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Wildlife & Parks  
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2300 Lake Elmo Drive  
Billings MT 59105

APR 05 2004

LEGISLATIVE ENVIRONMENTAL  
POLICY OFFICE

February 23, 2004

TO: Environmental Quality Council  
Director's Office, Dept. of Environmental Quality  
Montana Fish, Wildlife & Parks

Director's Office  
Parks Division  
Fisheries Division  
Wildlife Division

Lands Section  
Design & Construction  
Legal Unit  
Regional Supervisors

Montana Historical Society, State Preservation Office  
Janet Ellis, Montana Audubon Council  
Montana Wildlife Federation  
Montana State Library  
George Ochenski  
Montana Environmental Information Center  
Wayne Hirst, Montana State Parks Foundation  
Montana Parks Association (land acquisition projects)  
Bob Harrington, DNRC Area Manager, Southern Land Office  
Yellowstone County Commissioners  
Other Local Interested People or Groups

Ladies and Gentlemen:

The enclosed draft Environmental Assessment (EA) has been prepared for Pictograph Cave State Park and is submitted for your consideration. Questions and comments will be accepted until April 30, 2004.

If you have questions or need additional copies of the draft EA, please contact Montana Fish, Wildlife & Parks at 247-2940. Please send any written comments to the following address:

Pictograph Cave State Park Site Renovation  
Montana Fish, Wildlife & Parks  
2300 Lake Elmo Drive  
Billings MT 59105  
twalters@state.mt.us

Thank you for your interest,

Harvey E. Nyberg  
Regional Supervisor

# Pictograph Cave State Park Renovation and Development Environmental Assessment

## **PART I. - PROPOSED ACTION DESCRIPTION**

**1. Type of Proposed Action:** Upgrade of existing parking area and utility re-route

**2. Name of Project:** Pictograph Cave State Park Site Renovation

**3. Names, Address and Phone Number of Project Sponsor**

Montana Fish, Wildlife & Parks  
2300 Lake Elmo Drive  
Billings, MT 59105  
(406)247-2955

**4. If Applicable:**

Estimated Construction/Commencement Date: June 2004

Estimated Completion Date: September 2004

Current Status of Project Design (% complete): Parking Area and Grounds – 50% complete

**5. Location Affected by Proposed Action (county, range and township)**

Yellowstone County, T1S, R27E, Sections 19 & 20

**6. Project Size: Estimate the number of acres that would be directly affected that are currently:**

- |   |                         |
|---|-------------------------|
| (a) Developed:                                | (d) Floodplain .....    |
| residential.....                              | _____ acres             |
| industrial .....                              | (e) Productive:         |
| _____ acres                                   | irrigated cropland..... |
| (b) Open Space/Woodlands/<br>Recreation ..... | _____ acres             |
| _____ 1.5 acres                               | dry cropland .....      |
| (c) Wetlands/Riparian                         | _____ acres             |
| Areas .....                                   | forestry .....          |
| _____ acres                                   | _____ acres             |
|   | rangeland.....          |
|   | _____ acres             |
|   | other .....             |
|   | _____ acres             |

**7. Map/site plan:**

Please See Map Attachment

**8. Narrative summary of the proposed action or project including the benefits and purpose of the proposed action.**

Pictograph Cave became a National Historic Landmark in 1964 in recognition of its considerable contribution to our understanding of archaeology in the northwestern plains, and was subsequently designated as a State Historic Site in 1969. Pictograph Cave State Park is located seven miles outside of Billings—Montana's largest city. Yearly visitation at the site has consistently remained near 21,000 for the past several years. Visitation is expected to increase with the new "Fee to Free" rule that goes into effect this year, allowing Montana residents free entrance to all state parks. The recently completed backfill preservation project which enhances the integrity of the cave wall should also increase visitation to the Park. This project was funded through grants from the National Park Service and the National Trust for Historic Preservation.

The trail that runs throughout the Park will be upgraded during the 2004 season to allow for better access to the Interpretive Plaza. Designed to meet the American with Disabilities (ADA) standards, this upgrade will allow a greater number of visitors to experience the Park. Pictograph Cave is currently involved in an Interpretive Planning process scheduled for completion during the 2005 season. The Pictograph Cave Advisory Council has been involved in all recent actions taking place in the park, and has been a consistent source of valuable information and support in the Parks' development. The improvements recommended back up the recent Management Plan and support the other actions currently taking place at the Park.

