Draft
Environmental Assessment

Pictograph Cave State Park Maintenance Area & Host Site Improvement Project

August 2014

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Draft Environmental Assessment
MEPA, NEPA, MCA 23-1-110 CHECKLIST

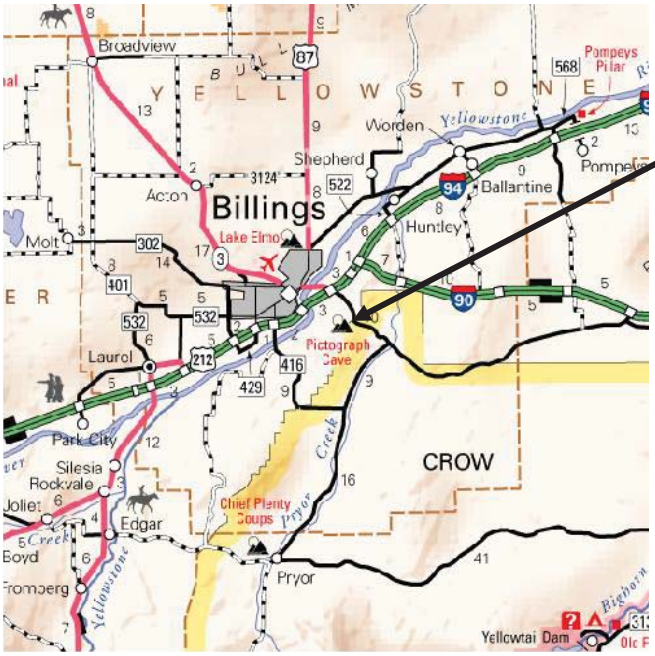
PART I. PROPOSED ACTION DESCRIPTION

1. **Type of proposed state action:** Montana Fish, Wildlife and Parks proposes to initiate an improvement project to the current Host/Maintenance Site located at Pictograph Cave State Park.

2. **Agency authority for the proposed action:** Montana state statue 23-1-102 authorizes the department to make a study to determine the scenic, historic, archeological, scientific, and recreational resources of the state. The department may purchase, lease, agreement, or acceptance of donations acquire for the state any areas, sites, or objects that in its opinion should be held, improved, and maintained as state parks, state recreation areas, state monuments, or state historic sites.

4. **Anticipated Schedule:**
Estimated Commencement Date: Fall 2014
Estimated Completion Date: Spring 2015
Current Status of Project Design (% complete): 15%

5. **Location:**
Pictograph Cave State Park is located in Yellowstone County, Sec 19, T1S, R27E



Area map showing location of Pictograph Cave State Park near Billings, MT

6. Project size -- estimate the number of acres that would be directly affected that are currently:

	Acres		Acres
(a) Developed:		(d) Floodplain	0
Residential	0		
Industrial	1	(e) Productive:	
(Existing Maintenance area)		Irrigated cropland	0
(b) Open Space/ Woodlands/Recreation	0	Dry cropland	0
		Forestry	0
(c) Wetlands/Riparian Areas	0	Rangeland	0
		Other	0

7. Permits, Funding & Overlapping Jurisdiction.

(a) Permits: permits will be filed at least 2 weeks prior to project start.
Agency Name: Yellowstone County Permits: Building Permit

(b) Funding:
Agency Name: Montana State Parks Amount: 20,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities:
Agency Name: State Historic Preservation Office
Type of Responsibility: Cultural and Historic Resources

8. Narrative summary of the proposed action:

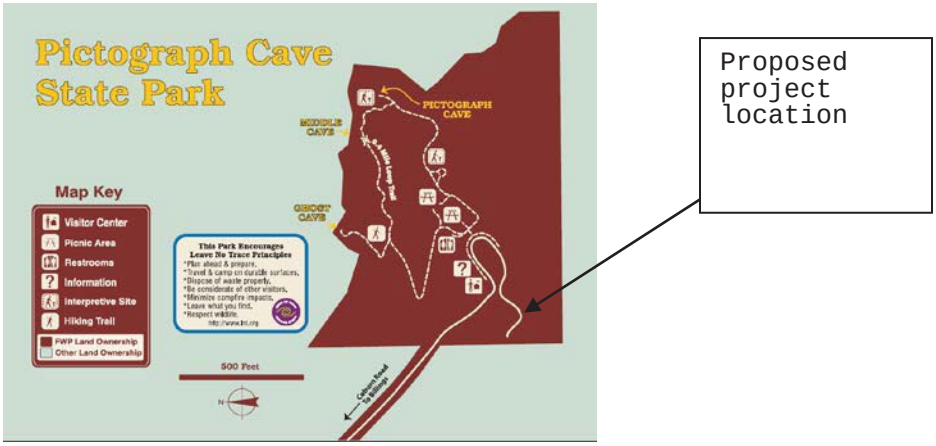
Pictograph Cave State Park is a 28 acre park located approximately 5 miles south of Billings, Montana. It was designated a National Historic Landmark in 1964 because of its historic and archeological significance. The park includes a ¾ mile interpretive looping trail, picnic grounds, latrine and visitor center (see map below). It is one of the more popular day use parks in the state with approximately 60,000 visitors in 2013. The park is open year round.

The location area for this proposal has been pieced together over decades and currently includes two host pads located directly adjacent to the existing maintenance shed. This design is disruptive to hosts residing on site as staff is required to walk within a few feet of the host site to retrieve tools or start equipment such as mowers, chain saws or OHV's.

