Database**

Montana State Historic Preservation Office
Montana Historical Society
PO Box 201202, 1410 8th Ave
Helena, MT 59620-1202

| | |
|---|---|
| Property Address: **Little Bighorn Battlefield National Monument**<br>Historic Address (if applicable): **Custer Battlefield National Monument**<br>City/Town: **near Crow Agency** | Site Number: **24**<br>(An historic district number may also apply.)<br>County: **Big Horn** |
| Historic Name: **Custer Battlefield NM Museum and Adminstration Building**<br>Original Owner(s): **National Park Service**<br>Current Ownership ☐ Private ☒ Public<br>Current Property Name: **Little Bighorn Battlefield NM Visitor Center**<br>Owner(s): **National Park Service**<br>Owner Address: **Superintendent, Little Bighorn Battlefield NM, P. O. Box 39, Crow Agency, MT**<br>Phone: **406 666-3300/406 638-3201** | Legal Location<br>PM: **Montana** Township: Range:<br>¼ ¼ ¼ of Section:<br>Lot(s):<br>Block(s):<br>Addition: Year of Addition:<br>USGS Quad Name: Year: |
| Historic Use: **Museum and Adminstration Building**<br>Current Use: **Visitor Center**<br>Construction Date: **1950-1951/1965/2000** ☐ Estimated ☐ Actual<br>☒ Original Location ☐ Moved Date Moved: | UTM Reference www.nris.state.mt.us/topofinder2<br>☐ NAD 27 **(preferred)** ☐ NAD 83<br>Zone: **13** Easting: **310435** Northing: **5048922** |
| National Register of Historic Places<br>NRHP Listing Date: **N/A**<br>Historic District: **N/A**<br>NRHP Eligible: ☐ Yes ☒ No | Date of this document: **January 31, 2006**<br>Form Prepared by: **Rodd L. Wheaton**<br>Address: **3021 S. Cornell Circle Englewood, CO 80113-3012**<br>Daytime Phone: **303 789-9550** |

| MT SHPO USE ONLY | Comments: |
| --- | --- |
| Eligible for NRHP: ☐ yes ☐ no<br>Criteria: ☐ A ☐ B ☐ C ☐ D<br>Date:<br>Evaluator: | |

**MONTANA HISTORIC PROPERTY RECORD**

PAGE 2

Property Name: **Little Bighorn Battlefield NM Visitor Center**

Site Number: **24**

ARCHITECTURAL DESCRIPTION ☒ See Additional Information Page

Architectural Style: International If Other, specify: **Park Service Modern**
Property Type: Government Specific Property Type: **Visitor Center**

Architect: **1950-1951, Daniel M. Robbins; 1965, Max R. Garcia; 2000 National Park Service, Intermountain Region architects** Architectural Firm/City/State: **Daniel M. Robbins & Associates, Omaha, NE; Max R. Garcia, Architect, San Francisco, CA; National Park Service Intermountain Region; Lakewood, CO**
Builder/Contractor: **1950-1951, J. C. Boespflug Construction Co.; 1965, Gorgam Construction Co.**
Company/City/State: **Billings, MT**
Source of Information: **Superintendent's Monthly Reports and construction documents**

Concisely, accurately, and completely describe the property and alterations with dates. Number the buildings and features to correlate with the Site Map.

Please refer to Attachements Nos. 1 and 2, Statement of Significance and Architectural Description for additional information.

**HISTORY OF PROPERTY** ☒ See Additional Information Page

Please refer to Attachment No. 1, Statement of Significance for additional information

**INFORMATION SOURCES/BIBLIOGRAPHY** ☐ See Additional Information Page

National Park Service, Little Bighorn Battlefield NM collections, Crow Agency, MT National Park Service, Denver Service Center, Technical Information Center, 12795 W. Alameda Parkway, Lakewood, CO 80225. Construction drawings, planning documents, and reports including superintendents' annual reports, Little Bighorn Battlefield NM Daniel M. Robbins registration records. State of Nebraska, Board of Engineers and Architects, P. O. Box 95165, Lincoln, NE 68509 Max R. Garcia. AS LONG AS I REMAIN ALIVE. Tuscaloosa, AL: Portals, 1979 Sarah Allaback. MISSION 66 VISITOR CENTERS: THE HISTORY OF A BUILDING TYPE. Washington, DC: The Govrnment Printing Office, 2000 www.Mission66.com/libi/libi02.html (photographs of the visitor center from 1999)

