National Park Service
U.S. Department of the Interior

Theodore Roosevelt National Park

Painted Canyon Redevelopment

Environmental Assessment **DOI-NPS-PEPC 134481**



The National Park Service (NPS) has considered the factors mandated by the National Environmental Policy Act (NEPA). This environmental assessment represents the NPS's good-faith effort to fulfill NEPA's requirements by prioritizing documentation of the most important relevant considerations within the statutorily mandated page limits and timeline. This prioritization reflects the NPS's expert judgment; and any considerations addressed briefly or left unaddressed are, in NPS's judgment, comparatively non-substantive and would not meaningfully inform NPS's consideration of environmental effects and the decision to be made. The environmental assessment is substantially complete, considers the factors mandated by NEPA, and, in the decisionmaker's judgment, contains analysis adequate to inform NPS's decision regarding the proposed action.

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CHAPTER 1. INTRODUCTION

In compliance with the National Environmental Policy Act (NEPA), the National Park Service (NPS) prepared an Environmental Assessment (EA) to examine alternative actions and environmental effects associated with the redevelopment of the Painted Canyon Area and Visitor Center (also referred to as Painted Canyon) at Theodore Roosevelt National Park (Park). The EA is prepared in accordance with 516 Department Manual (DM) 1, U.S. Department of the Interior (DOI), Handbook of National Environmental Policy Act Implementing Procedures, February 2026 (DOI NEPA Handbook) and its appendices, along with the National Environmental Policy Act Implementing Regulations at 43 Code of Federal Regulations (CFR) Part 46.

1.1. Background

The Park, in partnership with the National Park Foundation (NPF), evaluated options to redevelop Painted Canyon and its associated facilities. In 2022, the Park completed a Facility Revitalization Plan (Plan; NPS, 2022b) and Environmental Assessment (EA), referred to hereafter as the 2022 EA (NPS, 2022a), which identified several developed areas in need of improvement, expansion, and/or replacement. The Painted Canyon Area and Visitor Center was selected as a top priority due to aging infrastructure, transportation and circulation inefficiencies, limited visitor amenities, the need to modernize interpretive displays, and ongoing safety concerns (NPS, 2022a; 2022b). The 2022 EA examined a range of management strategies and development concepts intended to address both current and anticipated needs.

Although the 2022 EA analyzed the broader impacts of the proposed development concepts, it did not assess the localized effects of implementing the preferred (selected) alternative and explicitly stated that additional, site-specific NEPA review and other compliance requirements would be necessary once detailed design and engineering information became available prior to construction.

With more fully developed construction concepts now available, the Park is proposing to move forward with several of the improvements outlined for Painted Canyon in the 2022 Plan and EA. To assess the potential environmental impacts of these refined proposals, the Park has prepared a new EA (2026 EA). This EA supplements, rather than replaces, the 2022 EA by addressing new information and analyzing site-specific impacts. To streamline the review process and avoid redundancy, the 2026 EA incorporates by reference the relevant information and analyses from the Plan and 2022 EA and its associated Finding of No Significant Impact (FONSI). The 2022 materials are publicly available at: ParkPlanning - Facility Revitalization Plan.

1.2. Purpose and Need

The purpose of the proposed action is to redevelop the Painted Canyon Area and Visitor Center to enhance visitor experience, support year-round operations, improve accessibility and safety, and address long-standing facility deficiencies that limit the site's ability to provide a meaningful introduction to the Park.

Action is needed because many of the existing facilities no longer adequately serve visitors or Park staff due to deteriorated and undersized buildings, outdated and limited visitor services, inadequate accessibility and vehicle circulation, and infrastructure constraints that prevent the site from operating year-round (NPS, 2022a; 2022b). In addition, bison freely roam across the

site, creating a hazard for visitors because there is limited staff direction or wayside guidance available on how to safely interact with wildlife. Painted Canyon plays an important role in orienting visitors to the Park's resources and history, emphasizing the need for modern facilities that advance resource protection, provide a high-quality visitor experience, and can accommodate future capacity needs as visitation continues to increase. This project aligns with the vision and goals identified in the 2022 Plan and EA (NPS, 2022a; 2022b).

1.3. Project Area

The Park covers approximately 70,000 acres in western North Dakota (ND) and is divided into the North Unit, South Unit, and Elkhorn Ranch Unit. The Painted Canyon Area and Visitor Center was constructed in 1978 and is located in the Park's South Unit, approximately 8 miles southeast of Medora, ND along Interstate 94 (I-94) in Billings County (Figure 1). The site is about 34 acres and also functions as a state-designated rest area that is only open to the public from about May to October, depending on weather. Facilities in this location include a small bookstore and souvenir shop, parking areas for both passenger vehicles and tractor-trailers, restrooms, two wastewater treatment lagoons, two picnic shelters, hiking and horse-riding trails, and a scenic overlook, all of which are closed during winter months (NPS, 2022a; 2022b).

Painted Canyon offers expansive views of the North Dakota Badlands (Badlands), a rugged landscape of colorful geological formations that characterize the region. Distinct layers of sedimentary rock along buttes create the "painted" appearance for which the area is named, providing a striking contrast to the surrounding rolling hills of mixed-grass prairie (Figure 2).

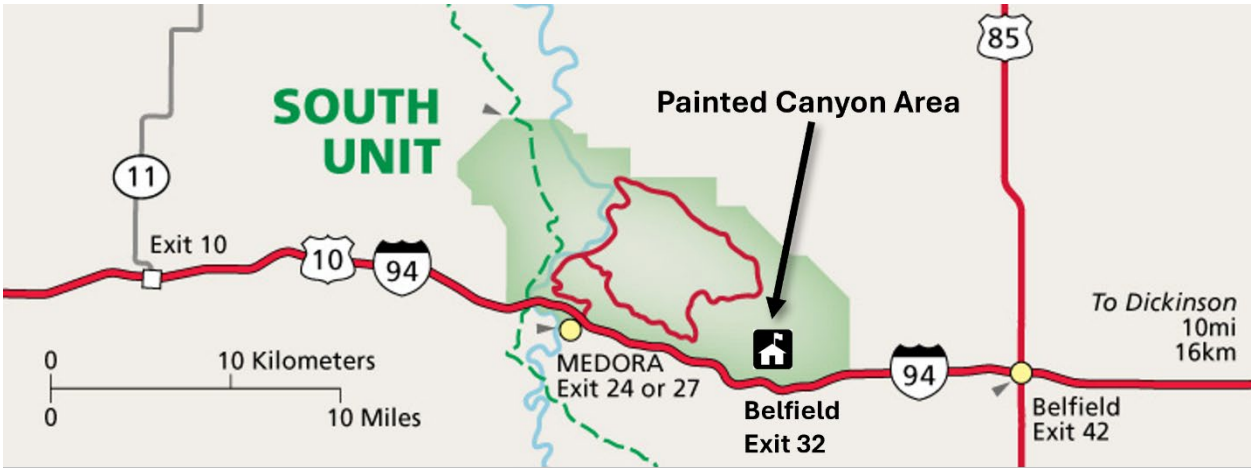


Figure 1: Map showing the location of the Painted Canyon Area and Visitor Center along I-94 within the South Unit of the Park.



Figure 2: The transition from the rolling hills of mixed-grass prairie to Painted Canyon and the North Dakota Badlands (photo credit: NPS).

CHAPTER 2. ALTERNATIVES

This section describes actions the NPS would implement to redevelop the Painted Canyon Area and Visitor Center to improve the visitor experience and onsite facilities. This chapter provides an overview of Alternative A: No Action Alternative and Alternative B: Painted Canyon Redevelopment. The action alternative was developed by the NPS interdisciplinary team and included input received during the public scoping period prior to the initiation of the EA. In addition to Alternatives A and B, this document also describes alternatives and alternative elements that were considered but not analyzed in detail (Appendix B).

2.1. Alternative A: No Action Alternative

Under Alternative A: No Action Alternative, the Park would not redevelop the Painted Canyon Area and Visitor Center. Existing conditions and current levels of operation and maintenance would continue as is. No major modernization or accessibility upgrades would be made, and the main building, parking areas, restrooms, wastewater treatment lagoons, picnic shelters, trails, and overlook would continue experiencing ongoing wear due to age, increased visitor use, and weather. The frequency of dangerous bison-visitor interactions would likely increase as visitation continues to rise. Painted Canyon would continue to operate seasonally from approximately May to October.

2.2. Alternative B: Painted Canyon Redevelopment (Proposed Action)

Under Alternative B: Painted Canyon Redevelopment (Proposed Action), existing facilities would be renovated, expanded, reconstructed, or removed, and new facilities would be added to improve visitor services and experience, operational functions, and site infrastructure. The proposed elements would be consistent with the vision and design concepts outlined in the Plan

and 2022 EA (NPS, 2022a; 2022b). All construction, demolition, access, and staging would occur within the site's existing developed area.

Elements of the proposed action would include installing bison exclusion features, building a new visitor center with modern amenities, constructing a new overlook and picnic shelters, reconfiguring the entrance, expanding parking, adding equestrian facilities, improving accessibility, updating utilities and infrastructure for year-round operation, and restoring native grasslands. All mitigation measures and best management practices (BMPs) in Appendix C would be implemented to the extent possible, and all proposed work would comply with applicable federal, state, and local regulations and requirements.

For the purposes of this document, the following definitions have been applied.

- Amenities: Features or services that improve comfort, convenience, and enjoyment with the primary purpose of enhancing the visitor experience but are not essential for basic site operations (e.g., scenic overlook, picnic shelters).
- Facilities: Physical buildings, spaces, or major assets designed to support a specific function, activity, or service (e.g., visitor center, restrooms, parking lots).
- Utilities: Essential services that provide the resources required for buildings and developed areas to operate safely and reliably (e.g., fiber-optic internet, propane, electricity, potable water, wastewater).
- Infrastructure: The foundational physical systems and networks that support the operation, connectivity, and long-term functionality of a site (e.g., roads, drainage systems, utility distribution lines).

