ENVIRONMENTAL ASSESSMENT
MAMMOTH PUBLIC RESTROOM

October 2000

Mammoth Hot Springs

YELLOWSTONE

National Park • Wyoming / Montana / Idaho

TABLE OF CONTENTS

INTRODUCTION

The National Park Service (NPS) is proposing to build a public restroom in the Mammoth Hot Springs developed area. Current restroom facilities in Mammoth are not adequate for the number of visitors to the area. In addition, restrooms in the Albright Visitor Center do not meet federal accessibility standards.

The proposed restroom would be located southwest of the Yellowstone Park Service Station (YPSS) (see Figure 1) and would accommodate pedestrian traffic between the visitor center and Mammoth Hot Springs terraces. The proposed restroom would also be in close proximity to the tour bus parking area.

PURPOSE AND NEED

The only public restrooms provided by the National Park Service in the Mammoth Hot Springs developed area are located in the basement of the Albright Visitor Center, in the Mammoth Campground, and a vault toilet at the Upper Terraces parking area. The restrooms do not accommodate the large numbers of visitors to the Mammoth area.

The visitor center restrooms are not accessible to people with disabilities

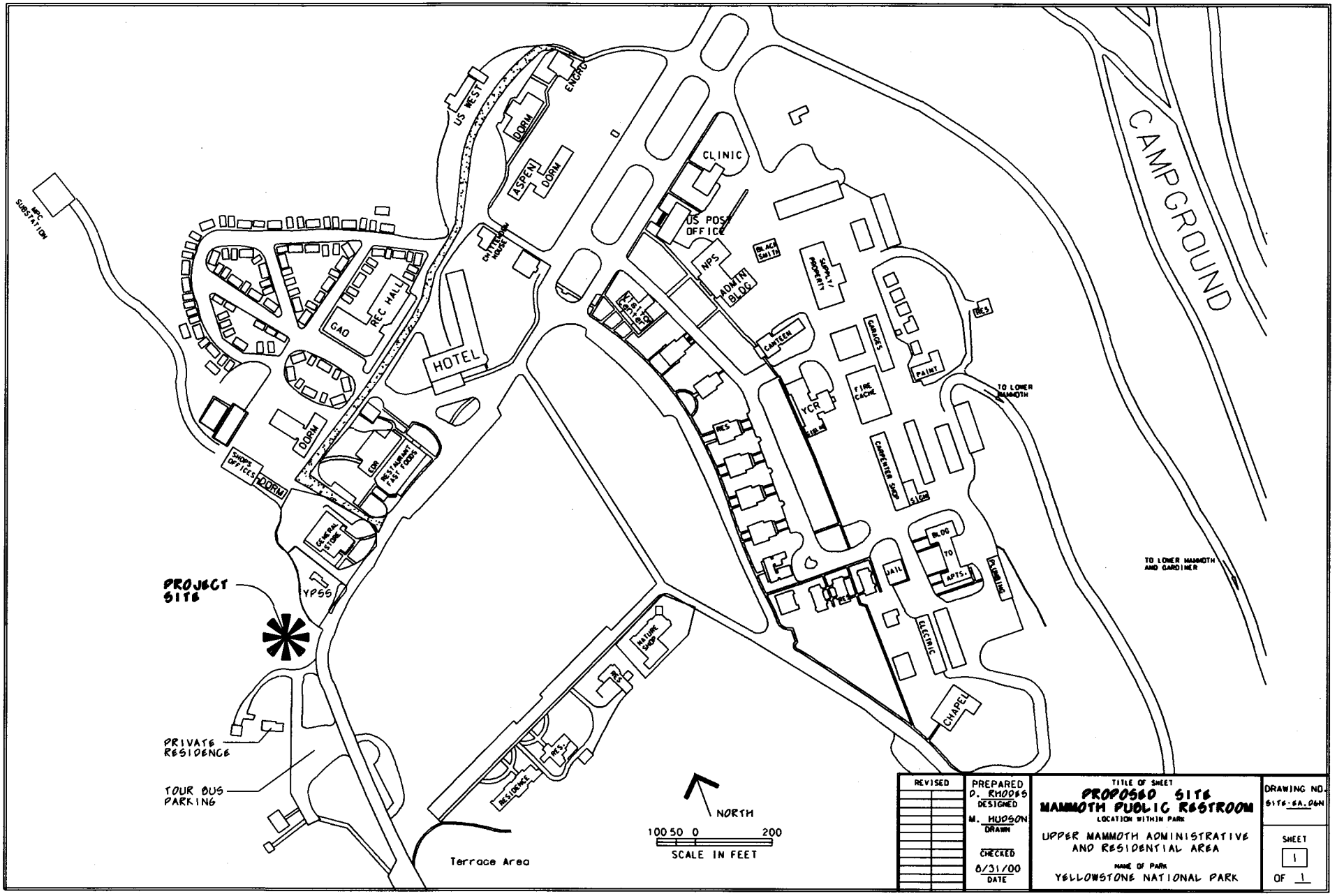

CAMPGROUND
US WEST
ENGRG
DORM
ASPEN DORM
CLINIC
US POST OFFICE
NPS ADMIN BLDG
BLACK SMITH
SUPT'S PROPERTY
CANTEEN
GARAGES
PAINT
RES
FIRE CACHE
YCR
TO LOWER MAMMOTH
CARPENTER SHOP
SIGN
BLDG 70
APTS.
JAIL
PLUMBING
ELECTRIC
CHAPEL
TO LOWER MAMMOTH AND GARDINER
MPC SUBSTATION
REC HALL
GAB
HOTEL
CHITTENDEN HOUSE
DORM
SHOPS OFFICES
LDR
RESTAURANT FAST FOODS
GENERAL STORE
YPSS
PROJECT SITE
PRIVATE RESIDENCE
TOUR BUS PARKING
NATURE SHOP
RESIDENCE
Terrace Area
NORTH
100 50 0 200
SCALE IN FEET
REVISED
PREPARED D. RHODES
DESIGNED M. HUDSON
DRAWN
CHECKED
8/31/00
DATE
TITLE OF SHEET
PROPOSED SITE
MAMMOTH PUBLIC RESTROOM
LOCATION WITHIN PARK
UPPER MAMMOTH ADMINISTRATIVE AND RESIDENTIAL AREA
NAME OF PARK
YELLOWSTONE NATIONAL PARK
DRAWING NO.
SITE-6A.06N
SHEET 1 OF 1

FIGURE 1

In July 1999 there were 74,473 visitors to the Albright Visitor Center--an average of nearly 2,400 visitors per day (see Appendix A).