**NATIONAL REGISTER OF HISTORIC PLACES**

NRHP Listing Date: **N/A**
NRHP Eligibility: ☐ Yes ☐ No ☐ Individually ☐ Contributing to Historic District ☐ Noncontributing to Historic District
NRHP Criteria: ☐ A ☐ B ☐ C ☐ D
Area of Significance: Period of Significance:

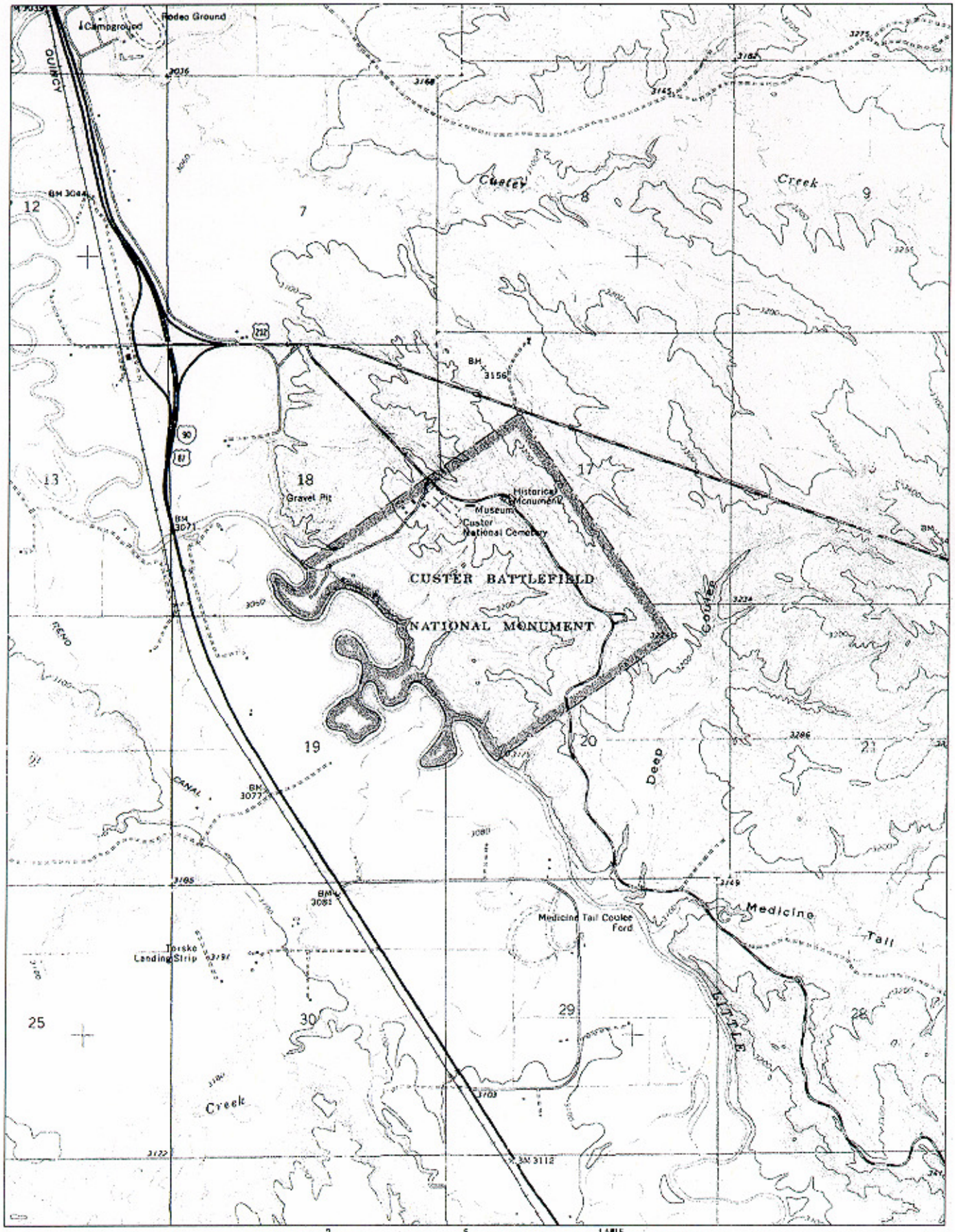
**STATEMENT OF SIGNIFICANCE** ☒ See Additional Information Page

