

**FINAL
GENERAL MANAGEMENT PLAN
and
DEVELOPMENT CONCEPT PLAN**

*D-17A
W/FONSL*

February 1986



**DEVILS TOWER NATIONAL MONUMENT
Wyoming**

National Park Service Rocky Mountain Region

Recommended:

Donna C. Robinson
Superintendent
Devils Tower National Monument

JAN. 23, 1986
Date

Approved:

Acting

Jack Nichols
Regional Director
Rocky Mountain Region

JAN 30, 1986
Date

FINDING OF NO SIGNIFICANT IMPACT FOR THE GENERAL
MANAGEMENT PLAN AND DEVELOPMENT CONCEPT PLAN, DEVILS
TOWER NATIONAL MONUMENT, WYOMING

This statement is prepared in accordance with the National Environmental Policy Act of 1970, as amended. An environmental assessment (EA) for the general management plan (GMP) and development concept plan (DCP) was released for public review in December 1985.

It is the decision of the National Park Service to implement the proposal described in the EA. Minor revisions were incorporated to reflect up-to-date data and conditions. Specific actions associated with this decision are illustrated in the final GMP and DCP.

In addition to the proposal, four alternatives were addressed in the EA. Following is a brief summary of each.

Proposal - Provides facilities and programs oriented to various visitor and resource protection activities. A visitor/administrative facility will be provided at the tower base and some existing facilities will be rehabilitated. Visitor capacity of the national monument is slightly increased.

Alternative I (No Action) - Maintains existing conditions at the national monument.

Alternative II (Minimum Requirement) - Provides conditions necessary to meet minimum standards required by law, regulation, and policy.

Alternative III - Emphasizes visitor services, management efficiency, and resource protection.

Alternative IV - Emphasizes visitor services and use, management efficiency, and resource protection. Visitor capacity of the national monument would be substantially increased.

Following is a summary of comments received on the EA.

Use controlled burning to improve wildlife habitat.

Maintenance of a no-hunting policy within the national monument will not solve problems

associated with white-tail-deer overbrowsing, depredation claims, and over population of resident deer within the monument.

The National Park Service should consider a cooperative hunting season within the national monument to control deer numbers in order that deer-population objectives can be met.

Specific burning prescriptions will be developed to meet management objectives described in the natural resource management plan. Management of white-tail deer is based on overall strategies outlined in the final GMP as well as specific strategies outlined in the natural resource management plan. Hunting at the national monument is not specifically mandated by Federal statutory law; therefore, hunting is prohibited pursuant to 36 CFR 2.2 (a) (1).


The existing 51-unit campground occupies the 100-year floodplain. Its presence does not adversely impact floodplains, also adequate measures (such as warning signs and illustrations of flood levels) will be employed to warn visitors of potential flooding. In accordance with the National Park Service Floodplain and Wetland Protection Guidelines for implementing Executive Order 11988 (Floodplain Management" (45 FR 35916 as amended August 23, 1982, by 47 FR 36718), it has been determined maintenance of the campground in its current location is an excepted action as provided for by Section 5.B.2b of the aforementioned guidelines.

Implementation of the proposal will contribute to temporary and slight increases in the local construction work force. Public health and safety are enhanced through improved visitor services and facilities. Known cultural resources will not be disturbed by management activities and all areas will be surveyed prior to any ground-disturbing work to mitigate adverse effects to cultural resources that may be encountered. No known species of threatened or endangered plants or animals will be adversely affected. Existing Federal, State, and local laws or requirements will not be violated by implementation of the proposal. Analysis indicates there are no significant cumulative impacts to the environment.

Based on the above findings, the decision to implement proposals illustrated in the final GMP and DCP is determined not to be a major Federal action that would significantly affect the quality of the human environment. Therefore, an environmental impact statement will not be prepared for this project.

Approved:

Acting


Regional Director
Rocky Mountain Region

1/31/86
Date

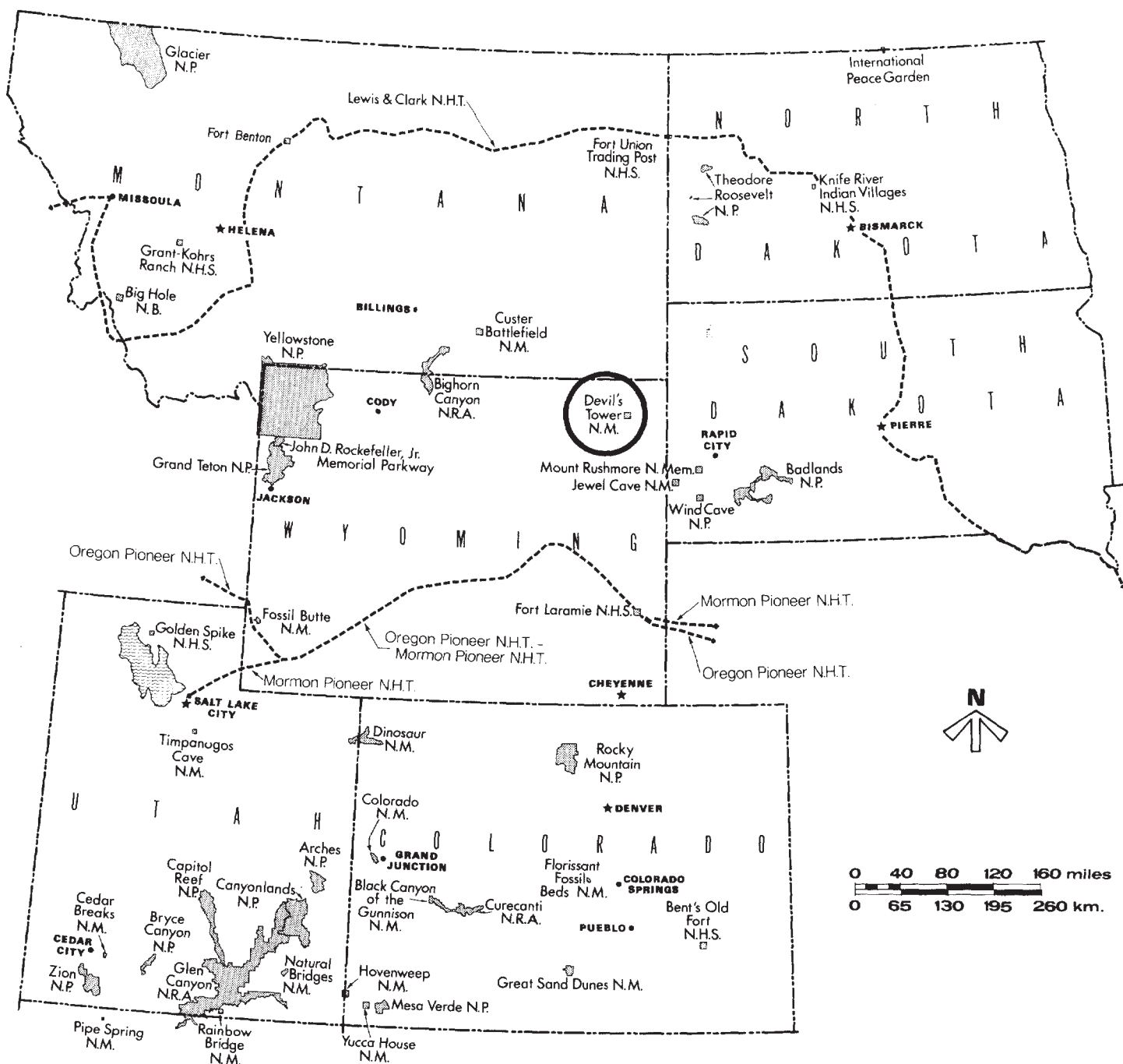
FINAL
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DEVELOPMENT CONCEPT PLAN
for
Devils Tower National Monument
Wyoming