Construction Operations

Construction activities would begin in Spring 2027 with the demolition of the existing visitor center, followed by additional demolition and phased construction from Spring 2027 through Summer/Fall 2028. A typical construction season would be from May through September (NPS, 2022a). Demolition and construction sequencing would be determined during the pre-construction planning phase.

Construction activities associated with the proposed Painted Canyon redevelopment may include equipment staging, grading, trenching and excavation, laying asphalt, pouring concrete, ground disturbance, building construction, tree removal, vegetation removal, landscaping, and revegetation (NPS, 2022a). All site work would be completed by a contracted construction company with Park staff and construction management providing oversight and coordination.

Painted Canyon would be closed to the public during construction. Construction operations would generally follow standard workdays and times and primarily occur during daylight hours.

Access, Staging, and Equipment

Construction site access would use the existing entrance and roadway configuration, and no new temporary access roads would be created. All efforts would be made to locate staging areas in previously disturbed or hardscaped surfaces to minimize additional ground disturbance (Appendix C).

Equipment used for road, parking, utility, and facility improvements may include skid steers, graders, medium and large loaders, backhoes, track hoes, trenchers, belly dumps, water trucks,

compacters, concrete trucks, cranes, large dump trucks for material hauling, asphalt milling machines, paving machines, asphalt rollers, curbing machines, and a variety of handheld power tools.

Demolition and earthwork would use typical construction machinery such as excavators, loaders, graders, and dozers. Structural assembly would use cranes, while concrete mixers and trucks would be used for foundation and flatwork. Utility installation would use trenchers and/or compactors. Material delivery vehicles, light towers, compressors, and generators would provide temporary construction support.

Equipment selection would follow standard NPS construction specifications and BMPs (Appendix C) and contractor methods.

Bison Exclusion Features

Approximately 2,500-3,000 linear feet (ft) of bison exclusion fencing would be erected using welded steel construction with line posts set in concrete. Horizontal bars would be placed starting at ground level up to a heigh of 6 ft with 8-12 inch (in) spacing between bars. Mild or carbon steel material would be used and allowed to oxidize to minimize maintenance needs and provide a rust color that blends with the natural landscape and site aesthetic. To fully exclude bison from the developed area and I-94, new fence would travel along the rim of the canyon and connect to the existing woven wire perimeter fence about 250 ft west and 1,000 ft east of the existing entrance cattle guard. Self-closing metal pedestrian gates would be installed to provide visitors access to trails on the north (Crescent Path), east (Painted Canyon Trail), and west (Painted Canyon Nature Trail) sides of the fenceline.

Swing gates up to 12 ft long would be installed near the southeast and southwest junctions of the welded and existing perimeter fence to allow vehicle access for administrative purposes. Should bison breach the exclusion fencing, these gates would also create temporary exit points where Park staff could herd bison out of the area. A “duck under” span, where the lowest horizontal bar is set to 18 in, would be installed adjacent to both swing gates so that deer (white-tailed (*Odocoileus virginianus*) and mule (*Odocoileus hemionus*)) and pronghorn (*Antilocapra americana*) may pass through.

Trees and woody vegetation would be removed along the fence corridor during construction and to allow access for monitoring and future repairs. The existing perimeter fence and cattle guard would not be removed until the new bison exclusion fence is fully installed and functioning to prevent bison from accessing the site or exiting NPS lands.

Vegetation Restoration

After construction is complete, plant community restoration and augmentation would occur throughout the site. Disturbed soil would be recontoured and topsoil added where needed followed by reseeding and planting using native grasses, forbs, and/ woody shrubs. Undisturbed areas would be seeded or planted to increase native species diversity. Restoration methods could include broadcast seeding, hydroseeding, drill seeding, installation of native plugs, and planting of container-grown shrubs and forbs. These activities would be implemented in accordance with the mitigation measures and BMPs in Appendix C, which outlines requirements for soil stabilization, invasive species prevention, and long-term establishment of native vegetation.

Site Entrance Redevelopment

The entrance to Painted Canyon would be reconstructed to establish a more identifiable entry point to Theodore Roosevelt National Park. Upon arrival a dry-stacked stone wall, matching existing Park masonry, would flank the asphalt roadway and metal swing gate. The new stone feature would subtly display NPS identification (e.g., small lettering) so visitors could immediately recognize they are entering a national park. The structure would use Civilian Conservation Corps (CCC)-inspired stonework to reflect the Park's history and blend with the surrounding landscape. To maintain efficient traffic flow and minimize congestion, the new design would be limited in scale, lack prominent signage (e.g., large NPS arrowhead), and not include any pull-off lanes to discourage visitors from blocking the entrance or parking on the side of road. A cattle guard would prevent bison from entering or exiting the site (Figure 3).

Beyond the gate, a two-way traffic road would divide into a one-way circulation pattern, with incoming vehicles proceeding to the right and outgoing vehicles coming from the left. In addition, blue highway signs would be replaced and updated with brown NPS-style (e.g., NPS arrowhead) signage to improve site identification and wayfinding along I-94.

Vehicle Circulation and Parking Reconfiguration

The proposed action would introduce a new road configuration to improve traffic circulation and expand parking. The main road would have a 15-foot-wide asphalt surface that leads to the equestrian parking area, visitor center, and passenger- and oversized-vehicle parking lots. All traffic circulation would be one-way. Precast concrete gutters would be used along roads and parking lots to maintain proper drainage and edge protection and reduce lifecycle maintenance demands.

The proposed parking area would be located southwest of the visitor center and contain two distinct parking lots. Depending on the availability of future funds, a third overflow parking area may be added. The primary passenger-vehicle lot would be asphalt and include 49 spaces, including three accessible spaces. The second parking area would be designated for oversized vehicles and provide eight pull-through spaces. All parking areas would include accessible asphalt walkways connecting to the visitor center and angled spaces to support one-way traffic flow. In the future, a loose aggregate (e.g., gravel, crushed stone, etc.) overflow parking area may be constructed between the two paved lots and would accommodate 45 passenger vehicles.

New traffic signs would be installed to direct visitors to the appropriate designated parking areas. Portions of the existing road and parking lot that do not align with the new orientation would be demolished and restored with native vegetation.

Visitor Center and Restroom Construction

The current 4,900 square-foot (sq ft) visitor center, canopy, and restrooms complex would be demolished and fully reconstructed. The new visitor center would be single-story, approximately 4,800 sq ft, and situated within the same general footprint as the existing structures. Building materials may include reinforced concrete, structural steel, stone or masonry elements consistent with Painted Canyon's existing aesthetic and the Park's CCC-era structures, and durable exterior siding (e.g., weather resistant composites or natural materials). The structure would feature a layered timber grid-shell ceiling supported by masonry bearing and shear walls. The front (south facing) wall would feature full-height storefront glass that would be energy efficient, bird-safe, and use a high-performance glazing system. The roof would use metal or composite shingles resembling slate and that are suitable for horizontal installation. All interior finishes would be

Architectural Barriers Act (ABA)-compliant. Concrete, stone pavers, or stabilized aggregate may be used for exterior walkways and plazas as long as they meet ABA accessibility standards. Final material selection would prioritize durability, accessibility, energy performance, and visual consistency with NPS architectural standards and the surrounding landscape and would follow NPS design guidelines and sustainability goals (NPS, 2022a; 2022b).

The new visitor center would include restrooms, a main lobby, interpretive exhibits, retail space, grab-and-go food and beverage service, and back-of-house support spaces. The building would be constructed in full compliance with the adopted 2024 International Code Council (ICC) standards, National Fire Protection Association (NFPA) requirements, and all relevant NPS building, fire, and accessibility policies.

Restrooms would be rebuilt as an integrated component of the new visitor center building. The reconstructed restrooms would provide modern, ABA-compliant facilities sized and configured to meet current visitor demand and correct longstanding accessibility deficiencies. The new facilities would include two gender-specific restrooms and at least one family restroom. The men's restroom would have two toilet stalls, including one ABA-compliant stall, two urinals, and two sinks. The women's restroom would have at least four toilet stalls, including one ABA-compliant stall, and two sinks. The vestibule outside the restrooms would include a water fountain/water bottle filling station.

The central hub of the visitor center would be an open-concept layout and include interpretive exhibits, retail space, grab-and-go food and beverage service, and a reception area/welcome desk. Interpretive displays would teach visitors about the history, geology, and/or cultural significance of the site. Since the Painted Canyon visitor center is intended to provide a brief introduction to the Park and a short respite for long-distance travelers, visitors would be directed to the Park's main visitor center and Theodore Roosevelt Presidential Library in Medora for a more in-depth experience. A small retail space would offer a limited selection of Park-related merchandise. Grab-and-go food and beverage service would offer shelf-stable and prepackaged refrigerated items for purchase. No on-site food preparation or cooking would occur.

The new visitor center would eliminate the existing basement, and all mechanical systems and staff functions would be accommodated on the main level. Back-of-house support spaces would include an ABA-compliant staff restroom and break room, maintenance and mechanical room, offices, a meeting room, and storage areas for equipment, retail inventory, and food and beverage items.

A garden plaza would be constructed on the north side of the visitor center to provide outdoor gathering opportunities and guide visitors to the Crescent Path (see Overlook Construction section). The plaza would provide a defined transitional space between the building, Crescent Path, and surrounding landscape and include accessible pedestrian footpaths, native plantings, and shaded seating areas. Pathways and signage would direct visitors toward key site features such as trailheads, overlooks, and interpretive elements. Low-profile site furnishings, such as benches and/or stone or timber accents, would reinforce the natural character of the area and provide short-term seating for resting or viewing the canyon.

Picnic Shelter Construction

The existing picnic shelters would be demolished and rebuilt, and two new shelters would be added within the same general area. Each shelter would have up to four picnic tables and be similar in size and configuration to the current amenities.