The Custer Battlefield NM Museum, now the Little Bighorn Battlefield NM Visitor Center, while once a very significant post-World War II NPS building, no longer meets criteria for nomination to the National Register of Historic Places. Originally designed and built between 1950-1951, the structure represented one of the earliest examples of International Style modernism in the Park Service, which predated the Mission 66 era of construction between 1956 and 1966. Thus, it falls within the Period of Significance criteria, developed by the NPS, for registering Mission 66 Visitor Centers. The original Museum building was an important precedent of the Mission 66 program and is an associated visitor center property type. However, it fails to meet the criteria for "Park Service Modern" because of the lack of integrity lost through subsequent additions extending through the year 2000 that impair the exterior and interior character of the original building and its Mission 66 wing. Considering that the Mission 66 wing was added in 1965 and the facade was partially destroyed in 2000, the structure does not meet the criteria for exceptional significance for structures less than 50 years old. Please refer to Attachment No. 2, Statement of Significance for additional information.

**INTEGRITY** (location, design, setting, materials, workmanship, feeling, association) ☒ See Additional Information Page

Please refer to Attachments Nos. 1 and 2 for additional information.

**MONTANA HISTORIC PROPERTY RECORD**
ADDITIONAL INFORMATION PAGE
Property Name: **Little Bighorn Battlefield NM Visitor Center** Site Number: **24**