Existing Toilets in the Mammoth Hot Springs Developed Area

Location	Women's	Men's	Unisex
Mammoth Campground (building closest to road)	3 toilets (one accessible)	3 toilets (one accessible), 1 urinal	
Visitor Center*	6 toilets	4 toilets, 4 urinals	
Mammoth Hotel**	5 toilets (one accessible)	3 toilets (one accessible) 4 urinals	
Dining Room**	2 toilets	1 toilet, 1 urinal	
Grill (Fast Food)**	2 toilets (one accessible)	1 toilet (accessible), 1 urinal	
YPSS (gas station)**	1 toilet	1 toilet	
Mammoth Horse Corral			1 vault toilet
Upper Terraces			1 vault toilet
Total Fixtures	**19**	**24**	**2**

Note: *There are accessible restrooms on the third floor of the Albright Visitor Center, but the only accessible route is from a ramp at the rear of the visitor center to an elevator in the basement (not a public access route). These restrooms are **not** included in the inventory.
**The Mammoth Hotel, Dining Room, and Grill are closed from early-October to mid-December and from mid-March to early May. The gas station is closed from mid-October to early May.)

SCOPING

Scoping for the proposed Mammoth public restroom project began in January 2000 with a press release and mailing to previously identified interested parties asking for help in identify issues and concerns. The scoping letter was also posted on the Internet. Scoping ended on March 31, 2000. Five comment letters were received; two from park concessioners, two from park employees, and one from the public. All letters supported the proposed project.

ALTERNATIVES CONSIDERED

Alternative 1--No Action

Existing restrooms in the Mammoth area would continue to be utilized. Visitors would not be provided with adequate or additional restroom facilities.

Alternative 2—Preferred Alternative

The proposed restroom would be located southwest of the Yellowstone Park Service Station, (see Figure 2) on land formerly occupied by the Cottage Hotel (see Historic Resources section). The proposed public restroom would supplement the already overflowing restrooms in the Mammoth area, especially those at the nearby Yellowstone Park Service Station.

View of site looking north from the Grand Loop Road

Site is located between the Yellowstone Park Service Station and employee residence

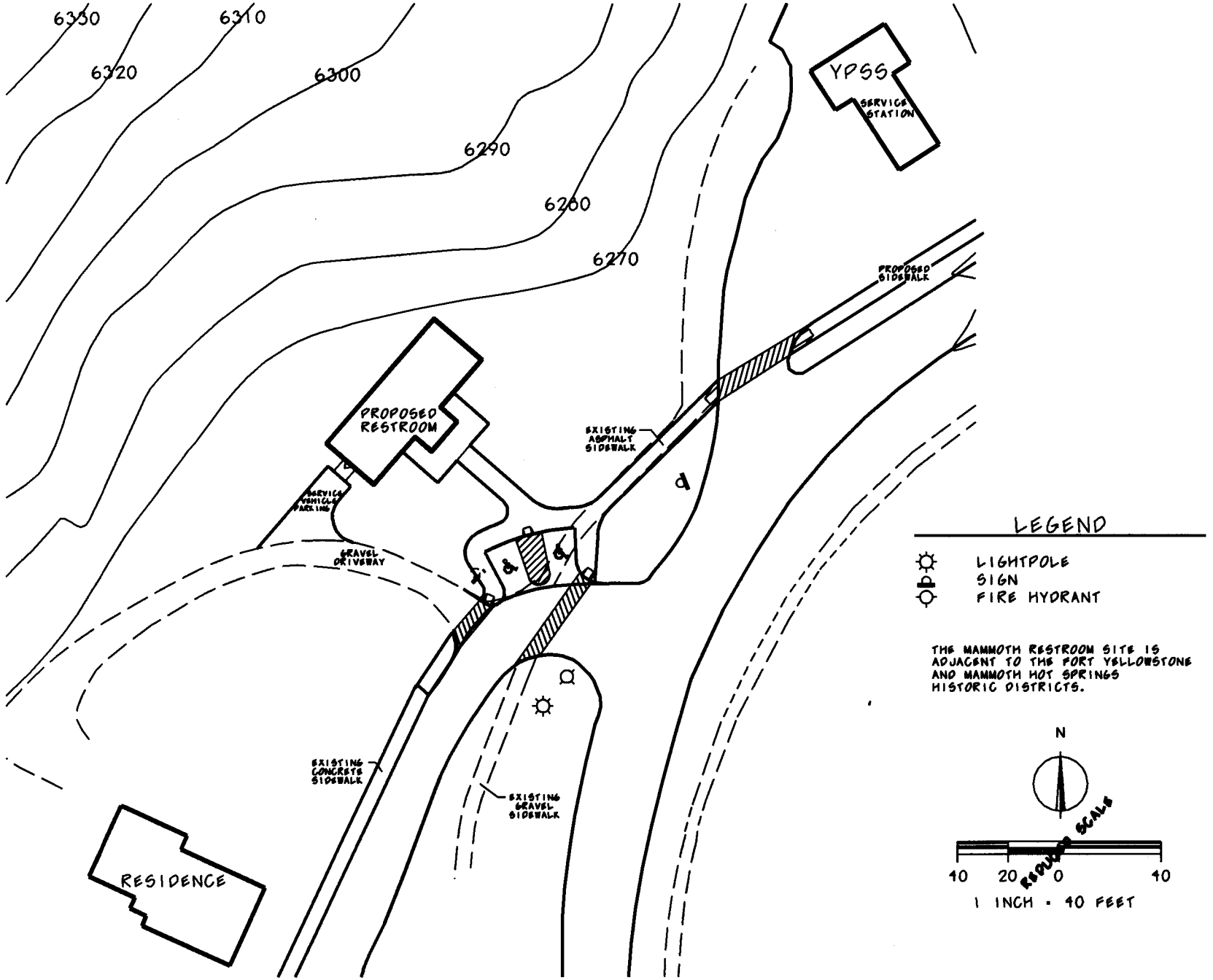

6330
6310
6320
6300
6290
6280
6270
YPSS
SERVICE STATION
PROPOSED SIDEWALK
PROPOSED RESTROOM
EXISTING ASPHALT SIDEWALK
SERVICE VEHICLE PARKING
GRAVEL DRIVEWAY
EXISTING CONCRETE SIDEWALK
EXISTING GRAVEL SIDEWALK
RESIDENCE
LEGEND
LIGHTPOLE
SIGN
FIRE HYDRANT
THE MAMMOTH RESTROOM SITE IS ADJACENT TO THE FORT YELLOWSTONE AND MAMMOTH HOT SPRINGS HISTORIC DISTRICTS.
N
REGULAR SCALE
10 20 0 10
1 INCH = 40 FEET

FIGURE 2

Existing restrooms in the Mammoth Hot Springs area are not easily accessed by people with disabilities. The new restroom would provide a facility that is accessible to all visitors. The restroom would accommodate pedestrian traffic between the visitor center and Mammoth Hot Springs terraces. The proposed restroom would also be in close proximity to the tour bus parking area.