Relocation of Historic NPS Sign

The historic Park sign would be carefully relocated using standard methods for moving heavy masonry structures. Its new location would reside on NPS land near the visitor center and canyon rim rather than the easement portion of North Dakota Department of Transportation (NDDOT)-owned land. Prior to relocation, the sign would be stabilized and braced to protect the stonework and iron lettering. Construction crews would excavate around the existing foundation, support the structure with lifting equipment, and transport it a short distance to its new location north of the visitor center. Concrete, stone pavers, or stabilized aggregate would be used to build an accessible path that would allow visitors to take iconic photos of or with the sign with the Badlands in the background.

The sign's structure, including its pointing and stonework, would be restored in-kind to preserve its integrity and contributing features that support the historic eligibility criteria of the Park's CCC-era resources.

Overlook Construction

A new overlook area, also referred to as the Crescent Path, would provide visitors with an improved Painted Canyon viewing experience. The accessible overlook would be a crescent shaped, cantilever structure constructed of concrete or steel with a patina finish to blend in with the local environment. Final material selection would be determined by a value analysis evaluating cost, durability, longevity, and maintenance needs. The northeast end of the overlook would be 8 ft wide and jut 10 to 20 feet over the canyon edge, and the southwest end would be integrated with adjacent trails and circulation routes. The overall footprint would be set back from the canyon edge to reduce erosion and erosion-related failure risk but still prioritize and preserve the panoramic views. Appropriate drainage features would be incorporated into the Crescent Path for storm water management. In addition to the crescent structure, viewing nodes would be interspersed along the rim to allow visitors space to spread out and view the canyon from multiple vantage points. Vegetation would be selectively trimmed to open sightlines while maintaining the natural character of the canyon edge.



Alternative B: Painted Canyon Redevelopment
(Proposed Action)

Figure 3: Proposed concept design for the Painted Canyon redevelopment.

Trails

The Painted Canyon Nature Trail and Painted Canyon Trail trailheads would be updated with new waysides and other signage. Both trails would retain natural surfaces, with water bars, check steps, and tread surface repairs as necessary to remove precipitation and provide a solid footing for hikers and horseback riders.

Self-closing pedestrian gates would be placed at the western end of the Crescent Path, near the new picnic shelters west of the main parking area, and at the east side of the equestrian parking area. Pedestrian gates would be of the same design in each location and wide enough (greater than or equal to 5 ft in width) for hikers and horses to pass through. In accordance with current policy, horses would not be allowed on the Painted Canyon Nature Trail.

The Painted Canyon Trail at the east side of the site would be rerouted to the equestrian area, and new marker posts would be installed. Other trails may be established inside of the bison exclusion fence along the canyon rim to the east and west of the visitor center and may be of either natural or improved surfaces. Interpretive waysides and navigations aids would be provided at or near all established trails within the developed area.

Equestrian Facilities Construction

A new equestrian parking lot would be constructed northwest of the wastewater treatment lagoons adjacent to the existing weather monitoring station and near the Painted Canyon Trail trailhead. The parking lot would be loose aggregate with precast concrete edging. The equestrian parking area would include approximately six pull-through parking spaces designed to accommodate oversized vehicles, such as pickup trucks towing horse trailers. Potable water would be supplied via a standpipe spigot located along the east side of the parking area. The spigot would be serviced by a buried water line installed at an approximate depth of 8 ft and routed to connect with the existing water-meter junction about 150 ft to the west.

Two hitching posts would be installed at the east edge of the parking area, one north and one south of the pedestrian gate in the bison exclusion fencing at the trailhead. A wood or synthetic manure disposal bin would be located to the south of the hitching posts, along with stall rakes and a wheelbarrow.

Updates to Utility Infrastructure

Utility infrastructure would be upgraded and modernized to allow reliable, year-round operation of the site and correct longstanding infrastructure deficiencies. Improvements would include replacing aging potable water and wastewater lines, upgrading electrical service and distribution components, and rerouting or reconstructing utility corridors within previously disturbed areas.

A small service area would be constructed on the east side of the visitor center. A standard heating, ventilation, and air conditioning (HVAC) system consisting of 3 to 4 units would be located here along with a propane generator to provide backup heat during power outages. The area may include refuse and dumpster storage. A small storage shed for NDDOT maintenance equipment and access to utility infrastructure would also be in this location and screened from view by a fence or some other partition.

This project proposes to line the third wastewater treatment lagoon to expand wastewater treatment capacity.

Construction activities associated with these upgrades would involve trenching, excavation, installation of new utility lines at appropriate depths, and removal of outdated components, all conducted in compliance with applicable federal, state, and local requirements. These updates would be necessary to ensure reliable operation of site facilities, reduce maintenance needs, and support modern visitor services envisioned under the proposed action.

CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the current and anticipated future conditions for wildlife, vegetation, visitor use, experience and safety, and viewshed/visual resources. The Affected Environment describes the existing baseline conditions for each impact topic and identifies how those conditions might be expected to change in the future if no action is taken (i.e., Alternative A: No Action Alternative). It also evaluates the beneficial and adverse effects that would likely result from implementing the proposed action (i.e., Alternative B: Painted Canyon Redevelopment).

3.1. Wildlife – Bison

3.1.1. Methods and Assumptions

To evaluate potential impacts on American bison (*Bison bison*; bison) the NPS focused its analysis on the presence or absence of exclusion fencing, its configuration, and its effectiveness at reducing bison–human conflict within Painted Canyon. The analysis assessed short-term construction effects, defined as those that occur during the period of construction, as well as long-term impacts from new permanent exclusion features, altered visitor traffic patterns, year-round operation, and changes to the bison–human interface after redevelopment.

3.1.2. Affected Environment

The Park manages a herd of approximately 400 bison in the South Unit and 300 in the North Unit. Grasslands and prairie provide important foraging grounds and are the preferred and most abundant habitat type for bison in the Park (Norland, 1984; Westfall, 1989). Forested areas are typically used as corridors (Norland, 1984).

Bison frequently use Painted Canyon, with individuals present nearly every day. Groups of 20-60 cows (i.e., adult female bison) and younger animals move through the area to forage in the upland grassland habitat. Individual mature bulls (i.e., adult male bison) or small groups of bulls (e.g., 3-5 animals) frequently loaf in grassy areas next to the parking lot, picnic shelters, restrooms, and visitor center (Figure 4).

Bison–human conflict is a concern at Painted Canyon (NPS, 2022a). Because the site is accessible from I-94 and has limited signage indicating the area is part of a national park, many visitors arrive with little awareness that they may immediately encounter bison. This increases the potential for close–range interactions between bison and people, and multiple incidents occur every year, with some resulting in serious injuries.

The likelihood of dangerous bison-human interactions is highest when visibility is limited, such as at night or when bison use structures like the historic sign or picnic shelters for shade or wind

breaks. Under these circumstances, visitors and bison may be unaware of each other's presence. When a visitor unexpectedly rounds a blind corner and comes upon a bison at close range, both can be startled, which may trigger frightened or aggressive behavior from the animal.

Bison can be most unpredictable during the rut (July-August), when they compete for social dominance and breeding opportunities, causing them to exhibit aggressive behavior towards other bison, wildlife, and humans in their proximity. The rut coincides with the Park's peak visitation during the summer. Bison have also moved into Painted Canyon at night while visitors were using indoor facilities, which prevented them from safely exiting the building and accessing their vehicles. Park staff are called to assist visitors with bison encounters four days a week on average.

Currently, no bison exclusion features exist at Painted Canyon, and bison can roam uninhibited throughout the site. Rail fencing and low stone walls have been installed along the canyon rim near the visitor center, but these structures are intended to guide visitor movement and do not restrict bison access. A perimeter fence on the southern boundary, along with a cattle guard at the entrance gate, prevents bison from leaving the site and entering the interstate.



Figure 4: The front of the existing Painted Canyon visitor center (south facing) as seen from the parking lot with a bison loafing next to a tree near the entrance (photo credit: NPS).

3.1.3. Environmental Effects Wildlife - Bison

3.1.3.1. *Effects of Alternative A: No Action Alternative*

Under Alternative A: No Action Alternative, the redevelopment of Painted Canyon would not occur and would remain as described in Section 3.1.2. As visitation continues to rise, the potential for bison-human conflict would likely increase.

3.1.3.2. *Effects of Alternative B: Painted Canyon Redevelopment (Proposed Action)*

Under Alternative B: Painted Canyon Redevelopment, the site would be redeveloped as described in Section 2.2.

Construction would occur from Spring 2027 through Spring/Fall 2028. Noise, vibrations, and movement from heavy equipment operation, material staging, increased human presence, and installation of temporary fencing may cause bison to avoid the immediate construction area. Despite this localized disturbance, bison would likely continue using adjacent grassland areas where forage and habitat conditions remain unchanged. These impacts would be short-term and limited to the construction period.

During construction, Painted Canyon would be closed to visitors, but construction crews would be present. Should bison continue using the site during construction, those on-site would receive training on how to safely work in areas where bison may be present. Because personnel would be informed about bison behavior and safety protocols, the likelihood of bison–human interactions resulting in injury would be lower than with untrained visitors. BMPs would be implemented to minimize risks to both bison and people.

Postconstruction effects would occur once the redevelopment is complete and the site reopens to visitors. The redevelopment of Painted Canyon, including the addition of bison exclusion features (e.g., fencing), would change how bison use the site and interact with visitors. Preventing bison from entering the site would benefit both bison and humans by eliminating the potential for close-range interaction.

The addition of exclusion features may have a minor adverse effect on bison by slightly reducing the availability of foraging or loafing areas. Painted Canyon occupies less than 0.01% of the Park's South Unit and with approximately 46,000 acres of high-quality habitat available to bison elsewhere, the proposed action would not adversely affect the herd's long-term health or abundance within the Park.

3.2. Vegetation (Non-Special Status Species)

3.2.1. Methods and Assumptions

To evaluate potential impacts on vegetation, the NPS focused its analysis on changes in land cover and plant community types. The analysis assessed short-term effects associated with construction activities and long-term impacts from modifying existing facilities, adding new permanent structures to the site, and reestablishing native vegetation.