February 1986

Rocky Mountain Region
National Park Service
U.S. Department of the Interior

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0 40 80 120 160 miles
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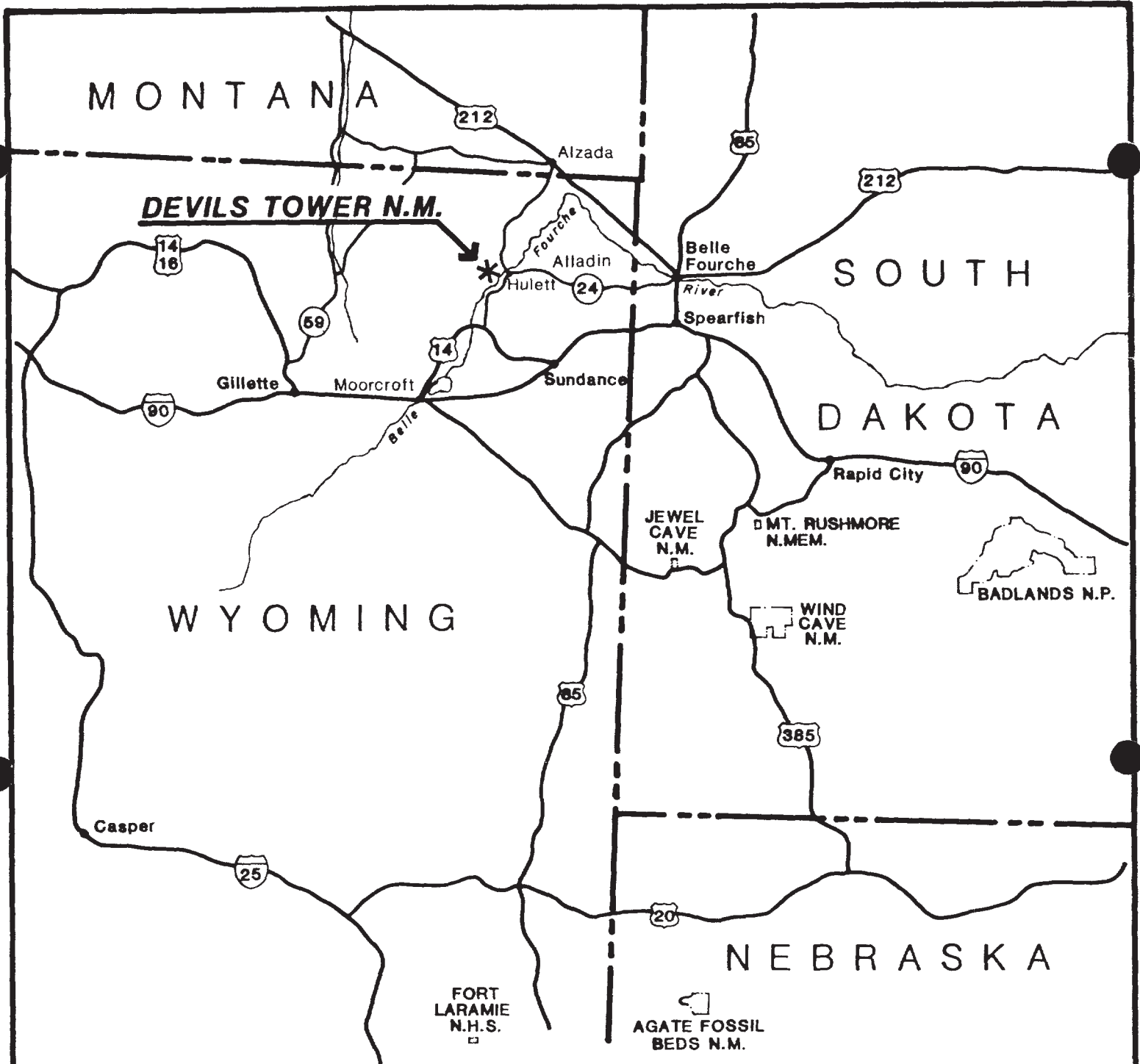
Legend

- Locations of Major Cities
- ★ Locations of State Capitals
- State Boundary Lines
- National Park Service Areas
- National Park Service Historical Trails

ROCKY MOUNTAIN REGION

National Park Service

United States Department
of the Interior



Vicinity Map

Devils Tower National Monument

United States Department of the Interior - National Park Service

for maintenance and cleanup activities thereby providing for increased management efficiency. Overcrowding of the current visitor center and its auxiliary facilities is minimized by construction of a new visitor/administrative facility.

Because of budgetary constraints, it is not possible to estimate when this plan will be fully implemented. Components of the plan will be phased as funds are made available.

LAND USE AND MANAGEMENT

Management zoning (see the MANAGEMENT ZONING MAP) specifies the long-term allocation of the land resources within Devils Tower National Monument. Two management zones are identified (1) the Natural Zone which contains 96 percent of the monument land or 1,297 acres, and (2) the Park Development Zone which contains 4 percent of the monument land or about 50 acres. The Natural Zone includes an Outstanding Natural Feature Subzone which is comprised of 155 acres or 12 percent of the monument land.

Natural Zone

Within the Natural Zone are pine forest communities surrounding the tower base, riparian vegetative communities associated with the Belle Fourche River and its floodplain, upland prairie remnants between the river and tower, prairie dog colonies, and habitat for various wildlife species.

Management emphasis within the Natural Zone is directed towards conservation of natural resources and processes and accommodation of uses that do not adversely affect these resources and processes.

Devils Tower itself, a high isolated monolith of igneous rock with remarkably symmetrical joint columns, comprises the Outstanding Natural Feature Subzone. Management emphasis within the Outstanding Natural Feature Subzone includes special management concerns as related to preservation of the tower and its related values while providing safe, technical rock climbing opportunities.

Park Development Zone

This zone includes the main access road, entrance station, parking, picnic area, amphitheater,

INTRODUCTION

Devils Tower National Monument occupies 1,346.91 acres in northeast Wyoming, Cook County, Congressional District at Large. The establishment of Devils Tower National Monument as the first national monument in 1906 outlines its purpose. To preserve and provide for the use of Devils Tower ". . . a natural wonder and an object of historic and great scientific interest. . . ."