The restroom would be located adjacent to the Mammoth Hot Springs Historic District in a previously disturbed area. The location of the building would retain the historic setback of other buildings along the road. The new building's design would reflect the architectural character of nearby historic buildings without imitating an historic style. The building would clearly be differentiated from the historic buildings but would be compatible in scale, mass, and materials.

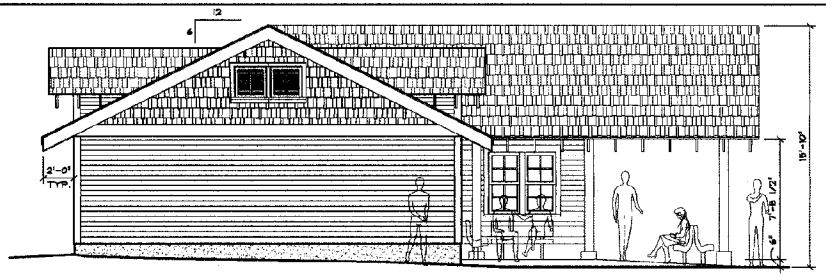
The proposed restroom would be approximately 1,800 square feet in size. The building would be single story, have a rectangular shape, gabled roof, and dormers. A covered porch would provide shelter, seating, trash receptacles, and interpretive displays. The building would reflect the architectural details of surrounding buildings, including roof pitch, construction materials, building shape, and entrances (see Figure 3). A geotechnical survey would be conducted to determine the most appropriate type of foundation for the building.

Preliminary floor plans provide for two women's toilet rooms with a total of 12 toilets (2 accessible). Two men's toilet rooms would provide a total of 4 toilets (2 accessible) and 6 urinals. Baby changing tables would be provided in both the women's and men's toilet rooms. Though not shown in the preliminary floor plan, a unisex or family toilet room would be included.

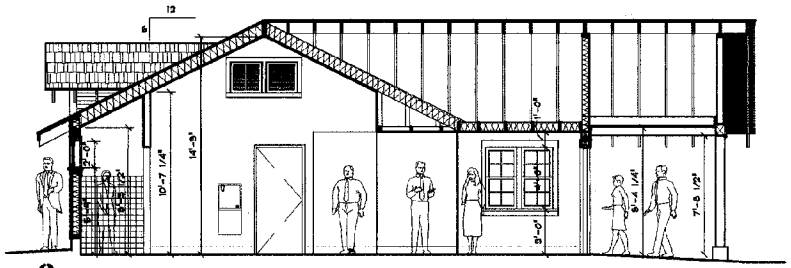
The building would be designed so that one side of the building (one men's toilet room and one women's toilet room) could be closed for cleaning while the other side remained open. During winter months, when there is less use, one side of the building could be shut down, and, thus, be more energy efficient. Sustainable design and low maintenance characteristics would be incorporated into the building design including easily cleaned, minimally painted surfaces; long lasting equipment and materials; and low-flow fixtures. Windows would provide natural lighting.

Two accessible parking spaces would be provided in close proximity to the building. Walkways would provide a firm, stable, slip resistant surface.

The project would be funded with Fee Demonstration money.