The proposed project will:

- Re-configure the existing parking area. This will increase the existing picnic area to the northeast. The proposed new parking area will provide space for three oversized vehicles and 29 cars.
- Contour the parking area grade to resolve existing erosion and drainage problems.
- Pave the parking area to reduce dust, mud, erosion, and visitor safety issues.
- Add concrete curb and an ADA walkway along the northeast end of the parking lot to improve ADA access to the existing latrine.
- Add parking area islands and paint striping to provide more efficient parking for cars, recreational vehicles, and buses.
- Reduce the maintenance required by frequent parking area grading.
- Remove the abandoned cistern near the picnic area grounds and reclaim the area with native vegetation.

The site will likely need to be temporarily closed during the construction phase. Special arrangements will be made to serve the needs of any group tours that may occur.

**9. Description and analysis of reasonable alternatives:**

**No Action Alternative:** If the proposed improvements are not made at this time, the site will continue to lose valuable potential. Visitor experiences will not reach the positive level we believe possible, resulting in a loss in visitor numbers and a lower quality of visitor service and experience.

**Project as Proposed:** The preferred alternative. The site would be more accessible to a wider group of users. The paved parking area will be more orderly and safer, and will reduce the amount of dust and mud the site currently experiences. The resources of the site would be protected and preserved for generations to come. The improvements will allow Fish, Wildlife and Parks to provide better services at this important archaeological site.

**10. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.**

(a) Permits:

Agency Name \_\_\_\_\_ Permit \_\_\_\_\_ Date Filed/# \_\_\_\_\_

(b) Funding:

Agency Name \_\_\_\_\_ Funding Amount \_\_\_\_\_

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name \_\_\_\_\_ Type of Responsibility \_\_\_\_\_  
State Historic Preservation Office Consultation on cultural impacts

**11. List of agencies consulted during preparation of the MEPA Checklist:**

State Historic Preservation Office  
Montana Historical Society  
1410 8<sup>th</sup> Avenue  
Helena, MT 59620

Consulted with Stan Wilmoth, State Historic Preservation Officer on March 8, 2004. The scope of the project was discussed. Recommendations were made to insure that if any previously undisturbed area is to be impacted an archaeologist will be retained to observe the construction and file a report.

## PART II - MEPA CHECKLIST

### PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Soil instability or changes in geologic substructure?			X			
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?		X				
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				
f. Other		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

1a. The grading and resurfacing of the parking area with pavement will cause some instability during construction. Best Management Practices will be employed to minimize negative effects of erosion. This will be a temporary and minor impact. Erosion will be reduced following reclamation and reseeding of areas adjacent to the parking lot. Adjacent soils will be more stable in the long-term.

### PHYSICAL ENVIRONMENT

2. AIR Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Emission of air pollutants or deterioration of ambient air quality? (also see 13 (c))			X			
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. For P-R/D-I projects, will the project result in any discharge which will conflict with federal or state air quality rags? (Also see 2a)		X				
f. Other		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

2a. Construction equipment used to complete the improvements may emit temporary air pollutants. This activity will cease upon completion of the project(s). Air quality will likely improve due to reduced dust once the parking area is paved.

**PHYSICAL ENVIRONMENT**

3. WATER	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
<b>Will the proposed action result in:</b>						
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		X				
b. Changes in drainage patterns or the rate and amount of surface runoff?			X			
c. Alteration of the course or magnitude of floodwater or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?		X				
i. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l. For P-R/D-I, will the project affect a designated floodplain? (Also see 3c)		X				
m. For P-R/D-I, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a)		X				
n. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (Attach additional pages of narrative if needed):

3b. Water quality from storm water run-off following construction will be improved due to elimination of erosion from the gravel parking area.