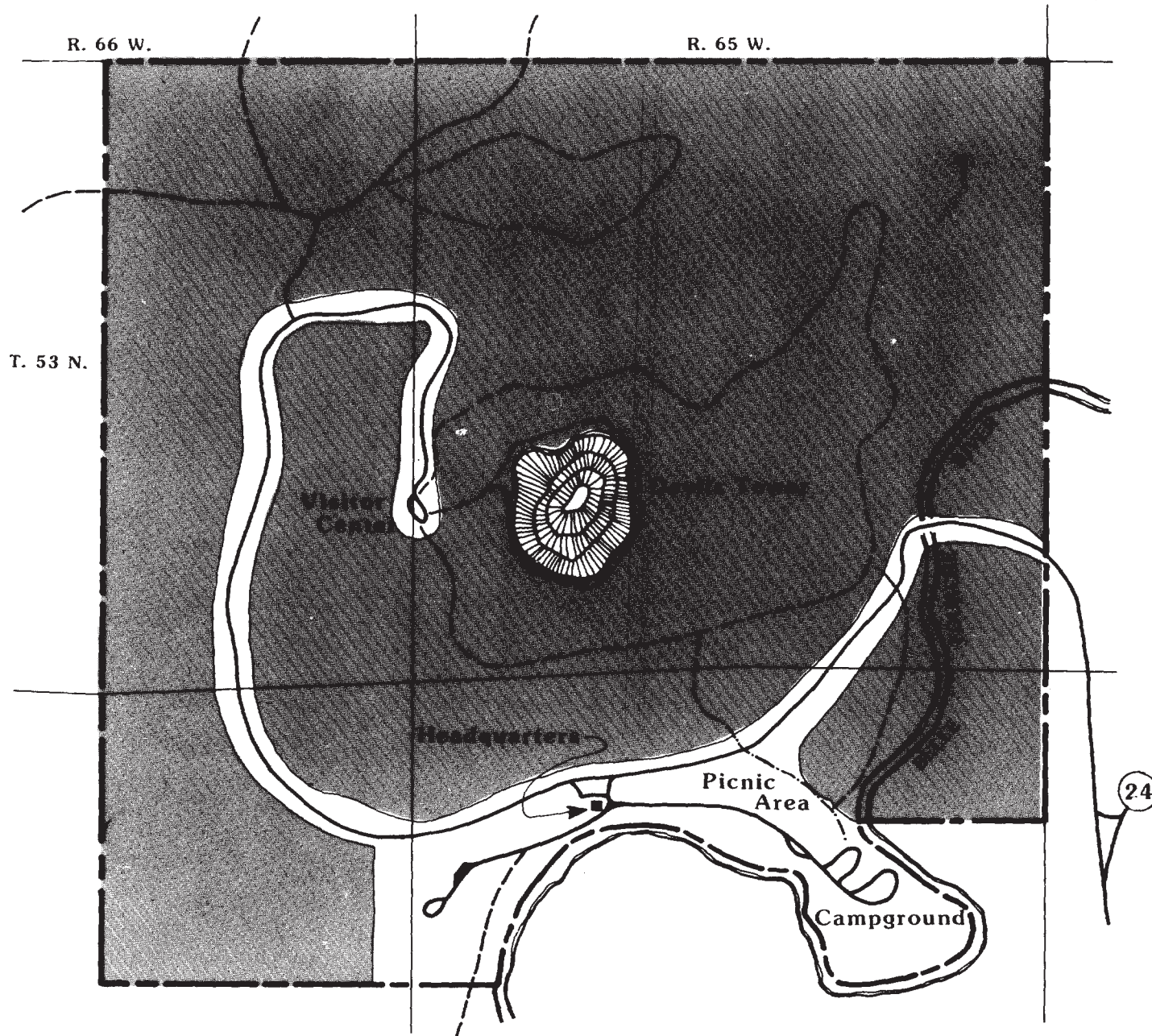
Each year visitors to Devils Tower represent each of the 50 states and several foreign countries, especially Germany. Activities that visitors principally participate in are viewing exhibits, photography, walking a portion of the tower trail, technical mountain climbing, picnicking, and camping. The 51-unit campground averages about 14,000 visits each year. Visitation has increased steadily over the past 10 years. Visitation projections range from 241,000 to 433,000 annually by the year 1990.

The purpose of this general management plan is to set forth the basic management strategies for achieving identified management objectives. Development concepts outline the appropriate level of development necessary to provide for visitor use and enjoyment of the national monument while protecting its natural and cultural resources.




An environmental assessment for the general management plan and development concept plan, distributed for public review in December 1985, addressed this plan and four alternatives devised to provide various degrees of visitor use and resource protection. That document described environmental consequences that could result from implementation of this plan and the various alternatives. A Finding of No Significant Impact was published in February 1986. That document describes the National Park Service decision to implement this plan. Also included is a finding that this plan and alternatives do not constitute a significant impact.

THE PLAN

This plan responds to resource protection, park management, and visitor use needs. By providing facilities and programs oriented to various visitor activities, environmental awareness is increased, and incidental resource damage is decreased. New and rehabilitated facilities will lessen the time required



Legend

- | | | | |
|-----------|----------------------------|---|-------------------------------------|
| — — — — — | National Monument Boundary |  | Outstanding Natural Feature Subzone |
| ————— | Paved Road |  | Park Development Zone |
| - - - - - | Unpaved Road |  | Natural Zone |
| - · - · - | Trail | | |



Management Zoning Map

Devils Tower National Monument

U.S. Department of the Interior - National Park Service

campground, administrative and maintenance facilities, employee residential area, and tower-base facilities. Management within the Park Development Zone includes strategies necessary to provide and maintain developments that serve the needs of the visitor and park management. All historic structures are located in this zone with the exception of the historic ladder, which is within the Outstanding Natural Feature Subzone.

Wilderness Potential

Devils Tower's 1,347 acres is surrounded entirely by private lands. These lands have been developed with roads, residences, and extensive agricultural improvements. Viewsheds within natural zones include these private lands. Because of the evidences of man's culturally modified environment and the small size of the natural zones, there is no potential for the visitor to experience primitive, unconfined recreation and solitude. Needs will continue to exist for management of the pine beetle to protect ponderosa pine stands and management of noxious weeds. For these reasons, the natural zone of the national monument does not qualify for wilderness designation.

RESOURCE MANAGEMENT

Following are the resource management strategies needed to protect, preserve, and perpetuate the monument's natural and cultural resources. A Natural Resources Management Plan was approved for Devils Tower in June of 1983. A Cultural Component of the Resource Management Plan was approved in January of 1985.

Natural Resources

Exotic Plant Management: Fifty exotic plants have been identified within the monument. Most are not common and are scattered throughout the monument; however, leafy spurge and, to a lesser extent, Canada thistle occur in extensive stands. These two species are aggressive and threaten other vegetation. Past practices have reduced amounts of leafy spurge by about 90 percent.

Exotic plant management strategies proposed at the monument include:

Selectively spray individual leafy spurge plants on an annual basis;

Maintain cooperation with adjacent landowners, county, and State agencies involved in noxious weed control;

Continue to use park staff to monitor the extent of leafy spurge and Canada thistle;

Develop a monitoring program for other exotic species in the monument;

Cooperate with researchers on the use of biological control agents (such as, flea beetle and gold midge). There is a need to develop biological controls for a number of exotic plants, particularly leafy spurge and Canada thistle.

Fire Management: Ponderosa pine forests cover about 750 acres of the monument. Historically, fire suppression--combined with grazing by livestock--has resulted in large accumulations of fuel. Fire suppression has permitted unnatural thickening and spreading of Ponderosa pine, invasion of exotic plants, and decadence of pine stands.

Because of the relatively small size of the monument, the danger of escaped wildfire from unnatural fuel buildup necessitates a continuing program of fire management including:

Burn plots of ponderosa pine as funding permits;

Use previous burns as a data base; develop specific burning prescriptions for future use;

Maintain a master map of the burning program;

Continue pre- and post-burn photo plot establishment;

Complete fire history research and incorporate data into the prescribed burning program.

Prairie Dog Management: The monument contains one prairie dog town of about 40 acres and an estimated 2,000 animals. The prairie dogs invade the monuments' picnic area and campground. They also invade adjacent lands causing landowner complaints. Because of its proximity to the entrance road, visitors feed the animals in spite of various messages not to. To ensure public health and safety, some separation from humans and human food is essential because prairie dogs may carry fleas which spread bubonic plague and other diseases.

Strategies necessary to control prairie dog populations include:

- Annually monitor prairie dog populations and signs of town expansion and selectively remove prairie dogs as needed;

- Continue to warn visitors against feeding prairie dogs through signing, personal contacts, and brochures.