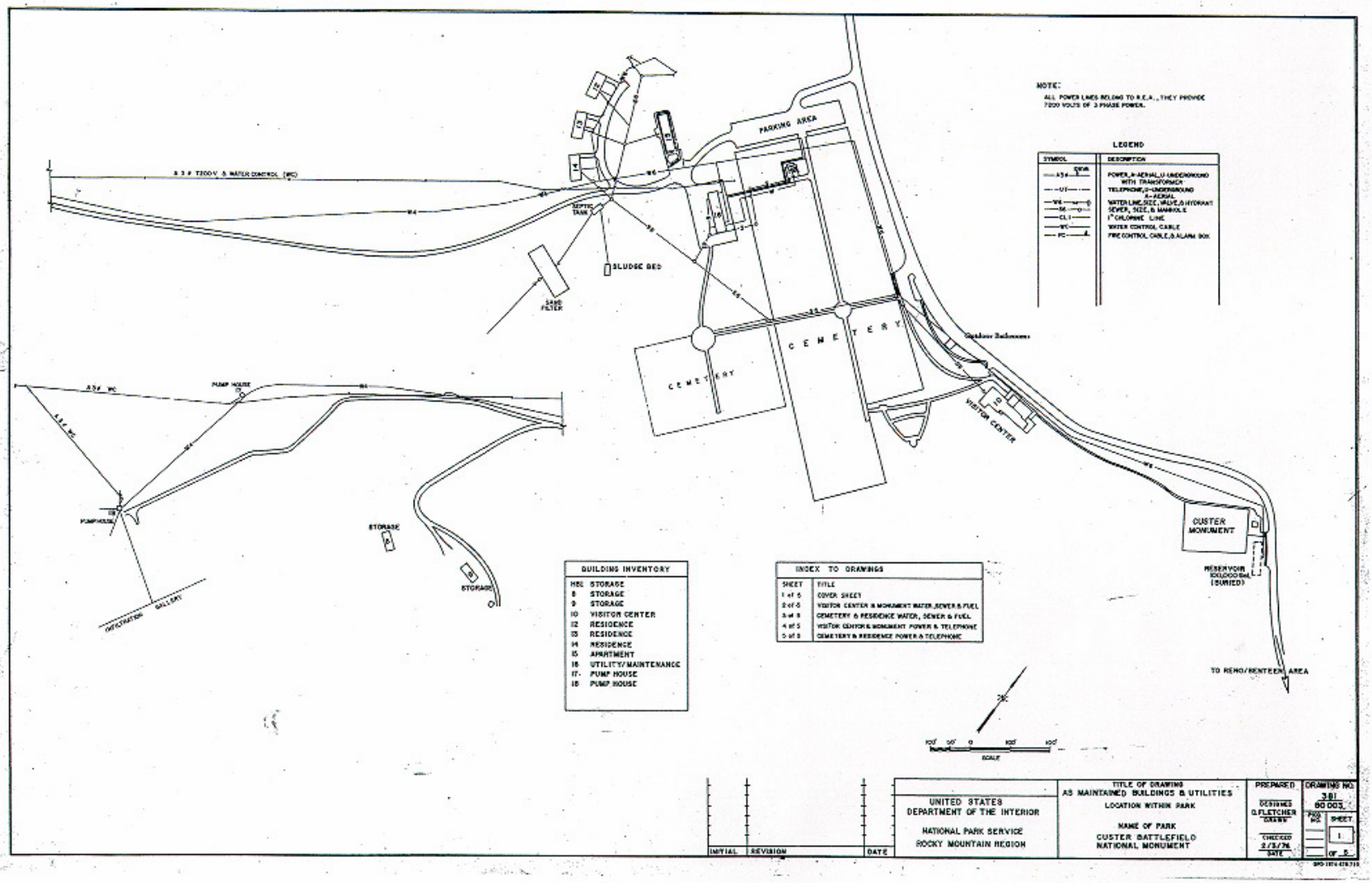

TN / MN 12°

0 .5 1 MILE

0 1000 FEET 0 500 1000 METERS

Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

# SITE PLAN - LITTLE BIGHORN BATTLEFIELD



2000 addition to North facade; South view;
Detail, 2006

Southwest corner, Northeast view; detail of West and South elevation, 2006

South elevation; North view, detail of South, 2006

North facade entrance feature; South view
Detail of the remodeled entrance feature, 2006

North facade; South view;
Overview of facade, 2006

Lobby, interior view facing west;
Information Desk, 2000

Bookstore, Northwest view; detail of space
With removed original exterior walls, 2000

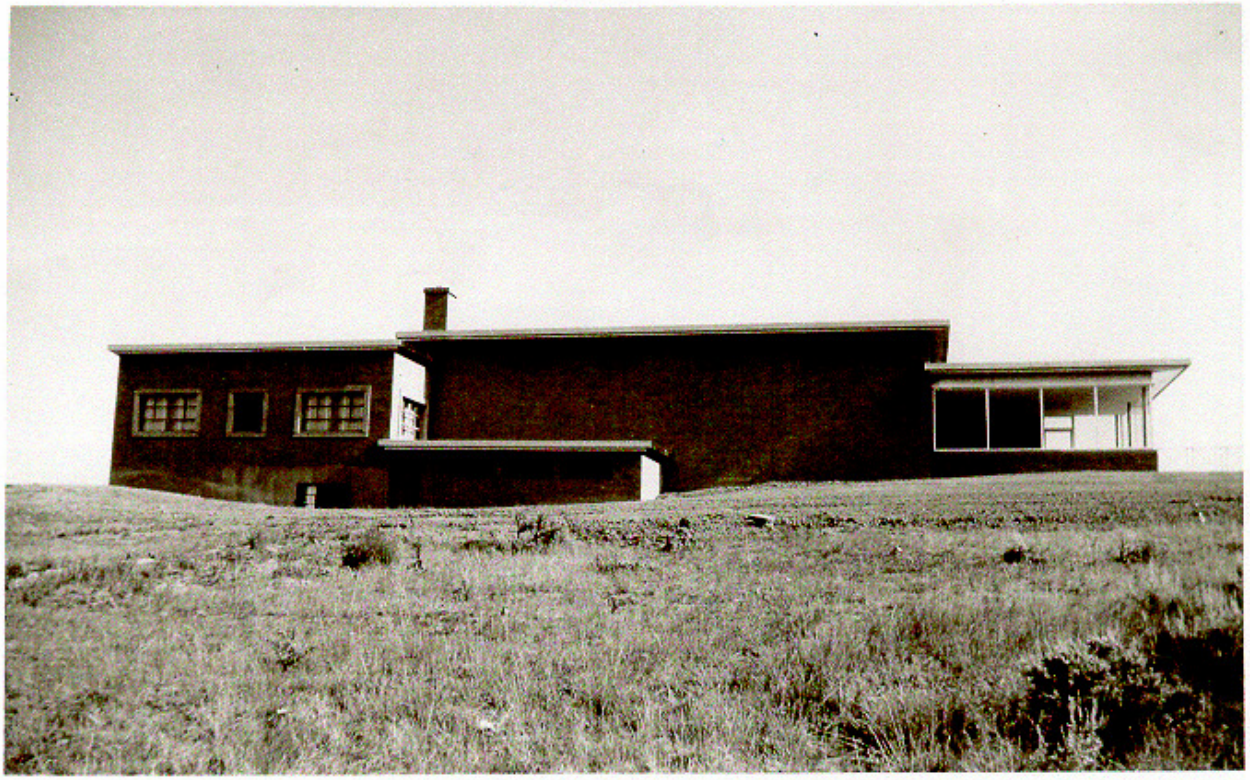
Observation Room; East view;
Detail of space, 2000