**PHYSICAL ENVIRONMENT**

4. <b>VEGETATION</b>	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		X				
b. Alteration of a plant community?		X				
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?		X				
f. For P-R/D-L, will the project affect wetlands, or prime and unique farmland?		X				
g. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

**PHYSICAL ENVIRONMENT**

5. <b>FISH/WILDLIFE</b>	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?		X				
c. Changes in the diversity or abundance of nongame species?		X				
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				
h. For P-R/D-L, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f)		X				
i. For P-R/D-L, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d)		X				
j. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

**HUMAN ENVIRONMENT**

6. NOISE/ELECTRICAL EFFECTS	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Increases in existing noise levels?		X				
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

6b. During construction phase the use of equipment will create additional noise. This will cease following completion of the project. The proposed project is located in a rural area, with no adjacent neighbors close enough to be disturbed by construction noise.

**HUMAN ENVIRONMENT**

7. LAND USE	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown*	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				
e. Other: _____		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

**HUMAN ENVIRONMENT**

8. RISK/HEALTH HAZARDS	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?		X				
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. For P-R/D-L, will any chemical toxicants be used? (Also see 8a)		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

**HUMAN ENVIRONMENT**

9. COMMUNITY IMPACT	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

**HUMAN ENVIRONMENT**

10. PUBLIC SERVICES/TAXES /SERVICES	IMPACT				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Will the proposed action have an effect upon the local or state tax base and revenues?			X			
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased used of any energy source?		X				
e. Define projected revenue sources		X				
f. Define projected maintenance costs.			X			
g. Other: _____		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

10b. Improvements and renovations at Pictograph Cave State Park will create the potential for out of area visitation to increase. Visitors would be expected to spend more time on site due to the improvements that are proposed. This would have a positive effect on tourist related expenditures in the Billings community.

10f. Maintenance costs will be minimal and absorbed into the existing park operations budget.

**HUMAN ENVIRONMENT**

11. AESTHETICS/RECREATION	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report)			X			
d. For P-R/D-L, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c)		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

11c. The quality and quantity of the recreation at this site will be altered. Both will be positively impacted due to the improvements, allowing a greater number of visitors access to the site.

**HUMAN ENVIRONMENT**

12. CULTURAL/HISTORICAL RESOURCES	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		X*				
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. For P-R/D-L, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a)		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

12a. Any area not previously disturbed will be monitored by an archaeologist.

12d. These projects are designed to preserve and protect the resources of Pictograph Cave State Park.

**HUMAN ENVIRONMENT**

13. SUMMARY EVALUATION OF SIGNIFICANCE  Will the proposed action, considered as a whole:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)		X				
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. For P-R/D-I, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e)		X				
g. For P-R/D-I, list any federal or state permits required.		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

Name, title, address and telephone number of the person(s) responsible for preparing this MEPA Checklist.

Terri Walters  
Parks Operation Supervisor  
Montana Fish, Wildlife & Parks  
2300 Lake Elmo Drive  
Billings, MT 59105  
(406) 247-2955  
Email: [twalters@state.mt.us](mailto:twalters@state.mt.us)