Animal Pest Management: There are occasional pests such as feral cats and dogs, wasp nests, and pack rats within the monument. Feral pigeons have been known to roost on the tower whitewashing the tower and creating a hazard to climbers; however, pigeons have not been sighted since November 1984.

Needed animal pest management strategies include:

- Monitor pests on a continuous basis;

- Removal, as needed, of feral cats and dogs, wasp nests, and pack rats;

- Contact the U.S. Fish and Wildlife Service regarding a joint pigeon management program if the species returns and creates a problem;

- Research population control techniques for feral pigeons if the species return and create a problem.

Tree Maintenance and Restoration: Trees in public-use areas die of old age and are killed by lightning, beetles, and visitor use. Standing dead trees are a

hazard to visitors and public and private property. Large cottonwood stands are becoming decadent along the river floodplain.

Vegetative management strategies necessary to ensure perpetuation of trees in problem areas and to provide for public safety include:

- Continued monitoring and removing of hazardous trees in developed areas;

- Initiate a study to determine the causes of riparian forest decadence and develop strategies necessary to correct the situation;

- Initiate a native tree planting program to replace losses in visitor-use areas.

White-tail Deer Management: Populations of white-tail deer use the monument. This population is not resident within the monument, but uses adjacent lands heavily. Population levels have remained fairly constant over the past 10 years; although, they are artificially maintained by agricultural practices on adjacent lands. Occasionally, farmer complaints of deer depredation have resulted in special hunts and payment of deer damage by the Wyoming Game and Fish Department (WGF). WGF considers these hunts only partially successful because deer are pushed to the monument where hunting is prohibited. Over browsing by deer does not appear to be a serious problem. Browse condition and trend is occasionally monitored by the park staff and WGF.

White-tail deer management strategies necessary for protection of resources at the monument include:

- Maintain hunting and boundary controls during the hunting season;

- Cooperate with the Wyoming Game and Fish Department within the constraints of National Park Service policy;

- Annually monitor deer population levels;

- On an ocular basis, monitor browse conditions and trends;

- Use photo points of browse plots for comparison of browse conditions.

Beaver Management: Beaver populations occur within and out of the monument along the Belle Fourche River. Beaver populations increase every 5 to 6 years causing extensive damage to trees along the Belle Fourche floodplain. Beaver damage of cottonwood is resulting in a quick decline of cottonwood populations.

The following strategies are necessary to achieve productive harmony between beaver and the need to sustain cottonwood populations.

Maintain fencing of individual trees for protection from beaver damage;

On a semiannual basis, monitor the extent of beaver damage to trees;

Study the beaver/floodplain/forest ecology to more adequately assess the situation and provide management strategies.

Unique, Rare, and Endangered Species Management: The monument is within range of the black-footed ferret; however, the species is not known to exist here. Surveys for the black-footed ferret were completed in the 1960's and 1970's. In the winter, bald eagles are frequently observed although they are not known to nest here. The Wyoming Game and Fish Department has identified the tower as a potential peregrine falcon hacking site; however, it was believed visitor use was too high to develop a viable program. Prairie falcons have been known to nest on the tower and prey on pigeons. There are no known rare and endangered plants in the monument.

The following management strategies are necessary:

Continue to close climbing routes in the vicinity of the prairie falcon as needed;

Continue observation records for unique, rare, and endangered species;

Develop and implement protection and enhancement plans for unique, rare, and endangered species if their occurrence becomes known.

Boundary Control: Standard National Park Service boundary signs and 8 miles of fence mark the monument boundary. The fence is maintained by adjacent landowners.

Patrols are used to determine adequacy of boundary markings. When fence breaks occur, livestock enter the monument and adjacent landowners are notified to remove the livestock. Management strategies necessary at the monument are:

Continue boundary patrols by park staff;

Maintain the cooperative National Park Service/ adjacent landowner fence maintenance and livestock removal program.

Air Quality Management: Devils Tower is designated as a Class II clean air area under 1977 Clean Air Act Amendments. Air quality monitoring has been conducted at the monument since May 1976 as part of the State of Wyoming's monitoring network. Pollutants monitored included sulfur dioxide (SO₂), nitrogen oxides (NO_x), and particulate matter. However, since SO₂ and NO_x concentrations were at or below detectable levels, the State discontinued monitoring for those pollutants. Particulate matter concentrations had shown a slight increase until the past 2 years when they began to decrease. At present, the air quality within the monument is pristine.

In 1980, the Department of the Interior determined that the air quality related values (including visibility, flora, fauna, and cultural resources) of the monument were important assets of the area and recommended that the monument be redesignated to Class I status. To date, the State of Wyoming has taken no action on this recommendation.

The region and other interested parties should be informed of air quality trends in the monument;

Air quality should continue to be monitored.

Basic Natural Resource Inventories: To make better management decisions, there is a need to know more about the basic resources of the monument. Geology is the main interpretive theme of the monument. Geologic studies completed so far seem to be adequate for this purpose. Natural history checklists have been developed for birds and plants. A vegetative inventory for the monument was completed in 1985. As funding permits, there is a need to:

Conduct detailed surveys on composition and densities of fish.

Pine Beetle Management: Black Hill pine beetle infestations have occurred in the 750 acres of ponderosa pine since the monument was established. About 120 trees per year were being killed in the 1960's. Chemical spraying was initiated and loss was reduced to 12 trees per year. At the present time, it is estimated that 5 to 10 trees per year are killed by bark beetle. The beetle infestation is not considered to be a threat to adjacent landowners.

Following are the proposed management actions:

Monitor pine beetle within the monument to ascertain the levels of activity;

Allow pine beetle infestations to exist unimpeded unless they threaten adjacent lands;

If threats do occur, trees should be felled and the bark burned. This program will be coordinated with the fire management program.

Water Resource Management: The Belle Fourche River flows through the monument for about 1/2 mile. Its flow is controlled by the Keyhole Dam about 17.8 floodplain miles upstream. Water quality is unknown. As part of this general management plan process, the 100- and 500-year flood-frequency levels have been determined. The National Park Service will:

Develop a water resource management plan that addresses water resource problems

Evaluate the Bureau of Reclamation's Emergency Preparedness Plan for Keyhole Dam and determine adequacy of warning devices and procedures.

Cultural Resources

Maintenance of the Monument's List of Classified Structures' (LCS) Properties: In addition to the tetrahedrons and historic ladder, four structures (visitor center, residence, checking station, and fire-hose shed) were built by the CCC and related New Deal agencies in the 1930's. Since then, the interiors of most of these buildings have been modified, but the

exteriors remain similar to the original construction. The following actions are required:

Maintain program for exterior restoration;

Establish program for interior modifications to provide adaptive use, when applicable;

If funding becomes available, develop interpretive programs for the structures;

Complete a historic structures report.

Maintenance of Tetrahedrons: There were 72 tetrahedrons installed in 1930 along the Belle Fourche River; the goal is to:

Maintain representative samples in strategic locations that minimize adverse visual impacts.

Maintenance of the Historic Ladder: About 170 feet remain of the 1893 historic ladder on the side of Devils Tower. This ladder is viewed by thousands annually and is a significant item of historic interest. To provide for this use there is a need to:

Develop and implement a cyclic maintenance program to insure perpetuation of the historic ladder.

Museum Collection Management: In the past, collections have not been inventoried, maintained, or stored according to standards prescribed by NPS-28. There is a need to:

Program work for proper storage, collection, and inventories;

Use the proposed visitor/administrative facility to house collections with proper humidity and temperature controls.