1 SIDE ELEVATION
SD2.1 : SD2.1 1/4" = 1'-0"



6 SECTION
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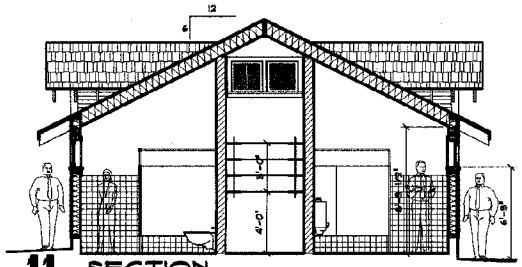

11 SECTION
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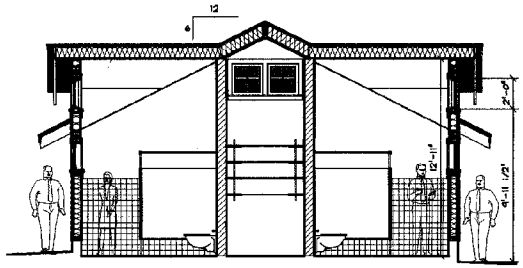

16 SECTION
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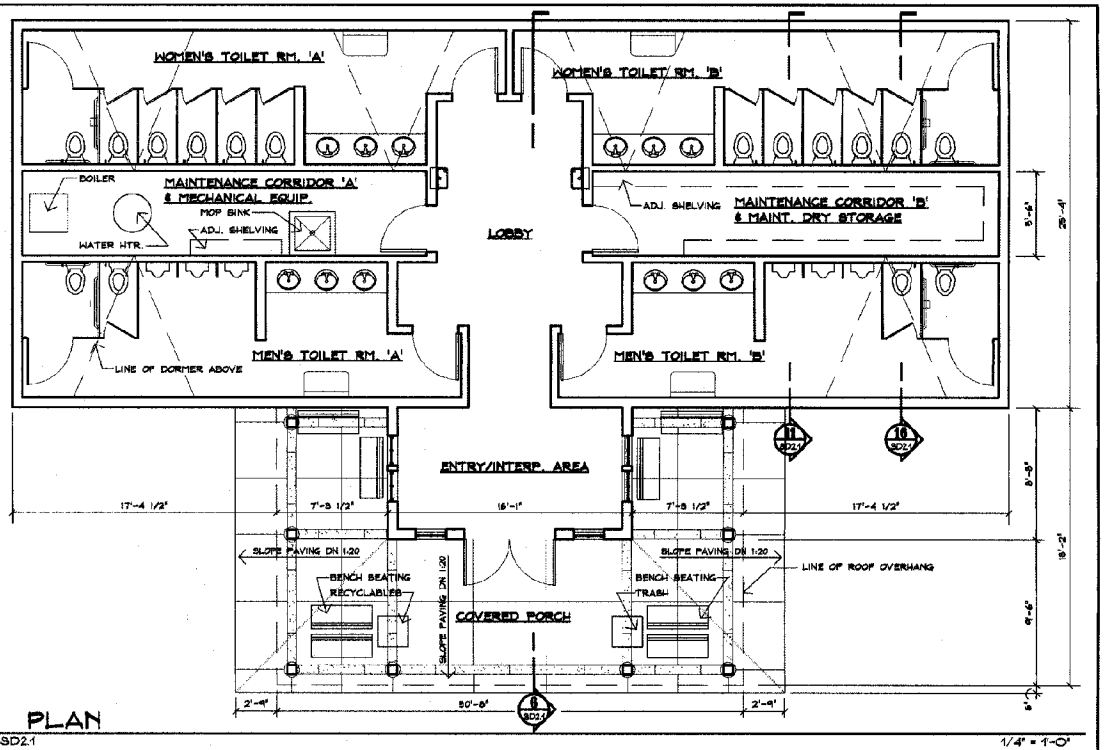
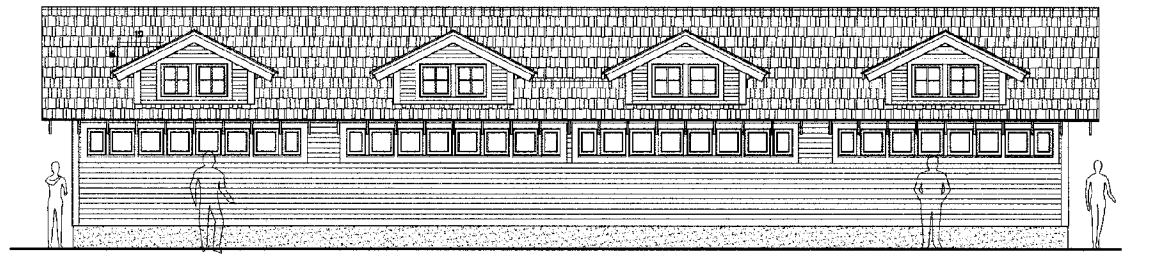


8 PLAN
SD2.1 : SD2.1 1/4" = 1'-0"

13 FRONT ELEVATION
SD2.1 : SD2.1 1/4" = 1'-0"



18 REAR ELEVATION
SD2.1 : SD2.1 1/4" = 1'-0"

SCHEMATIC DESIGN PLAN, EXTERIOR ELEVATIONS & SECTIONS

DRAWING: PUBLIC RESTROOMS
PROJECT: MAMMOTH HOT SPRINGS, YELLOWSTONE NATIONAL PARK
OWNER: UNITED STATES DEPT. OF THE INTERIOR NATIONAL PARK SERVICE

PROJECT № 0022
ISSUE DATE 5-20-00
REVISIONS 9-01-00

A&E ARCHITECTS P.C.
ARCHITECTURE
INTERIORS
608 NORTH 29th
BILLINGS, MT 59101
PHONE 406•248•2635
FAX 406 • 248 • 2427

SD2.1

Figure 3

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

OVERVIEW

This section of the EA discusses the affected environment and potential consequences of construction of a new restroom in the Mammoth Hot Springs developed area on natural, cultural, and socioeconomic resources and visitor use.

NATURAL RESOURCES

Natural resources evaluated include: geology, surficial deposits and soils, vegetation, rare plants, wildlife, threatened and endangered species, candidate species, wetlands and other waters of the United States, floodplains, water resources and water quality, air quality, and visual quality.

Under Alternative 2, approximately 0.6 (six-tenths) of an acre of park land would be committed to development of a public restroom and associated parking and sidewalks.

Geology

Yellowstone National Park is located in the central Rocky Mountains and is noted for geologic features that are the result of glaciation, stream erosion, volcanism, faults, and geothermal processes. The park is located in a geologically active area in the intermountain seismic belt of the Rocky Mountains. Yellowstone is one of the most active geothermal areas in the world. The park is world-renowned for its hot springs, geysers, mudpots, and fumaroles. In addition, earth tremors are recorded frequently in and around the park.

The proposed site is located in the northwestern section of the park. The site of the proposed public restroom is located on ancient travertine deposits near an active geothermal area, the Mammoth Hot Springs terraces.

Surficial Deposits and Soils

The Mammoth area is well known for naturally occurring hot springs. Soils in this area are primarily kame deposits, with localized areas of travertine deposited by the geothermal hot springs. These deposits have the potential to develop caverns and sinkholes when ground water dissolves travertine. Although sinkholes have not been observed in the proposed area for development, invisible caverns could be present beneath the ground surface. A geotechnical survey would be conducted to determine the most appropriate type of foundation for the building.

Approximately 0.6 (six-tenths) of an acre of previously disturbed land would be used for construction of the building and parking area under Alternative 2.

Although the site is located near an active hydrothermal area, disturbance of either primary or secondary hydrothermal features is not expected.

Vegetation

Coniferous forests or moist meadows generally cover the mountainous regions and high plateaus of Yellowstone. The most common tree species in Yellowstone is the lodgepole pine. Non-forested areas are mostly wetlands and upland meadows. Active hydrothermal areas are often devoid of vegetation.

Native vegetation at Mammoth Hot Springs primarily consists of grasses and sagebrush with stands of juniper and lodgepole pine. The vegetation in the area is described as being a moist shrubland of big sagebrush interspersed with Idaho fescue, junegrass, and occasional bluebunch wheatgrass, common rabbitbrush, fringed sagebrush, and prairie smoke. The area has been invaded by numerous exotics (non-native plants), predominantly hound's tongue, Canada thistle, dalmatian toadflax, and spotted knapweed.

Native vegetation would not be significantly affected by construction activities as the area has been previously disturbed. The potential for spreading exotic plant species during construction operations is a concern that can be mitigated by adhering to proper construction techniques and precautions. Two percent of construction money would be applied to exotic vegetation management.