Interior of Museum; West view;
Exhibit cases, 2000

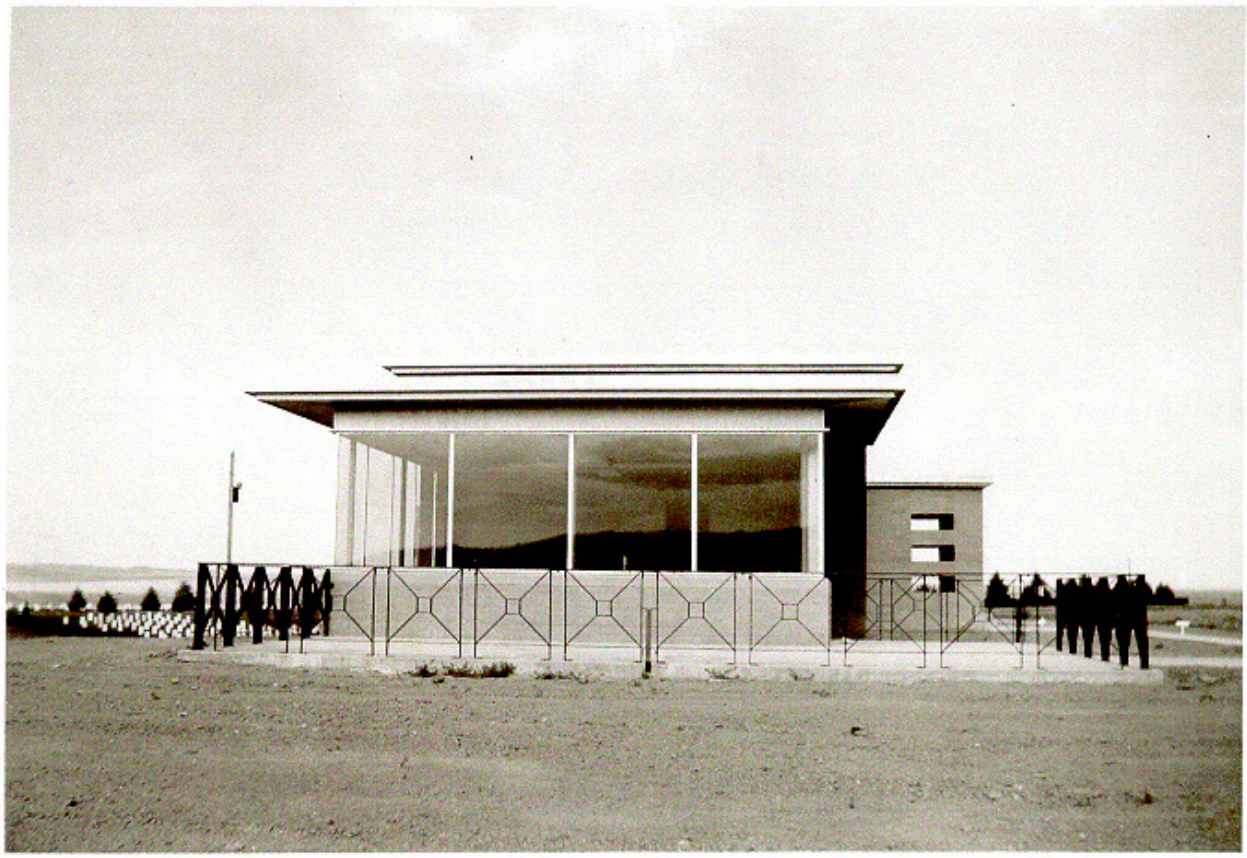
Historic view of North facade, c. 1952;
South view; view of newly constructed Museum

Historic view of Northeast corner,
c. 1952; Southwest view

Historic view of South elevation; c. 1952;
North view; detail of original elevation