Archival-Library Management: Archival-library material has been catalogued, but has not been stored according to standards prescribed by NPS-6, there is need to:

Program for a collection management plan, storage improvement, and cataloging in the National Park Service National Catalog and collection;

Use the proposed visitor/administrative facility to house historical and archeological collections with proper humidity and temperature controls.

Nominate and/or Evaluate Sites for the National Register of Historic Places: The known archeological and historical sites within the monument have not been evaluated for eligibility or nomination to the National Register of Historic Places. The following actions are necessary:

By contract or through the Midwest Archeological Center, evaluate archeological sites according to National Register criteria;

Program work using Rocky Mountain Region personnel to nominate historic structures to the National Register of Historic Places.

VISITOR USE AND INTERPRETATION

The major focus of visitor use will be towards a new visitor/administrative facility located at the tower base. A secondary focus of visitor use is at the Prairie Dog Town, picnic area, and campground. Visitors desiring a challenging experience are accommodated through provisions for climbing activities of the tower itself. Facilities at the tower base, Prairie Dog Town, picnic area, and campground provide recreation opportunities for visitors desiring a more structured and regulated environment. Opportunities for visitors desiring some isolation from the sights and sounds of humans, independence, and a degree of self-reliance are provided along the various trails and dispersed areas of the national monument. Due to restricted size and agricultural activities on surrounding lands, primitive and unconfined recreation experiences cannot be provided at Devils Tower.

A 3-mile paved road continues to serve as the major access and circulatory route within the national monument. This road provides access to the Prairie Dog Town, picnic area, campground, residential and maintenance area, visitor/administrative facility, and other tower-base facilities. A south and west road provides visitor access to various tower-viewing points as well as access to various private lands surrounding the area.

Eight miles of trail will continue to provide pedestrian access within the monument. The major focus

is towards the 1.25-mile Tower Trail which provides visitors with an opportunity to "walk around" the tower and view climbing activities. Remaining trails within the monument provide "loops" of travel within the more undeveloped portions of the monument.

An Interpretive Prospectus was approved for Devils Tower in 1979. Interpretive objectives outlined in that plan are:

To identify, evaluate, protect, and interpret the park's natural and cultural resources on a year-round basis;

To foster appreciation and understanding of geologic resources and to provide supplemental interpretation of cultural and other natural resources;

To increase visitor awareness of the inherent hazards associated with climbing and other activities within the monument and to provide for the fullest possible visitor safety.

Interpretation and information distribution will continue to be distributed using a variety of sources and mediums. Radio messages are distributed via a TIS radio audio station. The visitor/administrative facility serves as the primary visitor contact medium with geologic, biologic, and cultural theme exhibits. Information counters, climber registration, and cooperating association sales are also provided in this facility. The geologic story of Devils Tower is provided by audiovisual presentations and exhibit interpretations. The following exhibit themes are recommended at the visitor/administrative facility.

Geology relating to the formation of Devils Tower;

Legends of Devils Tower;

Climbing History of Devils Tower;

Environment of Devils Tower;

Devils Tower: The First National Monument;

East meets West: Vegetation and wildlife at Devils Tower has a unique mixture of species found in both the western and eastern United States.

The old park headquarters, converted to a seasonal ranger station and seasonal employee residences, also serves as an information distribution facility. Primary emphasis is directed to distribution of visitor/ administrative facility hours, interpretive program schedule, hazard warnings, campground information, and pertinent park regulations.

Wayside exhibits are provided at the Prairie Dog Town regarding visitor safety and well being of the animals, the life and dwelling of the town residents, and the former significance of prairie dogs on the western prairie. At the picnic area, a wayside exhibit reinforcing the significance of Devils Tower as the first national monument could be used capitalizing on the excellent views provided. Wayside exhibits along the Tower Trail provide a major source of interpretation. Subject matter includes plants and animals, ecosystems, fire ecology, and climbing.

At each trail, a trailhead marker is provided to identify the trail, give its length, provide warnings of grades, remind visitors of regulations, and provide warnings of potential hazards. Trail interpretation is provided for the Tower and Joyner Ridge Trails. Other trails are not interpreted to maintain their significant value of "discovery experience."

Overnight use is continued at Devils Tower through maintenance of the 51-unit campground. Signs are provided to warn visitors of potential flood hazards at this site. A private campground, located adjacent to the east boundary of the monument, provides overnight facilities for many park visitors. Capacity of the National Park Service campground is approximately 250 people at one time. An amphitheater, north of the campground, and the picnic area provides for scheduled, interpretive programs with seating to accommodate approximately 200 people. Parking to accommodate about 25 vehicles is provided at the Prairie Dog Town for visitors going to or leaving Devils Tower. The new visitor/ administrative facility includes parking for about 100 single vehicles and 20 buses/recreation vehicles. This visitor/administrative facility is designed to accommodate the 2,000-plus visitors per day currently trying to use the old visitor center during peak-use seasons. About 8 miles of trails provide hiking opportunities and associated dispersed recreation activities.

Climbing activities continue on Devils Tower. Climber registration programs are continued with management emphasis on climber safety. Current inventories indicate 100-plus climbing routes are available on the tower itself. Historic peak loads of use have been 100 climbers per day. To minimize potential climber conflicts and experience degradation of nonclimbers who view the tower, tower capacity is set at 100 climbers at one time. Regulatory permit systems are established by park personnel to limit use on an as-needed-basis.

Viewing and photographic opportunities are enhanced by providing photo pull-offs along the entrance road. When needed, vegetation is removed to provide vistas or confined views of the tower.

PARK OPERATIONS

The monument's residential and maintenance areas are maintained in their current location south of the entrance road. These facilities are retained in their current location because of excessive costs required for relocation. The relatively small size of the monument allows quick access to all portions of the monument from this location. Potential vandalism to maintenance facilities is minimized through constant National Park Service presence provided by the residential area.

Currently, all National Park Service housing units are used by monument personnel. Under this plan, two additional full-time positions will be established to carry out a variety of management programs. Housing is not available on adjacent private lands. The nearest available housing is in Sundance, Wyoming, (population 1,700) which is 28 miles southeast of Devils Tower. An additional duplex is necessary to house these employees. The duplex is located above identified 100-year flood levels. The existing residential area has sufficient space available to accommodate this multifamily dwelling. The dwelling will use materials and design to capitalize on nonconventional energy sources (such as supplemental solar heat) and optimize energy efficiency.

Employee housing needs are based on staffing levels necessary to implement visitor services, protection, maintenance, and administrative programs inherent to this proposal. In compliance with NPS-36, before structures for use as housing can be constructed,

acquired, or converted to government furnished quarters, justification must be submitted to the Director for review and approval. The park's quarters management plan will be an influencing factor in approving such housing requests.

The current headquarters does not provide sufficient room to accommodate permanent staff, office equipment, and file storage. The headquarters will be converted to a seasonal ranger station and seasonal employee residence. New administrative office space will be constructed in conjunction with the visitors/administrative facility thereby opening visitor services year-round. Maintenance facilities will be expanded with two stalls of covered vehicle storage. Increased staffing needs are one full-time resource management specialist, one full-time naturalist, and a part-time (6 months) maintenance worker.

GENERAL DEVELOPMENT/DEVELOPMENT CONCEPTS

Development concepts illustrated below are displayed on the GENERAL DEVELOPMENT MAP and TOWER BASE/AREA SPECIFIC DEVELOPMENT CONCEPT MAP. They are intended to improve visitor services and resource protection through improvement of visitor and management facilities.

Entrance Station: The historic checking station, built in 1940, is currently used for storage. The station will be retained with adaptive use deemed necessary by park staff to supplement management operations. The existing entrance station kiosk will be retained for that use.