Topsoil containing roots, rhizomes, and seeds would be saved during construction for later reclamation and revegetation work. Work would follow guidelines in *Vegetation Management for Construction Disturbance in Yellowstone National Park* (January 1995). After construction activities are completed, revegetation with native plant materials would return disturbed areas to a more natural state. Plant materials would reflect vegetation of the area and would not include plants known to attract bears. The long-term effects on vegetation would be minor after completion of the revegetation efforts.

Rare Plants

There are no Plant Species of Special Concern in the area proposed for development.

Wildlife

Yellowstone has 44 species of mammals, 305 species of birds, 13 species of native fish, 5 species of nonnative fish, 6 species of reptiles, and 4 species of amphibians. Among the 44 species of mammals are 7 species of native ungulates and 2 bear species.

Elk. The northern Yellowstone elk herd is one of the largest free-ranging herds in North America. During the winter, elk are commonly observed grazing on lawns in Mammoth Hot Springs. Elk have been observed calving and seeking cover from predators in the sagebrush and grassland near the proposed development area. Rutting (mating) season occurs during September and October, and bulls tend to seek open meadows to be highly visible and maintain their harems (groups of elk cows). Elk frequent the area proposed for development.

Mule Deer. Mule deer are classified as browsers and prefer shrubs to grasses, especially in the winter. Although very few of the Yellowstone mule deer winter inside the park's northern boundaries, some are occasionally seen grazing in the Mammoth Hot Springs area.

Bison. During the past two decades, the number of bison present in Yellowstone has been increasing steadily. The Mammoth area is within the present and historic winter range of bison, however, it does not contain any significant bison calving grounds. Bison have been sighted during winter near the area proposed for development. A long-term bison management plan and final environmental impact statement was released in August 2000.

Black Bear. Black bears are dispersed throughout the park and are most likely found in forested areas. Their primary diet includes grasses and sedges, but they opportunistically feed on fish, insects, roots, and berries, and they will scavenge, if necessary. Historically, black bears have been involved in more bear/human conflicts than grizzlies. Black bears have been seen less frequently along roadsides and in developed areas since intensive efforts to deny them access to artificial foods was instituted by the park in the early 1970s. As a result, conflicts between black bears and humans have declined. Mammoth is classified as high-quality spring and early summer bear habitat. Because the site is in high-quality black bear habitat, appropriate management of food and garbage would be required both during construction and during operation of the new restroom. Note: Grizzly bears are discussed in the "Threatened and Endangered Species" section below.

Small Mammals. The park's rodent population includes pocket gophers, mice, voles, marmots, squirrels, chipmunks, muskrat, and beavers. Smaller mammals such as pine marten, weasels, and red squirrels, are fairly common near Mammoth. Uinta ground squirrels frequent the proposed site. The landscaped lawns of Mammoth Hot Springs provide an optimal artificial habitat for ground squirrels.

Amphibians and Reptiles. Recent amphibian surveys indicate three species of amphibians are widespread and common in many parts of the park: the blotched tiger salamander, boreal chorus frog, and Columbia spotted frog. Reptiles such as common garter snakes and bull snakes, have been sighted in the Mammoth Hot Springs area.

Birds. A wide variety of birdlife can be found in the proposed development area. Some of the birds observed here include Cassin's finch, pine sisken, mountain chickadee, vesper sparrow, common raven, and Clark's nutcracker.

The proposed site is within a developed area of the park that is within the habitat and range of the ungulate population of Yellowstone. The area also contains small mammals and a wide variety of birds. These animals would be temporarily displaced during construction activities but are expected to return. Impacts to wildlife are generally expected to be short-term in nature, and no significant increases in wildlife mortality are anticipated.

Threatened and Endangered Species

There is one threatened and one endangered bird species and two threatened mammal species present in Yellowstone. The bald eagle (Haliaeetus leucocephalus) is threatened. The whooping crane (Grus americana) is endangered. The grizzly bear (Ursus arctos horribilis) and the Canada lynx (Lynx canadensis) are listed as threatened. Gray wolves (Canis lupus) are designated as an experimental population.

The U.S. Fish and Wildlife Service removed the peregrine falcon from the list of threatened and endangered species in 1999. Although no longer endangered, peregrine falcons, their eggs, parts, and nests will continue to be protected from unauthorized killing, possession, transportation, and importation by the Migratory Bird Treaty Act. Also, the species will continue to be monitored across the nation for the next 13 years to provide data on at least two generations of peregrines and to ensure that the bird is doing well after being delisted.

Bald Eagle. Both resident and migrating bald eagles can be found throughout Yellowstone. Bald eagle nesting sites occur primarily along the margins of lakes and along the shoreline of the larger rivers in the park. The bald eagle management plan for the Greater Yellowstone Ecosystem (GYE) has achieved the goals set for establishing a stable bald eagle population in the park. Bald eagles do not typically nest or regularly roost in the proposed development area.

Whooping Crane. Whooping cranes are occasional summer residents of Yellowstone. The whooping crane population in the park rarely, if ever, exceeds two individuals. In recent years one to two cranes have summered separately in the backcountry in the southern half of the park. Whooping cranes nest in marshlands, and Yellowstone lacks the tall reed habitat preferred by cranes. Whooping cranes have not been observed in the proposed development area. The proposed development would not affect the whooping crane.

Grizzly Bear. In 1975, the grizzly bear was listed as threatened in the contiguous United States, and fewer than 1,000 grizzlies are thought to survive in the lower 48 states. Surviving populations occur in six areas in Montana, Wyoming, and Idaho. The maximum grizzly bear population within the 5.5 million acres encompassed by the GYE

has been estimated at a maximum of 610. Nearly 40% of this area, 2.2 million acres, is within the boundaries of Yellowstone National Park. The bear management program in Yellowstone is directed toward the recovery, maintenance, and management of the grizzly bear population while also providing for safe park visitor experiences.

Occupied grizzly bear habitat in the GYE has been divided into 18 grizzly bear management units (BMUs). The BMUs were created to monitor bear population trends and to analyze the effects of habitat use or development on local bear populations. Each BMU is assumed to be sufficient to support its bear population from spring through fall.