3.2.2. Affected Environment

Upland plant communities are the dominant vegetation type at Painted Canyon and are representative of the mixed-grass prairie communities found throughout the Park (Figure 5). Upland plants, which occur across flat, rolling topography, commonly include species of native grasses (e.g., Western wheatgrass (*Pascopyrum smithii*), green needlegrass (*Nassella viridula*), blue grama (*Bouteloua gracilis*)), forbs (e.g., prairie coneflower (*Ratibida columnifera*), narrow-leaved purple coneflower (*Echnicea angustifolia*), yarrow (*Achillea millefolium*)), shrubs (e.g., silver sagebrush (*Artemisia cana*)), and snowberry (*Symphoricarpos occidentalis*). Woody species, such as buffalo berry (*Shepherdia argentea*), are concentrated along butte edges.

No plant species within the Park are currently listed or proposed for listing under the Endangered Species Act (ESA). Various surveys over the last several decades have identified and documented 13 state rare species within the Park, but none have been documented within Painted Canyon (Heidel, 1990; Manuel and Swanson, 2019). Invasive plants, including leafy spurge (*Euphorbia esula* L) and spotted knapweed (*Centaurea stoebe*), are also present and treated annually with approved herbicides as part of Park resource management operations.

Most vegetation within Painted Canyon occurs on previously disturbed land. Vegetation in the core visitor area includes several acres that are maintained and mowed during the visitor season and are interspersed between impervious surfaces. These existing conditions reflect a landscape already substantially altered by past development and disturbance.

Approximately 11 trees exist at Painted Canyon, all of which have been planted for landscaping purposes. No other large-diameter woody vegetation occurs at the site.



Figure 5: Dominant upland plant community type at Painted Canyon. A storage shed and weather monitoring station can be seen in the top left corner and the wastewater treatment lagoons and surrounding fencing in the top right corner (photo credit: NPS).

3.2.3. Environmental Effects

3.2.3.1. *Effects of Alternative A: No Action Alternative*

Under Alternative A: No Action Alternative, the redevelopment of Painted Canyon would not occur. The conditions would remain unchanged from those described in Section 3.2.2. Vegetation impacts associated with routine maintenance activities would continue at current levels.

3.2.3.2. *Effects of Alternative B: Painted Canyon Redevelopment (Proposed Action)*

The redevelopment of Painted Canyon would result in temporary and permanent impacts to vegetation. Vegetation removal would occur within developed or previously disturbed areas, and the species affected would not include unique or sensitive plant communities (Heidel, 1990; Manuel and Swanson, 2019; NPS, 2022a).

Temporary vegetation loss and disturbance would occur in work zones and staging areas. These areas would be restored following construction using native grassland seed mixes and/or plantings, consistent with Appendix C. Grassland vegetation would likely recover within a few growing seasons. Woody vegetation, such as buffalo berry, would recover more slowly and may take years or decades to return to surrounding undisturbed conditions. Native vegetation establishment after construction would improve habitat quality and species diversity across restored areas positively impacting the site.

Vegetation would be permanently removed, including all existing landscaping trees, in areas where new facilities and infrastructure would be constructed. At this time, no replanting of landscape trees is proposed, though future plantings may occur if deemed necessary or future funds allow. Following restoration of temporarily disturbed areas, the remaining long-term vegetation loss would represent a small portion of the overall project area. In total, the proposed action would affect less than 0.01% of the Park's vegetation and result in a minor adverse impact.

Construction-related ground disturbance could promote the spread of invasive nonnative plant species. Mitigation measures and BMPs (Appendix C), including weed-free material requirements, equipment cleaning, and monitoring and treatment, would be implemented to minimize risk. With these measures, the Park anticipates fewer invasive plants onsite following restoration compared to pre-construction conditions.

Routine mowing and invasive species treatments would continue as needed.

3.3. Visitor Use, Experience, and Safety

3.3.1. Methods and Assumptions

To evaluate potential impacts on visitor use, experience, and safety, the NPS focused its analysis on how each proposed redevelopment element may influence the ways visitors engage with Painted Canyon over the short-term (e.g., during construction) and long-term (e.g., post redevelopment). The analysis examined how changes to the site could affect the overall quality of the visitor experience.

To evaluate potential impacts to human health and safety, the NPS focused its impact analysis on how the proposed action may affect conditions related to accessibility and visitor safety. The analysis considered the extent to which the project would meet ABA accessibility standards and evaluated how proposed design elements would affect visitor safety throughout the site. Both short-term construction-related and long-term operational conditions were examined to understand how changes to site configuration, visitor flow patterns, and facility features would affect overall public safety.

3.3.2. Affected Environment

Visitor use and experience at Painted Canyon are shaped by the site's dual function as both a unit of the national park system and a high-turnover interstate rest area, resulting in a mix of park- and travel-focused visitation patterns. Visitors range from long-distance motorists to regional day users and national park visitors. A portion of the area is owned by NDDOT, with the NPS holding an easement which allows access to the site. Some visitors arrive expecting a standard highway rest stop, while others anticipate a more traditional national park experience.

Site Entrance

Visitors access the Painted Canyon Area and Visitor Center (Figure 6) from Exit 32 on I-94 where standard motorist services signs (i.e., blue) and cultural and recreational site signs (i.e., brown) identify the location. A short entrance road leads from the interstate to a gated (metal swinging gate) access point used to manage seasonal closures (NPS, 2022b). After the gate, the road divides into a one-way loop that separates inbound and outbound traffic and directs vehicles toward the developed core of the site. Near the entrance, a historic stone NPS sign (Figure 9) provides visitors with the first clear indication that the area is part of a national park



Figure 6: An aerial image of the existing conditions at Painted Canyon (photo credit: Google aerial imagery).

Vehicle Circulation and Parking

The parking area is about 1.76 acres and predominantly asphalt, with four grass islands in the center. The parking lot consists of 61 passenger-vehicle spaces, five of which are marked as accessible but do not meet current ABA accessibility standards. In addition to standard parking,

there are 29 oversized pull-through spaces to accommodate larger vehicles such as tractor-trailers (e.g., semi-trucks and 18-wheelers), recreational vehicles (RVs), travel trailers, and equestrian trailers. Some daytime idling of tractor trailers occurs. During periods of high visitation, the east parking spaces fill up first, which leads to passenger-vehicles double-parking in the oversized vehicle spaces closest to the entrance. This disrupts vehicle circulation, creates safety concerns between pedestrians and motorists, and limits parking for visitors with large vehicles or trailers.

The NPS is responsible for maintaining the parking lot, including the southwest portion that is owned by NDDOT. There are no signs in the parking area identifying the location as an NPS unit or directing visitors where to go. The canyon view is not visible from the parking lot.

Visitor Center and Restrooms

Built in 1978, the visitor center contains approximately 3,500 sq ft of interior space with an attached covered/canopy walkway, restrooms, and a basement/mechanical room (Figure 4). Over the years, the structure has received periodic improvements, with the most recent being in 2023 with the installation of new siding, windows, and interior flooring. Other work has primarily consisted of routine maintenance and repair.

Visitors approach the visitor center and restrooms from the parking area via a paved patio that leads into the structural canopy. The canopy provides sheltered circulation between the visitor center and restrooms and includes a double-sided kiosk with Park information and maps. It also serves as a primary transition point, guiding visitors toward the scenic overlook and offering an initial orientation to the site's features and layout.

Renovated in the 1990's, two gender-specific restrooms are located east of the canopy and separate from the main visitor center building. The restrooms are accessed through a shared vestibule with a water fountain in the center. The men's restroom has two toilet stalls, including one accessible stall, two urinals, and two sinks. The women's restroom includes four toilet stalls, including one accessible stall and two sinks. The restrooms do not comply with current ABA accessibility standards (NPS, 2022a). Skylights and clearstory windows provide daylighting supplemented by electric light fixtures. During high-use periods, such as bus drop-offs, lines frequently form outside the building.

Both restrooms share a unified pipe chase and janitorial wet closet for efficient maintenance. A north exterior double door provides access to maintenance storage, lift-station controls, and the pipe chase. A fenced enclosure on the east side protects the septic lift station. Restroom facilities and infrastructure adequately support existing visitation levels but are only operational for part of the year.

To enter the visitor center, visitors approach a recessed, east-facing entrance that is partially screened by a stone wall. Once inside, an open multipurpose room provides retail, interpretation, and visitor contact functions and is jointly operated by the NPS and a partner association. The space primarily operates as a bookstore/souvenir shop, and retail displays line the south wall (NPS, 2022b). Interpretive tactile exhibits are positioned along the north wall and within the central floor area for orientation and engagement. A combined sales and information desk in the northeast corner serves as the only visitor contact point. The north side of the building is made of a three-quarter-height glazed wall (Figure 7). The expansive views of Painted Canyon are not visible within the visitor center.

A basement contains the mechanical systems for the building, provides storage, and offers space for staff to eat lunch and complete administrative operations away from the main visitor area.



Figure 7: The north side of the Painted Canyon visitor center, as seen from the canyon edge (looking south), during the closed season. The two picnic shelters are to the right (photo credit NPS).

Picnic Shelters

The picnic area consists of two pavilion structures located on the northwest side of the parking lot. Each pavilion sits on a concrete slab and is divided into four partitioned picnic bays, each containing a picnic table (Figure 8). The pavilions share a wildlife-safe trash can and a water fountain. Partitions facing away from the more frequently visited areas experience recurring vandalism and create blind spots that limit visitors' ability to maintain awareness of approaching wildlife, such as bison.



Figure 8: The two existing picnic shelters at Painted Canyon to the west of the visitor center with the scenic overlook in the background (photo credit: NPS).

Historic NPS Sign

The stone elements of the sign were constructed by the CCC in 1938, along with other structures at the Park's former East Entrance on Highway 10 (Figure 9). Following completion of I-94 in 1968, segments of Highway 10 were closed and reclaimed, the main Park entrance was relocated to Medora, ND, and the sign was moved to its current location at Painted Canyon on land owned by NDDOT (NPS, 2022a). The iron lettering was updated after the unit's redesignation as a national park in 1978. Periodic repointing and other preservation work have occurred over the years, but the structure is once again in need of treatment. The sign's pylon represents one of the best examples of CCC-era workmanship in the Park and is included on the Park's List of Classified Structures. The sign remains a popular location for photographs and connects present-day visitors to the Park's iconic history.