Roads: The main park road provides access from the entrance station to the visitor center and is 3.0 miles in length. The 1980 Federal Highway Administration (FHWA) Survey identifies a Structural Sufficiency Rating of 56.3 and a Safety Sufficiency Rating of 68.4 for the upper 3.0 miles of this road indicating poor conditions. Reconstruction of the 3.0 miles of road has been previously programmed. Therefore, this proposal does not include costs associated with this improvement. The west and south gravel roads, 1.1 miles in length, will be chip sealed to reduce dust and erosion of road surfaces and reduce current sedimentation levels in the Belle Fourche River and other streams in the monument.

Historically, visitors have pulled off the main park road along strategic points to photograph the tower. This use poses safety hazards for many visitors. Five vehicle pull-outs with a capacity of two to three vehicles each will be constructed for visitors taking tower photographs. Some vegetative manipulation is necessary to provide vistas and confined views of the tower.

Prairie Dog Town: Interpretive signs and about 15 parking spaces are currently provided at the Prairie Dog Town. Many visitors stop at this location to view these animals. During the months of June, July, and August, the parking lot is full and visitors park on the road or do not stop. A full length parking strip will be constructed along each side of the road with a total capacity of 35 vehicles.

Administration Area: Currently, the park headquarters building has 1,256 square feet, public rest rooms, and parking to accommodate about 12 vehicles. The headquarters building will be converted to a seasonal ranger station and seasonal employee residences.

Campground: The existing National Park Service campground and private campground adjacent to the eastern boundary of the monument provide adequate facilities and capacity for visitor use. However, because the National Park Service campground is located entirely within the 100-year floodplain, adequate measures (such as, warning signs and illustrations of flood levels) will be taken to warn visitors of this potential hazard. Also, a flood warning system will be developed in cooperation with the Bureau of Reclamation. The National Park Service will review the Bureau's Emergency Preparedness Plan for Keyhole Dam to help provide adequate warning of imminent flooding.

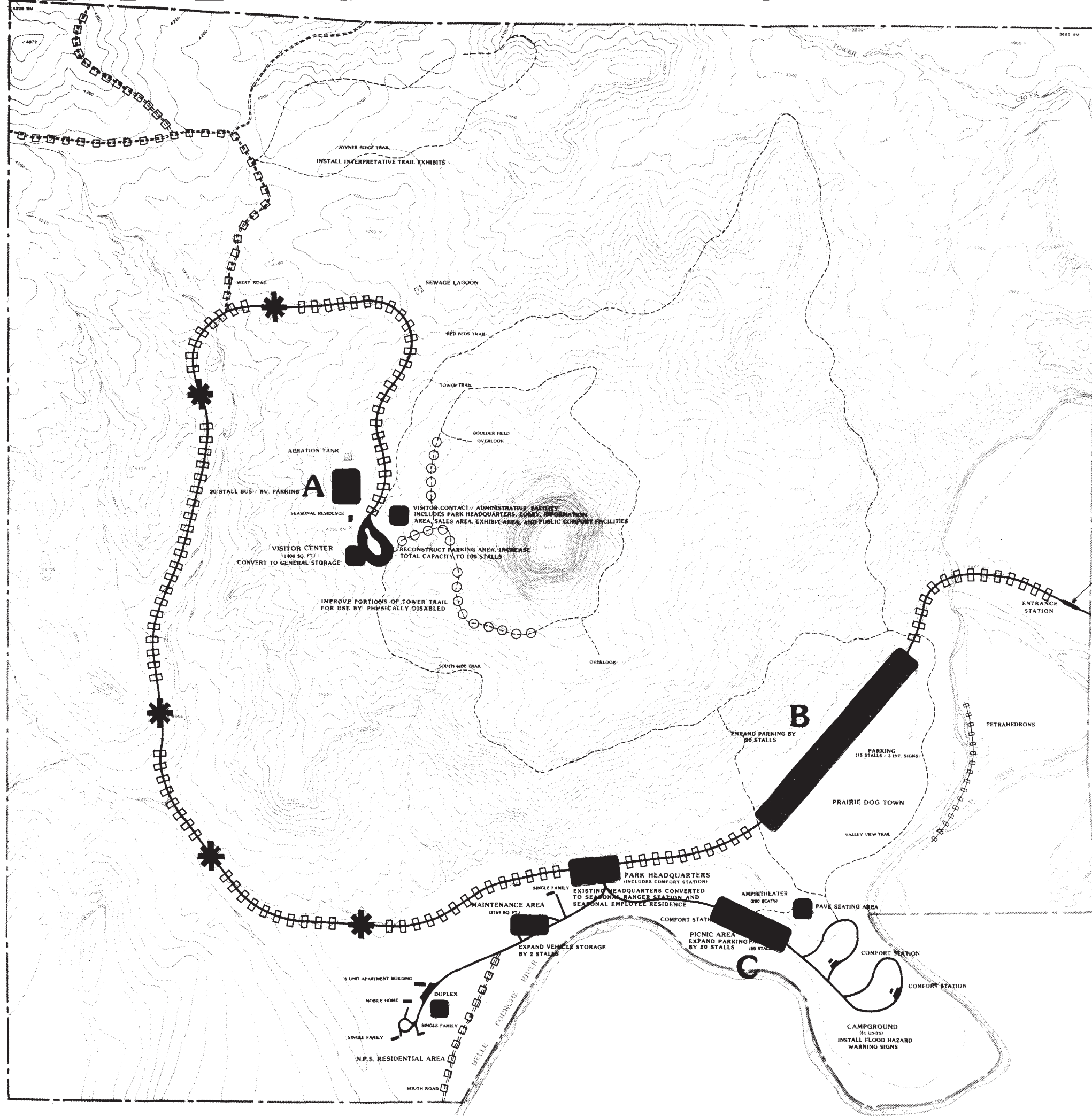
Picnic Area/Amphitheater: This area presently contains a 20-stall parking lot and seating for about 200 visitors. Seating capacity is more than adequate at the amphitheater; however, vegetation growing in this facility provides habitat for rattlesnakes. Park staff is unable to continually treat vegetation to remove this habitat. To increase operation efficiency and eliminate potential hazards, the amphitheater surface will be paved. Because many visitors drive to the amphitheater from the private campground and the picnic area is used for group functions, the existing parking stalls fill early and visitors park in unauthorized

areas which results in vegetative damage and soil compaction. Parking will be expanded by 20 stalls to minimize these adverse environmental effects.

Visitor/Administrative Facility: The current visitor center is generally open during the peak season--May through October. This structure was built in 1935 and has about 1,400 square feet of space of which 904 square feet are available to the public. Peak load at this facility is about 2,000-plus people per day. A 78-vehicle parking lot is currently provided at the visitor center. No accommodations are provided for buses and recreation vehicles. This parking lot is also used by tower climbers. During the peak-use season, the parking lot is full and many visitors simply drive through and, as a result, do not stop. Rest rooms for use by the physically disabled do not currently exist. Because of varying riser/tread ratios on the entrance stairs, safety hazards exist for visitors who do use the existing public rest rooms.

An analysis based on the Visitor Center Design Evaluation, National Park Service, 1976, indicates a need to provide a visitors/administrative facility with about 7,000 square feet. This new facility would accommodate a lobby information area, sales area, museum collection, archival-library, and exhibit space. Because the new visitor facilities also serve as park headquarters, the visitor facility would be open to the public year-round. A 20-stall bus/recreation vehicle parking lot will also be provided to alleviate traffic congestion problems, and the existing parking lot will be reconstructed increasing capacity by 22 vehicles for a total of 100 vehicles. Provision will be made for access and use by the physically disabled. The old visitor center will be converted to space for general storage.