Grizzly bears prey on pocket gophers and ants. They also forage on the bulbs, roots, and foliage of many forest, meadow, and marsh plants. Whitebark pine seeds are a high quality food source for grizzly bears, especially during the late summer and fall. Grizzlies also feed on ungulate carrion. During winter, ungulates in the park migrate toward the northern range or near thermal areas where severe temperatures are moderated and vegetation is easier to obtain. Ungulate mortalities during the winter serve as a readily available and high protein food source for bears when they emerge from their dens in early spring. When food is scarce, bears are attracted to human developments.

Mammoth Hot Springs is located within the Gallatin BMU, which is considered to be high quality spring and early summer bear habitat. This conclusion is based on vegetation characteristics, on the presence of winter-killed ungulates in the spring, and on the presence of elk calving grounds (active in late spring and early summer). Between 1990 and 1994, 63 grizzly bear activity reports were recorded within about 3 miles of Mammoth Hot Springs.

Grizzly bear activity has been reported in the Mammoth Hot Springs developed area. The area is designated as Management Situation 3 habitat. These habitats encompass developed areas and are managed for regular human use or occupation. Bear-human conflicts would be resolved by trapping and translocating the bear. By confining construction to previously disturbed areas, the potential effects on grizzly bears and their habitat would be minimized, and no adverse effects expected.

Canada Lynx. On March 21, 2000, the USFWS listed the Canada lynx as threatened under the Endangered Species Act. Lynx population numbers in Yellowstone are unknown, and there have been no lynx reported in the area proposed for development.

Gray Wolf. Gray wolves were native to the Yellowstone area at the time the national park was established in 1872. Gray wolves have historically been hunted for their hides. The gray wolf was the target of systematic poisoning from 1872 through the early 1900s. As a result, the gray wolf was extirpated from the ecosystem by the 1930s.

The USFWS released an EIS in May 1994 outlining wolf population recovery and reintroduction plans for Yellowstone and central Idaho. In 1995, 14 gray wolves were reintroduced to Yellowstone National Park. In 1996, 17 more wolves were released in the park. As of June 2000, there were approximately 120 wolves in about 12 packs or

groups in the GYE. This number does not include pups born during this year's whelping season. Within the 12 packs, there are estimated nine breeding pairs.

Currently, gray wolves do not use habitat in the Mammoth Hot Springs area. Immediate future use of this area by wolves is not predicted, due to high human use and the large amount of suitable prey in other areas. Wolves in the Yellowstone area are designated as an experimental population, and no areas are designated as critical habitat for wolves. The proposed development would have no effect on gray wolves.

Wetlands and Other Waters of the United States

No wetlands or other waters of the United States would be impacted by the project.

Floodplains

The site is approximately 500 feet from Clematis Creek. There are no floodplains within the proposed development site.

Water Resources and Water Quality

The Mammoth area is well known for naturally occurring hot springs. Clematis Creek and an active hot springs are located approximately 500 feet from the proposed site. The proposed development would not affect water resources or water quality.

Air Quality

Under the Clean Air Act, Yellowstone is designated as a mandatory Class I area where air quality degradation is not acceptable. Air quality monitoring in the park is conducted at the Tower and Lake Ranger Stations. Air quality and visibility are generally excellent in Yellowstone. Ozone, sulfur oxides, and particulate matter are monitored on a regular basis in the park. The concentrations of these three parameters have not exceeded limitations specified under existing regulations.

Air quality in the proposed development area is believed to be excellent, based on data regarding general air quality in Yellowstone. Occasional periods of degradation may occur due to regional haze or forest fire smoke. Localized emissions from wood burning stoves, campfires, and motor vehicles are occasionally visible.

There would be no significant long-term impacts on air quality or visibility in the development area. Effects would be temporary and limited to the duration of construction. Dispersed dust and mobile exhaust emissions would be caused by truck traffic and equipment activity. Contractor activities would comply with state and federal air quality regulations, and contractors would operate under applicable permits.

Visual Quality

Visual quality affects both visitor enjoyment and perception of Yellowstone. Mammoth Hot Springs is a developed area, highly visible to the public. The effects of the proposed restroom project on visual quality would be both short-term and long-term in nature. Short-term visual effects would include disturbed land, construction equipment, and development activities. Contractors would be required to maintain an organized construction site and to minimize adverse visual impacts on park residents and visitors.

The proposed restroom would be in the direct sight line of visitors driving into Mammoth from the south. Effects will be addressed in the Cultural Resources section.

CULTURAL RESOURCES

The affected environment and environmental consequences on cultural resources are evaluated in this section of the environmental assessment (EA). Cultural resources evaluated include archeological, historic and ethnographic resources, and cultural landscapes.

Archeological Resources

Although there is evidence that prehistoric hunters pursued large game in the northwestern plains at least 12,000 years ago, the earliest human use documented for the Yellowstone area dates to about 11,000 years ago. From around 2800 B.C. to 1600 A.D., prehistoric groups occupied the Yellowstone area extensively, leaving behind campsites, lithic quarries, and food processing sites.

An intensive archeological inventory of the site was completed in the summer of 1999. No archeological issues were identified. The park archeologist is completing a site form for remains identified as the historic Cottage Hotel. When the report and site form are complete, further compliance will be completed with the Wyoming State Historic Preservation Office. A determination of "not eligible" is recommended for the Cottage Hotel site.

Historic Resources

During the latter part of the 19th century, Euro-Americans homesteaded in the Yellowstone area. Increasing numbers of explorers, scientists, and visitors publicized Yellowstone's resources and scenery, leading to the formal establishment of the area as the country's first national park in 1872. Civilians initially administered Yellowstone from 1872 through 1886. The park was managed by the military between 1886 and 1916. Military management of the park occurred to control poaching and vandalism. The National Park Service assumed administration of Yellowstone National Park in 1916 and continues to manage park activities today.

Yellowstone has 907 historic buildings and structures on the List of Classified Structures; of these, 553 are eligible for the National Register of Historic Places (National Register). The remaining 354 buildings and structures still need to be evaluated for eligibility to the National Register. Five buildings have been designated as National Historic Landmarks. These include the museums at Madison, Norris, and Fishing Bridge; the Northeast Entrance Station; and the Old Faithful Inn. The majority of Yellowstone's historic buildings are located within developed areas of the park.

Fort Yellowstone was established by the U.S. Army in 1891 and is “one of the few military posts of the late 19th century to retain most of its major buildings in their original appearance and location” (Battle and Thompson, 1972). The buildings comprising the Fort Yellowstone/Mammoth Hot Springs (FY-MHS) Historic District (48YE486) represent the initial development of administrative and concessioner facilities in Yellowstone. There are 186 buildings and structures in the historic district. The contributing buildings retain their historical and architectural integrity. They also retain their relationship with the historic landscape.