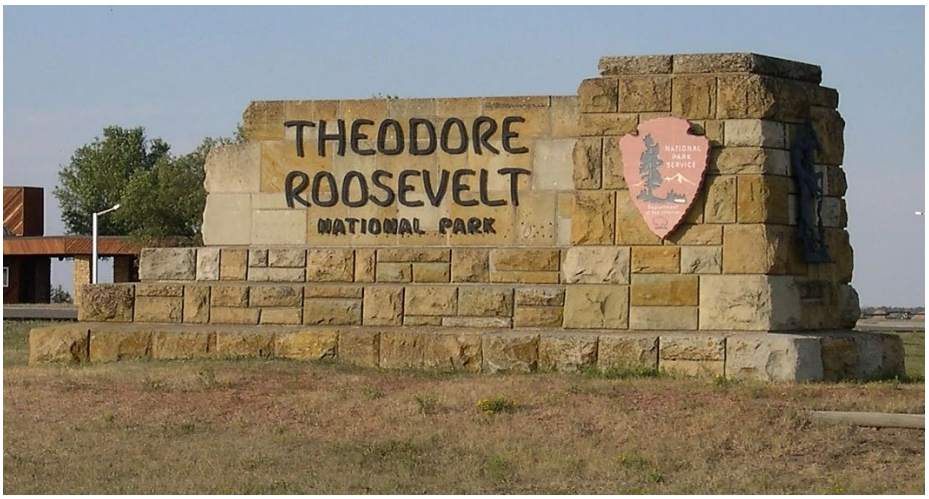


Figure 9: The historic NPS sign in its current location (photo credit: NPS).

Overlook

The Painted Canyon overlook provides panoramic views of the Badlands and is accessed via paved pathways from the parking lot and visitor center (Figure 10). The overlook area is bounded by a stone wall constructed in a style similar to the CCC-era sign and is the primary point of interest for visitors.

Several interpretive wayside plaques are stationed along the rim walkway, offering information about the site's history and landscape. Many of these signs are outdated and faded from years of exposure making them difficult to read.



Figure 10: The west side of the scenic overlook looking east over Painted Canyon (photo credit: NPS).

Trails

The Painted Canyon area has two designated trailheads. The Painted Canyon Nature Trail (Nature Trail) is a 0.9-mile loop that begins at the western edge of the parking lot and descends along the canyon hillside. From 2016-2017, trail counter data indicated that an average of 146 people accessed the Nature Trail daily from June through September (Brownlee et al., 2018).

The Painted Canyon Trail (Canyon Trail) originates at the east side of the parking lot, following a dirt service road for approximately 0.2 miles before diverting to the canyon rim and descending to the canyon floor. The Canyon Trail intersects with the Upper Paddock Creek Trail after 1.8 miles. From 2016-2017, trail counter data indicated that an average of 27 people accessed the Canyon Trail daily between June and September (Brownlee et al., 2018).

Visitors have also created informal social trails along the canyon rim. These unauthorized paths present safety concerns because no railing exists along the edge and the hillside is prone to sloughing and erosion.

Equestrian Facilities

Equestrian users frequent Painted Canyon to access the Canyon Trail and backcountry. Horses are not permitted on the Nature Trail. Horse trailers may be parked at any trailhead where parking spaces can accommodate trailer length and turning requirements (NPS THRO website). Currently, there are no designated equestrian facilities at Painted Canyon. Parking areas do not have dedicated horse trailer parking, and oversized vehicle parking provides limited support. Equestrian users often have little option but to hitch and saddle their horses at their trailers. The trailheads are not well defined and, equestrian users must cross the parking lot and inbound road to get to the Canyon Trail trailhead, which can lead to hazardous conflicts between horses, pedestrians, and vehicles (NPS, 2022a). A water spigot is located near the picnic shelters west of the parking lot, but no additional equestrian amenities are available.

Utilities Infrastructure

Wastewater treatment lagoons are located southeast of the primary visitor use area and are accessed via a two-track path. The system consists of three lagoons, one of which has never been used, and covers an area of about 2.5 acres. The system operates seasonally and can accommodate current visitation levels. Two of the lagoons are lined to prevent prairie dog intrusion. The liners were replaced in 2008 and have an expected useful life of 25 years. The lagoons are enclosed by a chain link fence and a lockable gate to access the area for maintenance.

A weather monitoring station is operated cooperatively by the NPS and the North Dakota Department of Environmental Quality (DEQ) and is located northwest of the wastewater treatment lagoons. No changes would be made to these facilities.

A small storage shed is nearby, which houses various equipment such as mowers and other maintenance tools.

Visitor Safety

In addition to the information already presented, the parking lot has wheelchair accessible spaces but they are not fully compliant with ABA accessibility standards (NPS, 2022a). For information about safety and bison-human interactions, refer to Section 3.1.2.

3.3.3. Environmental Effects

3.3.3.1. *Effects of Alternative A: No Action Alternative*

Under the No Action Alternative, the redevelopment of Painted Canyon would not occur. The conditions would remain unchanged from those described in Section 3.3.2. Facilities, infrastructure, and visitor amenities would continue to age, reducing the quality of the visitor experience. Non-compliant accessibility features would remain and safety concerns between pedestrians, vehicles, and wildlife would persist, leading to declining safety conditions over time.

3.3.3.2. *Effects of Alternative B: Painted Canyon Redevelopment (Proposed Action)*

The improvements made to the Painted Canyon Area and Visitor Center would have a long-term benefit on visitor satisfaction, experience, and safety.

The new entrance would create a more memorable sense of arrival and immediately signal to visitors that they are entering a national park. The stone entryway would clearly mark the transition from highway travel to a more traditional national park setting, distinguishing the experience from that of a typical interstate rest area. These changes would improve wayfinding and better align visitor expectations with the character of the site.

Although the stone entry feature would be minimal in scale and designed to blend in with the surrounding landscape, it may have a minor adverse impact if visitors stop to take photographs, which could lead to brief traffic backups. During periods of high visitation, these slowdowns could contribute to short-term congestion. These impacts would be minimized by signage, direction by Park staff, and visitor education. Visitors would also be directed to established, more iconic photo opportunities near the visitor center, such as the historic NPS sign and canyon overlook, thereby reducing the likelihood of traffic-related disturbances at the entrance.

The new road configuration and expanded parking would result in long-term beneficial impacts on visitor experience and safety by increasing separation between vehicles and pedestrians. Providing designated parking for passenger vehicles, oversized vehicles, and equestrian trailers would reduce user group conflicts and improve overall traffic circulation. Having three distinct parking areas would alleviate existing issues with double-parking and provide safer maneuvering conditions for large vehicles, especially during periods of high visitation. Accessibility would be improved by adding ABA-compliant parking spaces to the passenger-vehicle lot. New signs would reduce visitor confusion and enhance wayfinding by clearly directing motorists to the appropriate parking areas and identifying pedestrian and equestrian routes and trailheads.

Replacing the aging formed-stone gutters along the road with precast concrete gutters would cause localized, short-term ground disturbance but would be limited to the period of installation. The new gutters would improve drainage performance and reduce maintenance, resulting in a beneficial impact to site performance and infrastructure.

Tractor-trailers would no longer be permitted to use the site. Because of this change, long-distance truck drivers who currently park and idle in the oversized vehicle spaces would lose access to this rest-area function, resulting in a minor adverse impact to this user group. However, the anticipated impact would be minimal since the Painted Canyon Area and Visitor Center has historically only been open for part of the year (i.e., seasonally), and tractor-trailer services and parking are available about 10 miles west in Belfield, ND.

The construction of a fully accessible and modernized visitor center with integrated restrooms would result in long-term improvements to visitor satisfaction. Placing restrooms within the new building and redesigning circulation pathways would reduce crowding and mitigate line formation during high-use periods such as bus drop-offs and group arrivals.

Improving picnic shelters, overlooks, and similar amenities would create long-term, beneficial impacts on visitor experience by offering more comfortable, convenient, and accessible spaces for resting, gathering, and enjoying canyon views. Improved exhibits and outdoor interpretive spaces would enhance visitor engagement by supporting deeper learning and understanding of the site's resources.

The addition of bison exclusion fencing would improve visitor safety by preventing dangerous, close-range bison-visitor interactions. For more information refer to Section 3.1. It would also discourage visitors from creating social trails too close to the canyon rim.

Although bison exclusion fencing would improve visitor safety, visitors would need to adjust their expectation of seeing bison up close. Removing the possibility of bison-human interactions may constitute a minor adverse impact for a subset of visitors seeking novel or immersive wildlife moments. Interactions with bison would shift from spontaneous, close-range encounters to viewing wildlife from a distance. Visitors would continue to see bison on the landscape, such as from designated viewpoints, trails, or along the broader Park road system, rather than in parking lots or adjacent to built structures. Overall visitor opportunities to view bison would remain abundant given the species' extensive presence across the Park. While a small portion of visitors may feel a loss of excitement associated with unpredictable proximity to bison, the majority would benefit from safer conditions and a more comfortable environment for family groups, inexperienced visitors, and individuals unfamiliar with bison behavior.

Excluding bison would also benefit Park operations by reducing the amount of staff time spent mitigating bison-visitor interactions. This would allow them to dedicate more time to Park and visitor needs.

Updates to equestrian facilities would provide long-term, beneficial impacts to visitors by improving safety, convenience, and access to the Canyon Trail and surrounding backcountry areas. The new equestrian area would allow riders to reach the Canyon Trail trailhead and potable water without crossing parking lots or the inbound road, eliminating a major existing hazard. Having designated space for pre- and post-ride preparation would reduce conflicts by keeping pedestrians and vehicles from competing for space with equestrian users.