The proposed visitor/administrative facility should be designed to minimize impacts to the resources and visitor experiences. Design should employ techniques to visually blend the structure with surrounding landscapes, thereby not detracting from the park's major resource--the tower itself. To maintain historic integrity of the current historic buildings, design which is sympathetic to the CCC era should be used. Site specific location and layout of the visitor administrative facility should capitalize on tower views from within the building. These views would provide a focal point for interpretive activities.



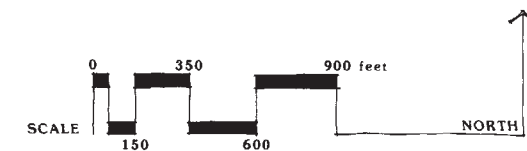
LEGEND

EXISTING CONDITIONS

- PARK BOUNDARY
- PAVED ROADS
- GRAVEL ROADS
- TRAILS
- CONTOUR LINE
- STRUCTURE
- TETRAHEDRON

PROPOSED ACTIONS

- RECONSTRUCT MAIN PARK ROAD FOLLOWING RECOMMENDATIONS IN THE 1980 FEDERAL HIGHWAY ADMINISTRATION SURVEY (ACTIONS PREVIOUSLY PROGRAMMED)
- CHIP & SEAL ROAD SURFACE
- DEVELOPMENT ZONE
- DEVELOPMENT ZONE DETAIL REFERENCE (SEE TOWER BASE/AREA SPECIFIC DEVELOPMENT CONCEPT MAP)
- PHOTO PULLOFF (SEE TOWER BASE/AREA SPECIFIC DEVELOPMENT CONCEPT MAP)
- IMPROVEMENTS TO TOWER TRAIL FOR USE BY THE PHYSICALLY DISABLED