The proposed restroom site was once the location of the Cottage Hotel. The two and one-half story log building was built in 1885 and stood for 79 years before it was demolished in 1964. There is little information about the history of the hotel between 1889 and 1964. There are no buildings or features associated with the Cottage Hotel remaining. Observations made in the summer of 1998 by park cultural resources staff reported, “Presently, the site displays little surface artifact scatter other than a few glass shards and bricks “ (Mills 1998). Documentation suggests that there was a barn, ice house, servant’s house, shed, and possible other outlying structures associated with the hotel.

Preparation of a National Historic Landmark nomination for the Fort Yellowstone Historic District and a National Register of Historic Places nomination for the Mammoth Hot Springs Historic District are currently under contract**.** The restroom site is adjacent to the Fort Yellowstone, Mammoth Hot Springs, and Grand Loop Road Historic Districts.

Construction of restrooms adjacent to the Mammoth Hot Springs Historic District and Fort Yellowstone National Historic Landmark District would have an effect on historic properties. Federal law and National Park Service management policies require full consideration of historical and architectural values whenever a project may affect historic properties. Additionally, the National Park Service "must to the maximum extent possible, undertake such planning and action as may be necessary to minimize harm to any National Historic Landmark that may be directly and adversely affected by an undertaking (36CFR800.10)."

Yellowstone National Park will ensure that the restroom does not adversely affect those qualities that qualify Fort Yellowstone, the Mammoth Hot Springs Historic District, and the Grand Loop Road Historic District for listing in the National Register of Historic Places. The building will be designed to meet the Secretary of the Interior's Standards for the Treatment of Historic Properties. The building will be constructed in a manner that is sensitive to and compatible with the districts' historic and architectural values.

Ethnographic Resources

Ethnographic resources are cultural and natural features of traditional significance to contemporary peoples and communities. The ethnographic record for Yellowstone National Park is incomplete. A draft ethnographic overview and assessment has been completed. The final document should be available at the end of September 2000.

For at least 10,000 years, Native Americans occupied the greater Yellowstone area. A number of Native American tribes were historically present in Yellowstone on a seasonal basis. These tribes may have included the Shoshone, Crow, Blackfeet, Nez Perce, Bannock, Arapahoe, Salish, Kootenai, Lakota/Sioux, and Kiowa. During the early and middle 19th century, early Euro-American explorers documented year-round occupation of areas within the park by a band of Shoshone Indians. This band was known as the Sheepeaters.

There are no known ethnographic resources in the area proposed for development. Native Americans would be consulted prior to construction to identify ethnographic concerns in the proposed development area. Native American consultation would begin with a request for comment on this document.

Cultural Landscapes

Cultural landscapes are settings that human beings have created in the natural world. The term covers designed historic landscapes, vernacular historic landscapes, and ethnographic landscapes. No cultural landscape inventories have been undertaken in Yellowstone National Park.

Yellowstone National Park considers both Fort Yellowstone and the Mammoth Hot Springs area eligible for listing in the National Register of Historic Places as a designed historic landscape. Fort Yellowstone exhibits many characteristics of a late 19th century military fort. Professional landscape architects provided plans for the Fort Yellowstone parade grounds (c. 1903) and the Mammoth Hot Springs developed area (c. 1930) (personal communication, Lon Johnson, Yellowstone National Park, Cultural Resources Specialist).

Potential effects on the Fort Yellowstone/Mammoth Hot Springs designed historic landscape will be considered with the effects on other historic properties during Section

106 compliance of the National Historic Preservation Act of 1966, as amended, and its implementing regulations 36CFR800.

SOCIOECONOMIC RESOURCES

Yellowstone National Park extends into five counties in three different states including Teton and Park counties in Wyoming, Gallatin and Park counties in Montana, and Fremont county in Idaho. The U.S. Forest Service, the state of Montana, and a few private land owners manage most of the property surrounding the park. The park plays a prominent role in the social and economic life of the greater Yellowstone area.

Gateway communities of varying sizes have developed outside the park's five entrances-Cody, Dubois, and Jackson in Wyoming and Cooke City/Silvergate, Gardiner, and West Yellowstone in Montana. The Montana gateway communities are on the immediate border of the park or within a few miles; the Wyoming gateway communities are an hour's drive or more from the park boundary. The gateway communities are relatively small. Their populations range from less than 150 permanent residents for Cooke City and Silvergate combined to almost 8,000 for Cody. The population of Gardiner is estimated at between 800 and 1,000 permanent residents, however, the population increases during the summer months.

Gateway communities provide food, lodging, gasoline, and automotive services. The communities also provide souvenirs and other goods and services to the public. The availability of services varies from community to community. Yellowstone's recreational opportunities tend to create a tourist-based economy in communities surrounding the park. These communities receive significant income by providing goods and services to park visitors and employees. Local businesses also benefit from annual NPS and concessioner expenditures for salaries, goods, and services.

Economic activity within the park is concentrated in six locations: Mammoth Hot Springs; Fishing Bridge, Lake Village, and Bridge Bay; Canyon Village; Tower/Roosevelt; Old Faithful; and Grant Village. A wide range of services including food, gas, lodging, transportation, horse rental, and medical services are available in these areas.

Less than 2% of Yellowstone is developed. Park infrastructure includes utilities, trails, roads, employee housing, administrative headquarters, and visitor services facilities in various areas throughout the park. The number of developed areas within the park has decreased over the years as park managers have removed some developments from resource areas and other developments have been consolidated.

There would be no effect on socioeconomic resources. Park employees would construct the new building.

Visitor Use

Visitor use and economic activities supporting the use of Yellowstone are highly seasonal. In 1995, 84% of the total annual visitation occurred during June, July, August, and September. Visitation is lower during the shoulder-season months of April, May, and October. Winter use grew rapidly in the early 1990s, with annual increases of 10 to 15%. In 1995, the park recorded 3.1 million recreational visits, with 140,000 occurring in the winter season. A recreational visit is defined as visitors entering the park for any part of a day for recreational purposes.

During the 1995 summer season, 17% of the park's total visitors entered Yellowstone through the North Entrance. In the 1995 winter season (mid-December through mid-March), 31% of visitors entered the park through the North Entrance. The North Entrance is the only park entrance open year round to wheeled vehicles.