Modernizing facilities at Painted Canyon and transitioning to year-round operations would increase daily use and routine maintenance needs. Expanded visitor amenities, updated mechanical systems, and greater occupancy of the new visitor center would require additional ongoing upkeep to ensure reliable functioning. However, the long-term effect on Park resources and capacity would be negligible. The redevelopment would incorporate durable materials, energy-efficient building systems, improved accessibility features, and modern infrastructure designed to reduce maintenance requirements long-term, lower lifecycle costs, and minimize repairs associated with aging facilities. These efficiencies would offset the incremental increase in operational demand and remain compatible with existing staffing and maintenance frameworks.

The new visitor center would improve operational efficiency through expanded visitor-facing and staff support areas, enhanced accessibility and safety by meeting current building and ABA standards, and reduced long-term energy and maintenance costs through high-performance, sustainable design. Upgraded utility infrastructure would reliably support year-round operation and increasing visitation trends without diminishing the visitor experience.

Construction Impacts

Construction of the new visitor center, restrooms, and associated site improvements would result in short-term, localized adverse impacts during the demolition and building phases. Heavy equipment operation, material staging, excavation, and utility work would generate temporary noise, dust, vibration, and movement within the project area. These effects would be minor, short-term, and localized, occurring only during construction. See Appendix B for more information on impact topics considered but eliminated from detailed analysis.

Visitor use and experience would be temporarily disrupted due to closures during construction. The Park would notify the public prior to construction through their website, social media, or other communication methods to give visitors and travelers time to make alternative arrangements. Signage would be used to inform motorists of these closures. Rest area amenities and vehicle services would be available nearby in Medora, Belfield, or Dickinson. Other units of the Park would remain open for visitors to experience and explore. No long-term, adverse impacts would occur.

3.4. Viewshed/Visual Resources

3.4.1. Methods and Assumptions

To evaluate potential impacts on viewshed/visual resources, the NPS focused its analysis on the visual impacts the proposed redevelopment would have on the landscape from different vantage points.

3.4.2. Affected Environment

This EA incorporates by reference and summarizes the affected environment and environmental consequences from Chapter 3, Section 3.6. of the 2022 EA (NPS, 2022a).

Painted Canyon marks the intersection where the rolling mixed-grass prairies meet the rugged North Dakota Badlands, creating a visually dramatic change in landscape characteristics. This contrast is defined by broad horizontal sightlines, colorful eroded formations, and expansive views across the canyon and surrounding prairie.

Buck Hill, located 2.2 miles north, is one of the highest points in the Park and provides a clear, elevated view of Painted Canyon within the broader prairie-to-Badlands landscape.

3.4.3. Environmental Effects

3.4.3.1. *Effects of Alternative A: No Action Alternative*

Under the No Action Alternative, the redevelopment of Painted Canyon would not occur. The conditions would remain unchanged from those described in Section 3.4.2.

3.4.3.2. *Effects of Alternative B: Painted Canyon Redevelopment (Proposed Action)*

The new visitor center would be minimally intrusive on the landscape. While most project elements at Painted Canyon would slightly modify existing views, they would repeat the form, line, color, texture, and pattern common to the local environment to remain visually inconspicuous within the larger setting.

To minimize impacts to the viewshed, the visitor center would be a low-profile, single-story building with design elements, materials, and colors that would match or blend into the landscape. These design choices would help ensure that the view from Buck Hill toward Painted Canyon and vice versa experience as little visual impacts as possible.

Potential glare from Painted Canyon toward Buck Hill was specifically considered during design. The proposed visitor center would incorporate features to reduce reflectivity and glare, such as strategic building orientation, the inclusion of awnings or alcoves, and the use of non-reflective exterior materials. Glass curtain walls would include appropriate films to minimize glare, improve energy efficiency, and minimize impacts on wildlife. The proposed new parking areas were intentionally sited away from the canyon rim to reduce visual impacts, especially from car window glare, and help maintain the integrity of the viewshed (NPS, 2022a). As a result, any effects to the viewshed from Buck Hill would be relatively minor and would not introduce overtly noticeable changes to the landscape character.

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APPENDICES

APPENDIX A: Consultation and Coordination

A.1 Public Scoping

On April 28, 2026, the NPS released a public scoping newsletter and opened a 15-day public scoping period, which concluded on May 12, 2026. During this time, the public was invited to provide comments on the proposed redevelopment of the Painted Canyon Area and Visitor Center online through the Planning, Environment, and Public Comment (PEPC) website or by U.S. mail.

A total of 38 unique correspondences were received during the public scoping period. Most commenters expressed support for moving the project forward while fewer commenters proposed ideas or raised concerns that were outside the scope of this project. The NPS reviewed all correspondence and consideration of these comments was incorporated into this EA and Appendix B. Public input helped identify impact topics for evaluation and refine the proposed action.

A.2 Consultation and Coordination Agencies

Tribal Consultation

On January 29, 2026, the NPS sent the following Tribal Nations an invitation to engage in formal Government-to-Government consultation and to initiate the National Historic Preservation Act (NHPA) Section 106 process regarding the proposed action to redevelop the Painted Canyon Area and Visitor Center:

- Chippewa Cree Tribe of the Rocky Boy's Reservation
- Turtle Mountain Band of Chippewa
- Spirit Lake Tribe of Fort Totten
- Three Affiliated Tribes (Mandan, Hidatsa, and Arikara)
- Crow Tribe of Montana
- Blackfeet Nation
- Standing Rock Sioux Tribe
- Fort Peck Assiniboine and Sioux Tribes

The letter also provided notice that an archeological survey was planned and that an Archeological Work Plan would be shared in subsequent correspondence. Three Tribes responded back, with two (Three Affiliated Tribes and Fort Peck Assiniboine and Sioux Tribes) expressing interest in consultation and one (Blackfeet Nation) deferring to "the Tribal Historic Preservation Officer (THPO) in closest proximity to the project area". On February 25, 2026, NPS transmitted the Archeological Work Plan to all Affiliated Tribes. Subsequent correspondence led to a site visit with the THPO from Fort Peck Assiniboine and Sioux Tribes on March 20, 2026, combined with a visit from staff from the North Dakota State Historic Preservation Office (SHPO). Discussions included investigation and preservation of a recorded archeological site (32BI795) on the margins of the project area, the need for a Determination of Eligibility (DOE) for the visitor center building that would be 50 years old in 2027, and disposition of the historic entrance sign. The THPO expressed concerns about the integrity of the archeological site due to past disturbance and planned future work.

On March 27 and April 2, 2026, NPS hosted virtual meetings with SHPO staff, the Fort Peck Assiniboine and Sioux Tribes THPO, and National Park Foundation (NPF) cooperators. The status of the current design was discussed. Other talking points discussed the cultural landscape, archeological site considerations, and the process for evaluating historic structures, which is to be led by the NPS.

On March 27, 2026, NPS also sent a consultation package to THPOs of Affiliated Tribes regarding a Categorical Exclusion (PEPC 135581) for geotechnical boring to inform construction design at the site, with a determination of "No Adverse Effects". On March 30, 2026, NPS received email correspondence from the Turtle Mountain Band of Chippewa THPO stating concurrence. No correspondence was received from other THPOs on this project.

On or around April 1, 2026, NPS located and shipped museum artifacts from 32BI795 to the Midwest Archeological Center (MWAC) for inspection. Upon evaluation of 32BI795 artifacts, MWAC staff discovered that only three of the 136 total items (two lithics and one bone) demonstrated potential indications of human working, with the remainder likely representing gravel from prior site development. This finding suggested that all items may have been imported to the location. This information was shared with the Fort Peck Assiniboine and Sioux Tribes THPO by email on April 8, 2026.

During April 13-18, 2026, the archeological survey (pedestrian and shovel testing) was conducted at Painted Canyon. The pedestrian survey covered 47.6 acres and returned no significant surface findings. A total of 225 shovel probes were excavated across the project site. Nine shovel probes were positive for cultural resources, including five that contained concrete, asphalt, brick, and metal from past development, and four that included lithics (five flakes total). One positive shovel probe was in proximity to 32BI795, whereas the other three were located at the western edge of the Painted Canyon plateau and assigned site number THRO SU 2026-1. However, the limited number, spatial disposition, and context of artifacts from the recent and prior surveys provided little evidence that significant sites, or those retaining integrity, were present.

On May 8, 2026, NPS received a phone call from staff at the Three Affiliated Tribes THPO office regarding consultations letters sent earlier in the year, inquiring about the project and 32BI795. NPS shared preliminary findings of the recent archeological survey and evaluation, the review of artifacts from prior surveys, and advised that a report would be forthcoming. Subsequent correspondence with the THPO office in June resulted in a site visit from the THPO and Native American Graves Protection and Repatriation Act (NAGPRA) coordinator on July 17, 2026, during which the THPO conveyed no concerns for the planned project. Contemporary to this site visit, MWAC completed a report on the historic structures at Painted Canyon with a determination that the visitor center building was not eligible for listing on the National Register of Historic Places (NRHP). MWAC also completed a Class III report on the archeological survey with determinations that both 32BI795 and THRO SU 2026-1 are not eligible for listing on the NRHP.

On July 20, 2026, NPS emailed a consultation packet to Affiliated Tribes including the DOE on historic structures and the Class III report and supporting information, requesting concurrence on determinations that the visitor center building and the two archeological sites are ineligible for listing on the NRHP. The report also concluded that the historic entrance sign located within the

site is a contributing feature to eligible CCC-era resources of the South Unit at the Park and was not included in this recommendation of ineligibility. On August 20, 2026, NPS sent the THPOs the agency assessment of effect finding of 'no adverse effect' for SHPO concurrence.