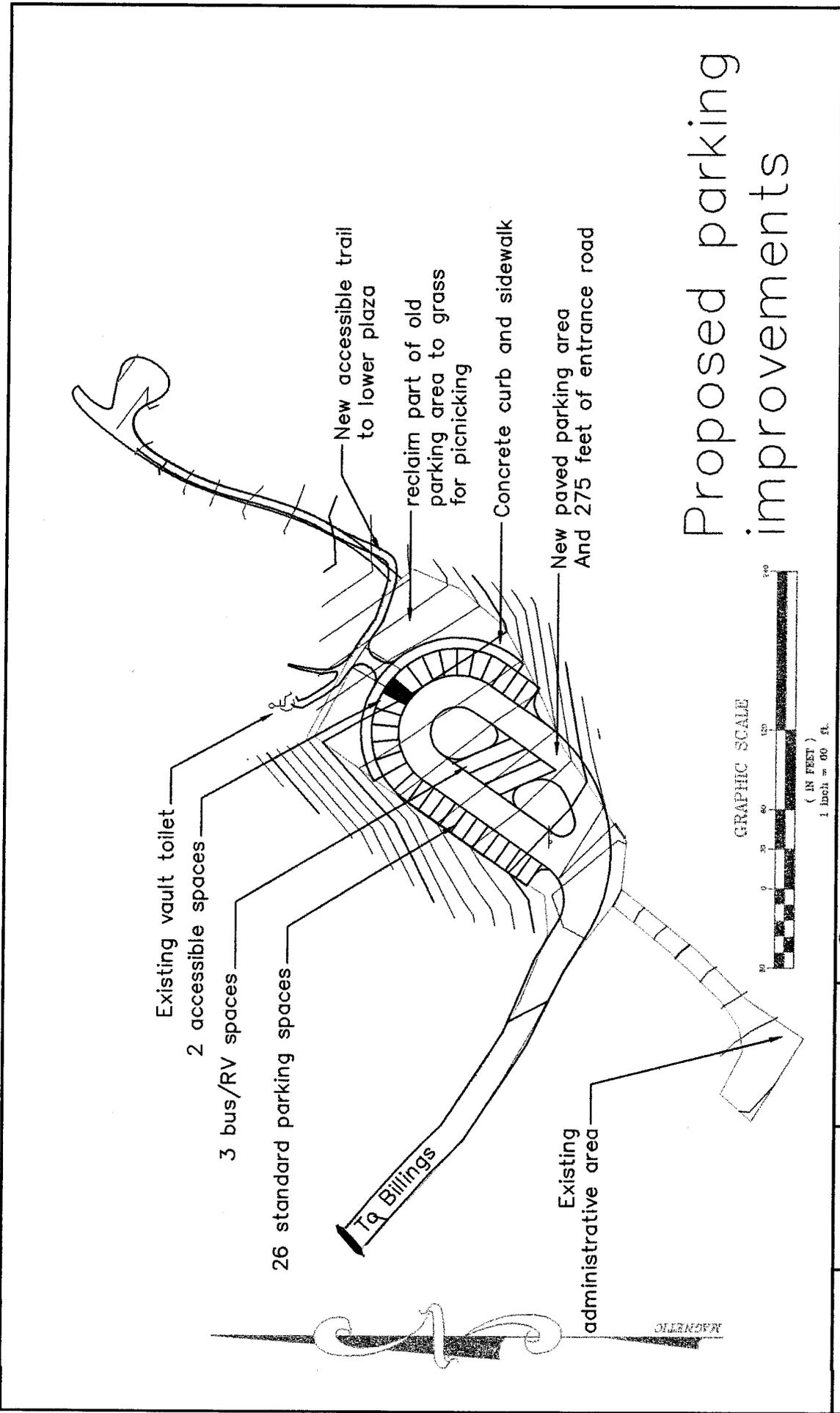
## **PART III - MEPA CONCLUSION SECTION**

The proposed projects are in accordance with the Pictograph Cave State Park Management Plan formally adopted by Fish, Wildlife and Parks in 2003. The plan was developed through the guidance of an interdisciplinary team of interested public members. The Management Plan has a 10 year horizon. Completing these projects as proposed during 2004 will move the site towards the stated vision and will contribute to the overall integrity of the site in an appropriate timeline. Disabled accessibility will be greatly improved due to the completion of this project.

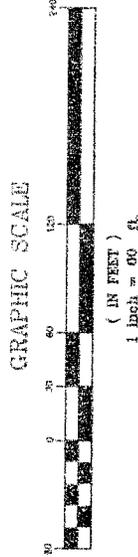
### **Pictograph Cave State Park Vision**

The following vision is taken from the 2003 Pictograph Cave Management Plan. In 2012, Pictograph Cave, well managed and protected by Montana Fish, Wildlife and Parks, will provide a safe experience whereby:

- Visitors of all ages become engaged in the past and learn the stories of previous occupants.
- Visitors can see rock art images, and understand the site's archaeological significance.
- Each visitor is touched by the past in a setting with few sights and sounds of the modern world.
- Natural geologic processes are evident and explained.
- Trails and roads make the park easily accessible to the community.
- The Park is linked to other heritage and recreation attractions in the Billings area.



# Proposed parking improvements



DESIGNED BY	DATE	APPROVED BY	DATE
CHECKED BY	DATE	APPROVED BY	DATE