A 1995 winter visitor use study showed that approximately 40% of park visitors stopped in Mammoth Hot Springs (Appendix B). Parkwide, the facilities most commonly used by visitors were restrooms (84%) (Littlejohn 1996).

During the month of July 1999, there were 74,473 visitors to the Albright Visitor Center--an average of nearly 2,400 visitors per day. (See Appendix A) In 1999, peak visitation for the Albright Visitor Center occurred on August 11, with 3096 visitors. On that same day, 1,409 vehicles entered the park through the North Entrance, including six tour busses

During July 2000, there were 71,295 visitors to the Albright Visitor Center. On August 11, 2000, there were 2,708 visitors to the Albright Visitor Center. On that same day, 1,674 vehicles entered the park through the North Entrance, including two tour busses. In comparison, on August 8, 2000, fifty-six tour busses entered the park through the North Entrance.

There is no way to conclusively determine whether any of these visitors stopped at the visitor center or even in the Mammoth area, but the information shows that there are many people traveling through the area that may need to use a restroom.

There are approximately 350 designated public parking spaces throughout the Mammoth Hot Springs development. There are six tour bus parking spaces in close proximity to the proposed restroom. This number does not include parking at the Mammoth horse corral pullout or Upper Terraces parking area (see Appendix B).

A new public restroom in the Mammoth area would help alleviate pressure on already crowded NPS and concessioner facilities. The quality of visitor services available in Yellowstone would be improved. The impact on other restroom facilities in the

Mammoth Hot Springs area would be lessened, if a new public restroom was constructed. Long lines outside the Yellowstone Park Service Station restroom would decrease.

Topics Not Considered

The following topics were not considered in this EA because they would not be affected by the proposed project.

Prime and Unique Farmlands

In August 1980, the Council on Environmental Quality (CEQ) directed that federal agencies must assess the effect of their actions on farmland soils classified by the U.S. Department of Agriculture's Conservation Service (NRCS) as prime or unique. Prime or unique farmland is defined as soil that particularly produces general crops such as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops such as fruits, vegetables, and nuts. According to the NRCS, none of the soils in the project area are classified as prime and unique farmlands. Therefore, the topic of prime and unique farmlands was not considered as an impact topic in this document.

Environmental Justice

Executive Order 12898, "General Actions to Address Environmental Justice in Minority Populations and Low Income Populations," requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effect of their programs and policies on minorities and low income populations and communities. The proposed action would not have health or environmental effects on minorities or low income populations or communities as defined in the Environmental Protection Agency's Environmental Justice Guidance. Therefore, environmental justice was not considered as an impact topic in this document.

CUMULATIVE EFFECTS

Alternative 1—No Action

There would be no significant or measurable cumulative effects on natural resources, cultural resources, or socioeconomic resources. Adequate restroom facilities would not be available to visitors.

Alternative 2—Preferred Alternative

Implementation of Alternative 2 would have a limited effect on natural resources. Although some natural resources would be affected, proposed mitigation efforts include revegetation with native plant species. Some visual effect on cultural resources would result from implementation of Alternative 2, but would be mitigated by using a building design compatible with the historic district. Socioeconomic resources would not be affected. The quality of visitor services available in Yellowstone would be improved. The impact on other restroom facilities in the Mammoth Hot Springs area would be lessened if a new public restroom was constructed.

Other Planning Efforts in the Mammoth Hot Springs Area

Planning for construction of the Yellowstone Heritage and Research Center, a curatorial storage facility, is underway. The project will consolidate Yellowstone's museum collections, research library, archival collections, historic vehicles, and herbarium into one facility. Areas being considered are located at the North Entrance to the park, adjacent to Gardiner, Montana, and/or in the Mammoth Hot Springs Historic District. Construction of the facility is planned to begin in 2001.

REGULATORY COMPLIANCE

If the NPS field director decides, based on the EA, that the project would significantly effect the human environment, a notice of intent (NOI) to prepare an environmental impact statement (EIS) would be issued. Conversely, a finding of no significant impact (FONSI) would be issued if it is determined that there would be no significant impact from this project. The FONSI would be approved by the field director.

Consultation with the USFWS on threatened and endangered species under 50 CFR Part 402, which implements the Endangered Species Act, would be completed. As part of the consultation process, the NPS would seek USFWS concurrence with its determination of effect on threatened and endangered species.

Contractor activities would comply with state and federal air quality regulations, and contractors would operate under applicable permits.

Compliance with the National Historic Preservation Act, as amended, would occur. Specifically, the identification and evaluation of cultural resources within the Area of Potential Effect would be assigned to the appropriate personnel for monitoring and input both prior to and during construction activities.

Native American tribes traditionally associated with Yellowstone National Park would be contacted for input and comment on this project.

REFERENCES

Battle, David G. and Erwin N. Thompson. *Fort Yellowstone Historic Structure Report*, U.S. Department of the Interior, National Park Service, Denver Service Center, May 1972.

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Mills, Kara. *A Brief History of the Cottage Hotel, Yellowstone National Park.* Branch of Cultural Resources, Yellowstone National Park, Summer 1998.

National Park Service. *Vegetation Management for Construction Disturbance in Yellowstone National Park*, Yellowstone National Park, January 1995.

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Concessioners

Amfac Parks and Resorts
Yellowstone Park Service Stations
Hamilton Stores, Inc.

Appendix A

Albright Visitor Center Visitation

	1999	2000
January	3,101	3,164
February	3,706	3,524
March	3,777	4,278
April	5,379	7,049
May	26,046	26,026
June	59,426	56,740
July	74,473	71,294
August	68,625	62,118
September	40,947	
October	15,802	
November	1,988	
December	2,820	
Total	306,090	

(Data provided by Yellowstone National Park Division of Interpretation)

Appendix B

Parking Spaces in the Mammoth Hot Springs Area
(numbers are approximate)

30 Post Office/Clinic
35 Visitor Center
48 Mammoth Hotel and Dining Room
11 Southwest side of Grill
32 Hamilton Store and Yellowstone Park Service Station
06 Tour bus parking
22 Picnic area
20 Liberty Cap parking
22 South Terrace parking

(Data provided by Yellowstone National Park Planning Office)

Appendix C

(From Visitor Services Project, Yellowstone National Park Visitor Study, Report 75, February 1996)