SHPO Consultation

Correspondence with the SHPO mirrored the Tribal correspondence detailed above. Key interactions and correspondence are as follows: January 29, 2026, letter requesting NHPA Section 106 engagement; February 25, 2026, transmission of Archeological Work Plan; March 20, 2026, site visit; March 27, 2026, consultation correspondence regarding geotechnical boring; March 27 and April 2, 2026, virtual meetings; May 20, 2026, site visit by MWAC staff for DOE on historic structures as outcome of virtual meetings; and July 17, 2026, consultation correspondence sharing historic building DOE report on historic structures, Class III archeological report and site forms, requesting concurrence with determinations of ineligibility for the visitor center building and two archeological sites. Correspondence received from SHPO includes a February 10, 2026, letter expressing interest in consulting, an April 22, 2026, concurrence letter regarding geotechnical boring, a July 31, 2026, letter providing concurrence for ineligibility of the visitor center building and two archeological sites for listing on the NRHP, and August 6, 2026, letter conveying North Dakota Cultural Resource Site number registration for THRO SU-2026 of 32BI1228. On August 20, 2026, NPS sent the SHPO the agency assessment of effect finding of 'no adverse effect' for SHPO concurrence.

Endangered Species Act (ESA) Consultation

The NPS submitted a consultation package through the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) on June 15, 2026 and met with the USFWS on June 30, 2026, to confirm concurrence with the No Effect Determination for the Northern long-eared bat (*Myotis septentrionalis*). A No Effect Determination was confirmed for the whooping crane (*Grus americana*) on June 15, 2026 and Northern long-eared bat on July 1, 2026. (See Appendix B).

APPENDIX B
Alternatives and Impact Topics Considered but Dismissed from Detailed Analysis

B.1 Alternatives and Alternative Elements Considered but Eliminated from Detailed Analysis

The range of alternatives includes options considered during the NEPA process but excluded from detailed analysis. The following section summarizes each alternative or alternative element that was eliminated and explains the rationale for its dismissal.

Common to All Dismissed Alternative Elements and Alternatives

The alternative elements listed below were dismissed from detailed analysis because they would not mee the project's purpose and need. (Section 1.2). The purpose and need focuses on improving visitor services, modernizing facilities, enhancing safety and accessibility, and addressing long-standing infrastructure deficiencies.

Dismissed Alternatives and Alternative Elements Proposed During Public Scoping

Gas Station: Providing commercial fuel services was not identified as a visitor-use need in existing Park planning documents (NPS, 2022a; 2022b), does not align with established priorities, and falls outside the scope of this project.

A gas station would introduce new commercial services that would be inconsistent with the *2006 NPS Management Policies* (Section 1.4), which require that development in national parks be necessary, appropriate, and closely connected to a park's purpose. Providing fuel services would also require facilities for fuel storage, hazardous materials management, spill response, and ongoing compliance obligations unrelated to the goals of the redevelopment effort. Because this element would not meet the project's purpose and need and would expand the scope of development beyond what is appropriate for this site, it was dismissed from further consideration.

Grills and Barbeque (BBQ) Areas: Grills and BBQ areas were not identified as a needed visitor service in existing Park planning documents (NPS, 2022a; 2022b), nor do they serve a purpose related to resource protection, visitor safety, or operational efficiency at this location. Placement of grills or BBQ infrastructure would introduce operational and compliance considerations outside the scope of the proposed action, including fire risk management, ash disposal and removal, and increased monitoring requirements, which is beyond the current capacity of Park staff and operations.

An alternative that includes grills or BBQ areas would have effects similar to those already analyzed for outdoor site amenities and gathering areas, and none of these effects would alter the overall conclusions of the EA. As a result, a detailed analysis would be redundant and would not improve or change decision making. For these reasons, grills and BBQ areas were dismissed from detailed analysis.

Interagency Fire Center: An interagency fire center is no longer a priority at Painted Canyon because the current purpose and need do not focus on expanding emergency response infrastructure. Although the 2022 Facility Revitalization Plan identified a conceptual

multiagency wildfire response center at Painted Canyon as part of a long-range vision, this concept is outside the scope of the redevelopment effort. Establishing a fire center would require specialized facilities, dedicated operational space, and interagency coordination needs that exceed the physical footprint, budget, and staffing capacity of the proposed redevelopment. Because it does not support the core objectives of the proposed action, the interagency fire center concept is no longer being pursued and was dismissed from detailed analysis.

North Unit Visitor Center: Redevelopment of the North Unit Visitor Center was dismissed from detailed analysis because the proposed project's purpose and need are specific to Painted Canyon. The North Unit Visitor Center is a separate facility outside the geographic and planning scope of the Painted Canyon redevelopment effort. Incorporating improvements at this location would require initiating a separate capital investment with distinct operational, staffing, maintenance, and compliance requirements unrelated to the objectives of this project and would therefore be economically infeasible within the context of this EA. For these reasons, this element was dismissed from further consideration.

Playground: A playground is not an established visitor service priority at this site and would introduce recreational infrastructure that is not supported by existing park planning (NPS, 2022a; 2022b). It would also require additional maintenance, safety oversight, and management responsibilities that do not align with the redevelopment goals.

An alternative that includes a playground would have effects similar to those already analyzed for outdoor site amenities and gathering areas, and none of these effects would alter the overall conclusions of the EA. As a result, a detailed analysis would be redundant and would not improve or change decision making. For these reasons, including a playground was dismissed from detailed analysis.

Restaurant, Food Court, Coffee Shop, and Food Vendors or Trucks: Providing full-service food operations would introduce a level of commercial food service that exceeds the grab and go options included in the proposed action. These facilities are technically infeasible because of the lack of sufficient space to accommodate commercial kitchen or foodservice buildouts within the proposed visitor center footprint. They are also economically infeasible, as the scale of construction, utilities, and specialized equipment required would far exceed the project's budget. Operating commercial food services would require food safety certifications, inspections, and ongoing compliance responsibilities that are outside the scope and intent of the Painted Canyon redevelopment and beyond current Park staffing capacity. Because these services fall outside the project's purpose, scope, and planning direction, they were dismissed from further consideration.

B.2 Issues and Impact Topics Considered but Eliminated from Detailed Analysis

Impact Topic	Rational for Dismissal
Air Quality	Impacts on air quality would be negligible. Because Painted Canyon is accessed directly from I-94, vehicle emissions are already part of the existing baseline condition. Semi-trucks would no longer be able to idle on site, which would result in localized improvement to air quality.

	Although passenger vehicle and tour bus use would be likely to increase over time, associated changes to air quality would remain minor and not measurable compared to existing conditions. Construction activities would generate short-term, temporary emissions, but no long-term changes in air quality would occur. Air quality would continue to be monitored through the on-site weather monitoring station. The project would not affect the Park's attainment status. See the 2022 EA for additional information (NPS, 2022a).
Soundscape	Impacts on the soundscape would be negligible. Because Painted Canyon is accessed directly from I-94, noise from high-speed traffic is already part of the existing baseline condition. Eliminating semi-truck idling would result in a noticeable reduction in localized noise. Although typical passenger vehicles, tour bus traffic, and visitor use may increase over time, any associated changes to the soundscape would remain minor and negligible compared to existing conditions. Operating large equipment during construction would generate short-term increases in noise but would not result in noticeable changes compared to current conditions. Noise impacts would be confined to a localized area around the construction zone and generally only occur during daylight hours. A temporary increase in noise would be limited to the period of construction.
Cultural Resources	Recent archeological surveys (May 2026) did not identify any significant cultural resources within the project area. Tribes have been consulted and multiple Tribal Historic Preservation Officers (THPOs) have visited the site. One THPO provided concurrence with the No Adverse Effect finding during the site visit. No further correspondence has been received regarding our request for concurrence from the other THPOs. See Appendix A for more information on consultations. No further analysis is warranted because survey results indicated a No Effect determination and construction can be monitored if recommended by subject matter experts or requested by Tribal Nations. Proposed actions would follow the mitigation measures and BMPs outlined in Appendix C.
Historic Structures and Cultural Landscapes	The stone NPS sign is considered a historic structure under Section 106 of the NHPA and is being relocated. Because its current placement is not its original historic location, moving the sign does not constitute an adverse effect on the historic integrity of the resource. Consultation with the State Historic Preservation Office (SHPO) resulted in concurrence with a determination of No Adverse Effect for the historic sign and the

	Painted Canyon Visitor Center building. See Appendix A for more information on consultations. All other structures within the project area were evaluated and found not eligible for listing on the National Register of Historic Places nor contributing features to a historic district or cultural landscape.
Indian Trust Resources	These resources were considered during consultations in Appendix A.
Land Use	The historic NPS sign would be moved from NDDOT property to NPS property. No new fencing would be added to NDDOT land. Any potential changes to the existing easement between the NDDOT and NPS would not result in any changes to land use.
Economics Effects	Painted Canyon visitors would likely be opportunistically stopping at the area while on their way to a pre-planned destination or have a visit planned to Medora, ND for the Park, Theodore Roosevelt Presidential Library, or other attractions. Therefore, the redevelopment at Painted Canyon itself is unlikely to draw a substantial number of new visitors to the area. A temporary influx of workers and tradespeople to the area may occur during construction. Any slight increase in visitation or on-site workers would have a negligible impact on the local economy.
Soils	Soils were dismissed as an impact topic because construction-related disturbance would be temporary, limited to previously disturbed areas, and would not affect any unique or sensitive soil types. Standard erosion-control and site-restoration measures would prevent additional erosion near the rim (Appendix C), resulting in negligible, short-term impacts not warranting further analysis.
Threatened and Endangered Species	A determination of No Effect was made for the Northern long-eared bat and whooping crane. Trees onsite were planted for landscaping purposes and are not suitable or preferred habitat for Northern long-eared bats. See Appendix A for information regarding endangered species consultations.
Night sky/Dark sky	Painted Canyon already has light sources being used at night and is not considered a pristine dark sky environment. Oil flares can be seen from the site (NPS, 2022a).
Water Resources	No water resources are within or near the proposed action area due to its location on a bluff (NPS, 2022a).

APPENDIX C: Mitigation Measures or Best Management Practices

To help ensure the protection of natural and cultural resources and the quality of the visitor experience, the NPS would implement the following mitigation measures and best management practices (BMPs).