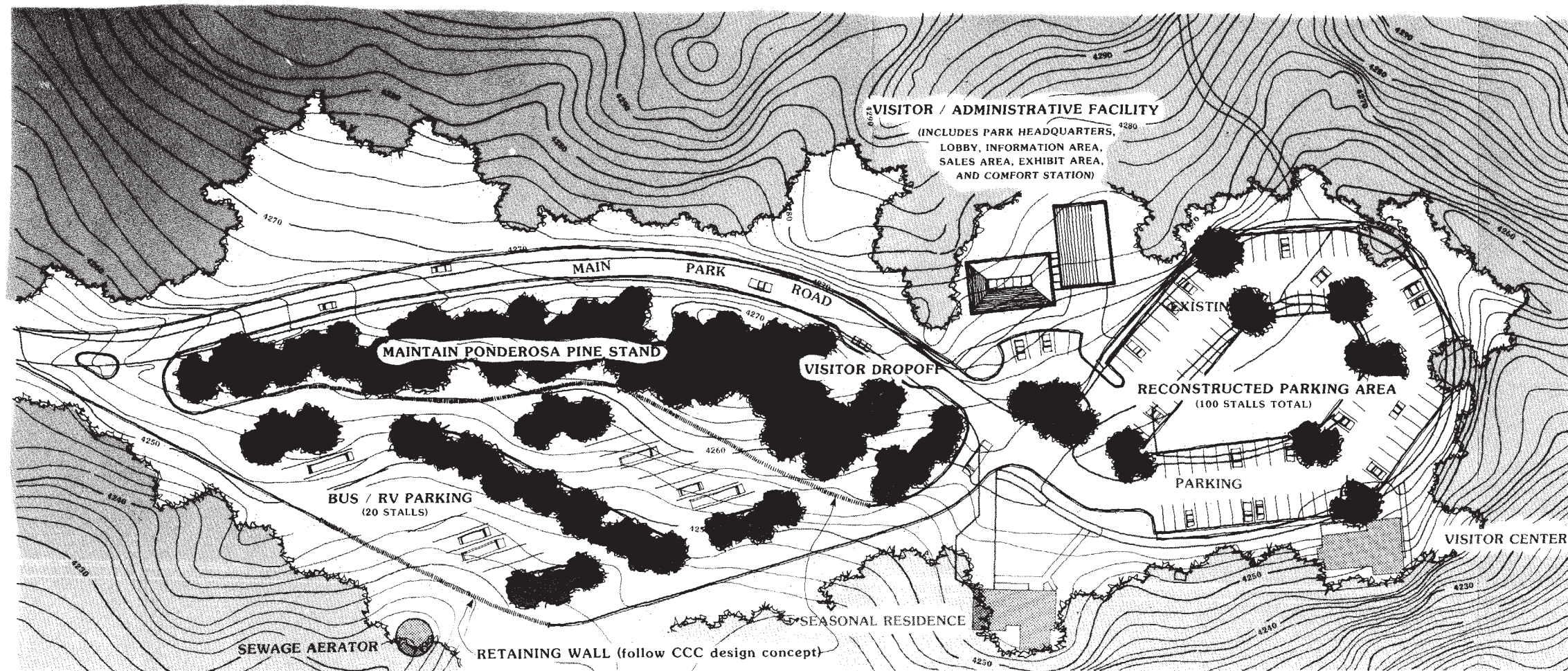
GENERAL DEVELOPMENT MAP

DEVILS TOWER NATIONAL MONUMENT

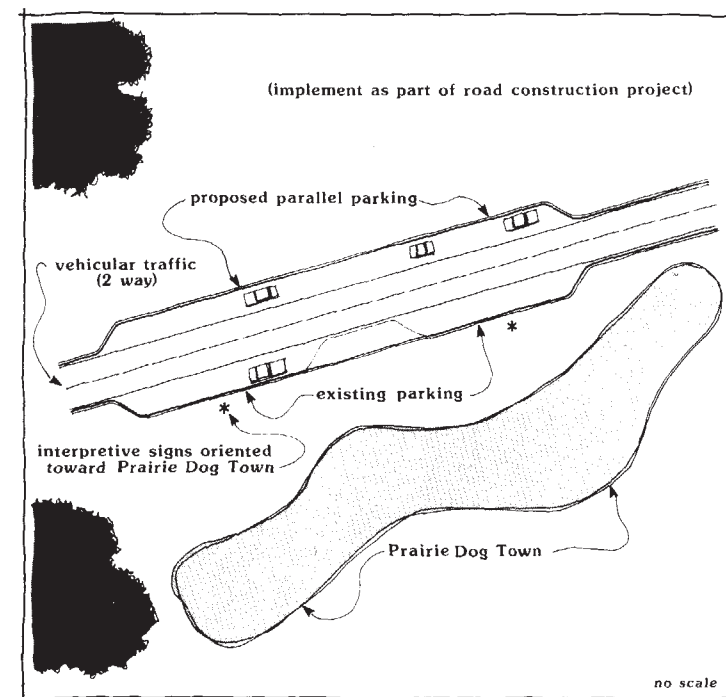
GENERAL MANAGEMENT PLAN/ DEVELOPMENT CONCEPT PLAN

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

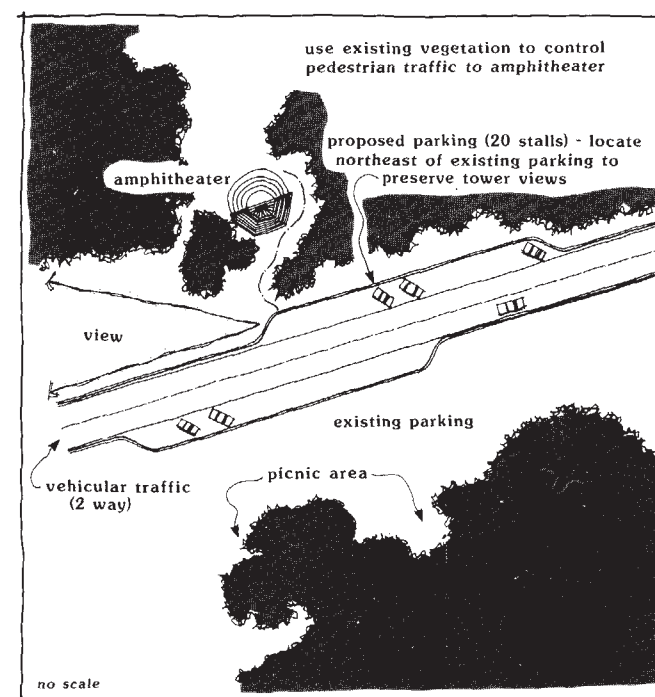
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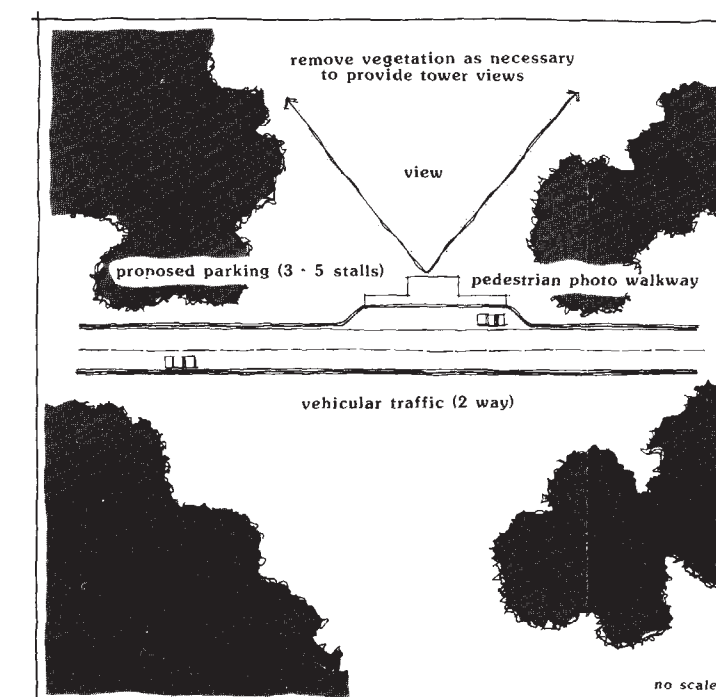
A - TOWER BASE DEVELOPMENT CONCEPT



B - PRAIRIE DOG TOWN PARKING CONCEPT



C - PICNIC AREA / AMPHITHEATER PARKING CONCEPT



TYPICAL PHOTO (VIEWING AREA) PULLOFF

TOWER BASE/AREA SPECIFIC DEVELOPMENT CONCEPT MAP

DEVILS TOWER NATIONAL MONUMENT

GENERAL MANAGEMENT PLAN/
DEVELOPMENT CONCEPT PLAN

UNITED STATES DEPARTMENT OF THE INTERIOR
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Trails: Eight miles of trails are within Devils Tower National Monument. A great majority of trail use occurs on the 1.25-mile Tower Trail. Varying widths and excessive grades make this trail unusable by the physically disabled. This trail will be partially reconstructed to provide short segments that are accessible to and usable by the physically handicapped. Remaining trails within the monument will be maintained in their current status.

Utilities: To accommodate increased facilities and visitor use, expansion of water and sewer systems will be required. Estimated waste-water flow is 35,950 gallons per day and expected demand for potable water is 49,900 gallons per day. Sewer system improvement needs include expansion of septic tanks and leach fields at existing comfort stations and enlargement of the treatment system for the visitor/ administrative facility. Water-system improvements include upgrading of pumps and lines and additional water storage capacities.

Maintenance/Residential Area: Because of substantial investments, functional relationships to other administrative facilities, and lack of alternative sites, the residential area is maintained in its current location. A duplex to house two additional permanent staff will be constructed in this area. Because this area is subject to flooding in the event of Keyhole Dam failure, the National Park Service will review the Bureau of Reclamation's Emergency Preparedness Plan. If this plan does not provide adequate provisions for staff safety, the National Park Service will develop and install adequate flood warning systems.

Current locations and facilities associated with the maintenance area are retained including maintenance shop, equipment storage, carpenter shop, fire cache, flammable storage, office, rest rooms, and furnace room. Covered vehicle storage will be expanded by two stalls.

STAFFING AND OPERATIONAL NEEDS

To provide visitor services, protection, and maintenance, there is a need to establish appropriate National Park Service staffing levels. In addition to current staff, the following permanent/full-time positions are needed.

Resource Management Specialist
Naturalist.

A part-time position required in addition to current staffing levels include:

Maintenance Worker (.5 FTEs).

Annual operations and maintenance costs required upon full implementation of this plan is \$505,000.

PLANNING AND RESEARCH NEEDS

The following planning and research needs are required to improve management of the national monument.

Development of a monitoring program to measure the spread of exotic plant species within the monument;

Complete fire history research and develop fire management prescriptions;

If feral pigeons return to the tower, conduct research for control of feral pigeon populations;

Initiate a study of the beaver/floodplain/forest ecology to assess existing conditions and provide strategies for future management including strategies to eliminate or curtail riparian forest decadence;

Develop a water resource management plan;

Develop a program for interior modifications of historic structures for adaptive use;

Update Devils Tower National Monument's Interpretive Prospectus to reflect strategies included in the General Management Plan and Development Concept Plan.

PHASING SCHEDULE/COST SUMMARY

It is not possible for all of the developments previously described to occur at once. Following is the conceptual phasing program and cost summary. Source of the cost summary is the Denver Service Center, Estimating Branch, October 1984, Class "C" Estimates.

PHASE	ACTIVITY	ESTIMATED COST
1	Chip and seal south and west roads (1.1 miles)	\$ 34,000
	Expand prairie dog town parking by 20 stalls	\$ 43,000
	Construct five photo pullouts, three stalls each	\$ 34,000
	Expand picnic area/amphitheater parking by 20 stalls	\$ 43,000
	Pave amphitheater	\$ 7,000
	Reconstruct visitor/administrative facility parking (expand to 100 stalls) construct 20-stall bus/recreation vehicle parking lot near tower base	\$132,000
TOTAL COST OF PHASE 1		\$369,000
2	Construct visitor/administrative facility (approximately 7,000 square feet)	\$1,438,000
	Partially reconstruct Tower Trail (approximately .5 miles)	\$ 28,000
	Construct National Park Service duplex	\$ 210,000
	Expand sewage treatment facilities (septic systems)	\$ 101,000
	Expand water storage and distribution system	\$ 204,000
	Convert headquarters to seasonal ranger station and seasonal residence	\$ 30,000
	Construct two-stall covered vehicle storage at maintenance area	\$ 56,000
TOTAL COST OF PHASE 2		\$2,067,000
GRAND TOTAL		<u>\$2,436,000</u>

LIST OF PREPARERS

This general management plan and development concept plan was prepared by an interdisciplinary team of Devils Tower National Monument and Rocky Mountain Regional Office. The team members are:

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Dr. Ralph Root, Geologist, Denver Service Center

Michael Snyder, Team Captain/Landscape Architect/Planner, Rocky Mountain Regional Office.

Others who were active in the preparation of this general management plan/development concept plan are:

Sarah Brown, Landscape Architect Technician, Rocky Mountain Regional Office

Joyce Moe, Editorial Clerk, Rocky Mountain Regional Office.