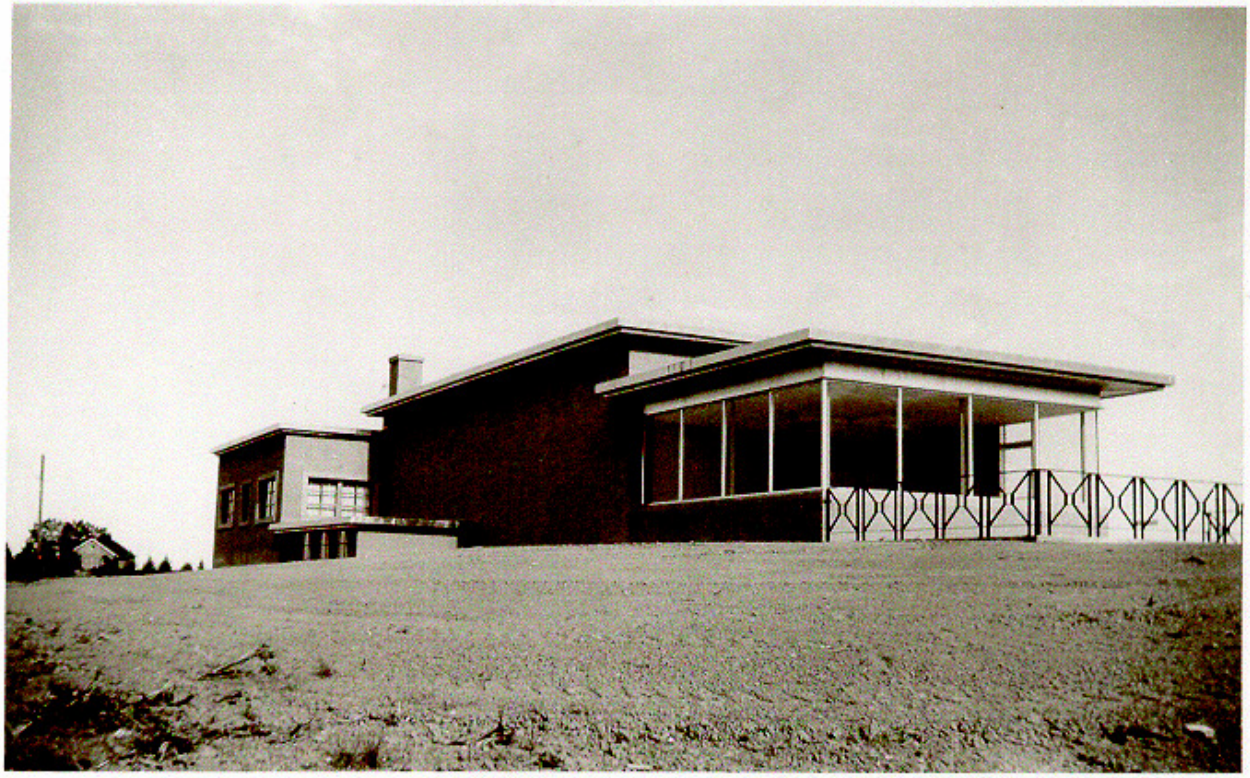


Historic view of Observation Room, c. 1952;
West view; detail of the East elevation of the wing



Historic view of North entrance, c. 1952
South view; detail of original entrance feature

Historic View of South elevation, c. 1952;
Northwest view; detail of the rear elevation



# APPENDIX D: PUBLIC INVOLVEMENT

Internal scoping was conducted by park staff of Little Bighorn Battlefield National Monument and resource professionals of the National Park Service's Denver regional office on June 14-15, 2005. This interdisciplinary process defined the purpose and need, identified potential actions to address the need, determine what the likely issues and impact topics would be, and identified the relationship, if any, of the proposed action to other planning efforts at the monument.

On June 24, 2005 a presentation was made to Custer Battlefield Historic Museum Association and others that described the proposed project.

Press release inviting the public to attend an open house and discuss the proposed Interim Visitor Center Plan was sent out on November 14, 2005.

Scoping brochure describing the proposed action was sent to the park's mailing list, park neighbors, local agencies, state historic preservation officer, park affiliated tribes, a local newspaper of record and other local papers, and other parties that may be interested. Brochures were mailed on November 15 & 16, 2005.

Eleven Indian tribes traditionally associated with the lands of Little Bighorn Battlefield National Monument and others with whom monument staff regularly consult, were also apprised by letter of the proposed action on November 15 & 16, 2005 or January 13, 2006.

An open house was held on December 20, 2005 in the Little Bighorn Battlefield visitor center observation room. Several members of the public and many members of the Crow Tribe attended the open house and spoke to park staff about the proposed replacement of the observation room. The Mandan Hidatsa Arikara Nation/ Three Affiliated Tribes expressed interest via a phone call and stated that they would defer to the wishes of the Crow Tribe. The Crow Tribe sent a letter of support for the proposed Observation Room replacement.