Wildlife and Species of Concern

- To reduce potential conflicts with wildlife and people, NPS managers would ensure that personnel conducting construction activities are instructed on appropriate behavior in the presence of wildlife.
- Trees would be removed between November 1 and March 31 to avoid potential impacts to any roosting northern long-eared bat. Construction activities would be restricted to times outside when this species is likely present (November 1 through March In consultation with the U.S. Fish and Wildlife Service, the National Park Service would minimize work done during the June/July pupping season.
- If erosion-control material is used (e.g., wattles/fiber rolls, blankets/matting/netting), the materials must be made of 100% biodegradable and natural materials with large-diameter netting to prevent entrapment of wildlife. Wildlife-friendly erosion control products and methods shall be used.
- Compliance with food storage and waste disposal will always be maintained. The work site will be cleaned up and appropriately secured at the end of each work period daily to reduce the attraction of wildlife.
- Surveys for eagle nests occurring within one mile of the construction area will be completed during March – April, annually, during construction operations. If an active nest is observed, NPS will consult FWS on mitigations and necessary permitting.

Vegetation

- All vehicles, equipment, and tools shall be cleaned completely prior to entering the work zone to prevent the spreading of noninvasive plant seeds.
- To avoid introduction of nonnative, invasive plant species only certified weed-free materials will be used during construction. Straw bales or nonfumigated products will not be permitted.
- Construction activities shall be restricted during saturated soil conditions or severe weather conditions to avoid damage to soils and vegetation.
- Vehicle and equipment operations will be limited to paved areas whenever possible. All vehicles will use the same entry, egress, and turnaround areas. Travel corridors will be delineated prior to construction.
- Recontouring and soil decompaction of disturbed areas will take place immediately following construction, so the project area is ready for revegetation efforts. Weed control will be implemented to minimize the introduction of noxious weeds.
- All disturbed ground shall be reclaimed using appropriate BMPs, which may include planting or seeding with native vegetation.
- Any revegetation plantings will strive to reconstruct the natural spacing, abundance, and diversity of native plant species.
- Seed mixes will include local cultivars of native grasses and forbs, where feasible. If local cultivars are not available, then native species sourced from other locations may be

used. Native plants must be seeded during fall to early spring, with fall seeding preferred, to allow cool season plants the best opportunity to germinate. Plugs and other plantings should be installed during spring or in early fall, at least three weeks before the first freezing temperatures.

- Restored or augmented vegetation will be monitored and watered if not receiving sufficient environmental moisture.
- The site will be monitored and treated for invasive plants utilizing approved herbicides and/or mechanical techniques.

Visitor Use and Experience

- Visitors will be informed in advance of construction activities via multiple methods, including the Park's website, various signs, and at the Medora and North Unit visitor centers. Park staff would be available to address visitor questions during construction and provide regular updates to the public about project progress and any associated delays.

Human Health and Safety

- In developed areas, the presence of underground utilities must be determined and flagged prior to excavation using heavy machinery, handheld tools, or equipment**.**
- Before any remodel, renovation, demolition, or abatement activity, the proper hazard material testing shall be conducted.
- The project leader will engage the NPS accessibility coordinator during project design and receive approval before finalizing the project.
- Contractors shall submit a site-specific safety plan to the construction manager who will share it with Park management. The site-specific safety plan shall demonstrate compliance with Occupational Safety and Health Administration (OSHA), other applicable laws, and include an emergency response plan.
- Contractors and NPS staff will follow all Park safety and health policies and programs. A hierarchy of hazard control will be implemented. Personal protective equipment is required. Hard hats, safety vests, eye protection, and other personal protective gear, as needed, shall always be worn in the construction zone.
- Any safety violations will be corrected immediately. If the violation is not corrected immediately, the project will be postponed until such corrections are made.
- The construction zone will be clearly marked. Fencing or other types of NPS-approved temporary barriers will be installed. Closures and temporary safety fencing will be required to keep visitors out of construction and staging areas.
- The NPS would coordinate with the City of Medora and NDDOT on installing appropriate signage regarding construction routes for public safety.
- Plans for emergency vehicle access would be developed prior to construction.
- Hazardous materials will be stored in accordance with manufacturer's and Occupational Safety and Health Administration Subpart D requirements. Safety Data Sheets for each chemical will be maintained and readily available on-site.
    - Hazardous material spills will be reported immediately report spills to the Park.
    - Spill emergency response kit will be maintained.
    - Employees will be trained on how to respond to a spill and use an emergency response kit.
    - Spill containment kits and fire extinguishers will be available on-site at all times.

Visual Resources and Viewsheds

- The visibility of structures from areas in the park would be considered.
- Topography and vegetation would be used for screening as appropriate so as not to intrude on views and maintain uninterrupted landscapes. (In some areas trees may attract attention as opposed to screening the view of structures due to the lack of naturally occurring vegetation in certain areas, e.g., prairie landscape areas.)
- The visual impact of all future development would be reduced or eliminated.
- Dark sky–compliant fixtures would be used.
- Organic forms, structures, and features that blend with the natural landscape would be used to intrude on it as little as possible.
- Design features would be incorporated to minimize reflectivity and glare, such as the use of awnings, alcoves, or building orientation.

Air Quality and Soundscapes

- All construction motor vehicles and equipment will have mufflers conforming to original manufacturer specifications that are in good working order to prevent excessive or unusual noise, fumes, or smoke.
- Dust generated by construction would be controlled as necessary by spraying water on the construction site or using other BMPs for dust control.
- Rock dust created during cutting or shaping would be controlled by a wet method to eliminate/reduce silica exposure for workers and visitors.
- All haul loads will be secured and/or covered within NPS boundaries and in accordance with state regulations.

Archeology, Historic Preservation, and Cultural Resources

- Consultation with the North Dakota State Historic Preservation Office (SHPO) and Tribes would occur before construction begins. See Appendix A for more information.
- Known historic and prehistoric sites and isolated occurrences near the study areas would be surveyed, marked, and avoided during project activities, if present.
- Known archeological or structural resources near the study areas would be identified and delineated prior to project work. An archeologist who meets the Secretary of the Interior's professional qualification standards would monitor specific areas of ground disturbance indicated by NPS cultural resources staff if requested or needed. A traditional cultural specialist identified through consultation with Tribes would also be present to monitor ground-disturbing activities, particularly in areas within or adjacent to known archeological sites.
- If previously unknown archeological resources are discovered during construction, all work in the immediate vicinity (600 feet) of the discovery shall be halted until the resources are identified and documented and an appropriate mitigation strategy is developed, if necessary, in accordance with pertinent laws and regulations.
- Coordination with SHPO would occur throughout the course of the project if unknown cultural resources are discovered because of project activities.
- If human remains are discovered, all work must stop and the Park be contacted immediately. The Park's inadvertent discovery plan, developed in consultation with Tribes prior to any ground-disturbing activities, would be followed in accordance with

the provisions outlined in the Native American Graves Protection and Repatriation Act (NAGPRA; 1990).

- All workers will be informed of the criminal penalties for illegally collecting artifacts or intentionally damaging any archeological or historical property. Workers will also be informed of the correct procedures should previously unknown resources be uncovered during construction activities.
- Equipment traffic would be minimized within the project area and staging areas would avoid known archeological resources.
- Any new structures would be designed to blend in with the existing cultural and historical landscape.
- All new construction would be consistent with NPS design guidelines (e.g., Department Order (DO)-58).

Geology and Soils

- To minimize the amount of ground disturbance, staging and stockpiling areas will be in previously disturbed sites to the extent possible. All staging and stockpiling areas will be returned to preconstruction conditions following construction.
- Fill, rock, or other earth materials will be obtained from the project area or nearby areas whenever possible. Soil and fill material must be weed free and from a source approved by the NPS. Visible fill, rock, or other earth materials will be of a compatible color to the surrounding landscape.
- New or locally sourced topsoil would be evaluated for nonnative invasive plants and plant materials.
- Recontouring of disturbed soils to complement the surrounding landscape is required following the completion of construction.
- All construction equipment would be inspected and washed to remove potential nonnative invasive plants and plant materials.
- Heavy Equipment Use: (1) Use of heavy equipment where soils are wet or extensive compaction could occur will be avoided; (2) The visible limit of disturbance will be clearly marked using stakes, flagging, or fencing, and all demarcations must be removed and disposed of properly upon the completion of construction; and (3) Surface soils that have been compacted shall be scarified to slow runoff and promote revegetation.
- Erosion control measures that provide for soil stability and prevent movement of soils during rain events (e.g., silt fences and tarps) will be implemented.
- All erosion- and sediment-control devices will be adequately maintained to ensure continued performance of their intended function. Those that have sustained damage or have reached their capability will be replaced or have maintenance performed. Silt protection structures will be inspected and cleaned out regularly.
- Any ground surface temporarily disturbed during construction would be aerated and revegetated with native plants to reduce compaction and prevent erosion.
- All utility lines will be installed according to applicable laws and regulations, especially regarding the proper depth of the lines in the soil column. The project manager will oversee or inspect this work in time to allow for corrections prior to burial of the lines. Damage to existing lines during construction will be reported or repaired the same day.

- Trash and construction waste, including rubble, concrete, asphalt, etc., will not be left on-site or buried but will be removed and disposed of in an approved manner.
- All construction equipment must be inspected daily for hydraulic and fuel leaks and repaired as necessary. When not in use, idle equipment, petrochemicals, and toxic/hazardous materials will be locked.
- The number of vehicles and frequency of equipment accessing the project area will be restricted to the minimum amount required to successfully complete operations.
- If needed, a Stormwater Pollution Prevention Plan and project specifications for dust control measures within construction areas, including active haul roads and staging areas, would be developed and implemented. A qualified stormwater practitioner would ensure compliance with the plan.

Water Resources

- All relevant requirements under the Clean Water Act, including management of stormwater-related nonpoint source pollutants under the National Pollutant Discharge Elimination System, would be complied with and met.
- Best management practices (BMPs) would be implemented for drainage and sediment control to prevent or reduce nonpoint source pollution and minimize soil loss and sedimentation in drainage areas. As much as practicable, plastic materials would not be used.