The current tool shed is not large enough to shelter the larger pieces of equipment which is required to maintain the park grounds, trails and road. Therefore property including; snow blowers, riding lawnmowers, OHV's and assorted maintenance equipment is stored outside and subject to vermin, weather and vandalism which take a costly toll on the condition of the equipment. The current

utility lines to the host pad areas are not graphed and in poor condition which could lead to a major safety issue if not properly resolved. The utility pedestals are old and in poor condition and need to be replaced too.

Our preferred alternative would correct these safety and security issues while being sensitive to the nature of the park's cultural resources. The proposed improvements would provide a maintenance and host area that complements the visitor center while not detracting from the parks natural view shed.



9. Description and analysis of reasonable alternatives:

<u>Alternative A: No Action.</u>

If no action is taken the equipment that is currently stored outside covered on pallets will continue to be subjected to vandalism, the natural elements as well as adverse effects from small animals including; mice, prairie dogs, rattlesnakes and yellow bellied marmots. This causes a costly and rapid deterioration of the states equipment which currently includes; Polaris OHV, Craftsman snow blower and riding lawn mower all which are too large to fit in the existing structure. There is also the issue of site security; Pictograph Cave contains cave paintings and many valuable artifacts that go unmonitored outside the parks hours of operation. A gate is locked 2 miles above the park but many people still place bikes over the gate and ride or walk in during closed hours. Without a suitable host pad providing reliable basic utilities and a sense of privacy to the parks hosts, it is more difficult to retain a host at the park. Appearance of the area is also a consideration as the current structures lie within the view shed below the parks visitor center.

Alternative B: Improvement of Host Site & Maintenance Area Proposed Action.

The proposed action is to remove the current shed and pump house and relocate all equipment and utilities to a new 12'x24'pre-fabricated storage shed placed on a new concrete pad. This preferred alternative would provide adequate space and a safer, more functional and secure building for the parks tools and equipment, while not detracting from the aesthetic values of the park.

The two host sites would be renovated to provide for a more functional, size adequate, and dedicated setting for the host's RV and vehicles. Electricity would be routed to the storage shed and host pad sites pedestals to provide a safer connection and reduce any public safety hazards or code compliance issues. The presence of hosts on park grounds acts as a deterrent to anyone who may try to vandalize or disturb Pictograph Cave State Park's important archeological resources.

The project will be completed in phases starting with $20,000 in funds currently allocated.

10. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

As a National Historic Landmark Pictograph Cave State Park requires the appropriate a high level of sensitivity toward cultural resources. Montana State Parks will work closely with the State Historic Preservation Office to appropriately inventory and protect any cultural resources affected by this project.

PART II. ENVIRONMENTAL REVIEW CHECKLIST

Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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		Yes	1b
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				

1b. The installation of the new concrete pad for the new storage shed and the installation of buried utility lines to the host pad pedestals would require the movement of a small amount of soils. During the construction period the adjacent area may be impacted by the use of construction equipment. These areas will be reclaimed through soil loosening and reseeding with native vegetation.

2. AIR Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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-J projects, will the project result in any discharge, which will conflict with federal or state air quality regulations? (Also see 2a.)		X				

3. WATER Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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-J, will the project affect a designated floodplain? (Also see 3c.)		X				
m. For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)		X				

There are no water resources within or near the project area.

4. VEGETATION Will the proposed action result in?	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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		YES	1b
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				1c
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?		X			YES	1e
f. For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		X				
g. Other:		X				

4b. Some vegetation would be impacted at the locations of the new storage shed and the utility trenches. Reseeding the disturbed areas with native species would mitigate these influences to the overall plant community.

4c. A search of the Montana Natural Heritage database revealed no occurrences of plant life that is designated a species of concern, threatened, or endangered within the project area.

4e. The proposed improvements may increase the potential of noxious weeds becoming established in disturbed areas. Mitigating actions will include reseeding with native species and monitoring of growth of noxious weeds at disturbed areas. Any noxious weeds discovered would be controlled by using Integrated Weed Management (IWM) methods identified in the Region 5 Noxious Weed Management Plan. This typically involves chemical and mechanical control efforts.

5. FISH/WILDLIFE Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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-J, 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-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)		X				

No impacts are anticipated to local wildlife since the project area is already used by park staff and hosts.

B. HUMAN ENVIRONMENT

6. NOISE/ELECTRICAL EFFECTS Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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				

7. LAND USE Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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				7b
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				

Although the proposed improvements are within a state park designated a National Historic Landmark, the location of the improvements would not impact the caves or the remaining pictographs. The project area would not detract the educational and historic values of the park.

8. RISK/HEALTH HAZARDS Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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-J, will any chemical toxicants be used? (Also see 8a)		X				

9. COMMUNITY IMPACT Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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				

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10. PUBLIC SERVICES/TAXES/UTILITIES **Will the proposed action result in:**	**IMPACT**					
	Unknown	**None**	**Minor**	**Potentially Significant**	**Can Impact Be Mitigated**	**Comment Index**
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			10c
d. Will the proposed action result in increased use of any energy source?		X				
e. Define projected revenue sources						
f. Define projected maintenance costs.						10f

10c. Electric power would be run to the new host pad pedestals and to the new storage shed. Overall, electricity use at the park is not expected to increase with the improvements.

10f. Maintenance costs for the new storage shed and pedestals are expected to be minimal and any maintenance costs would be absorbed into the existing park maintenance budget.

11. AESTHETICS/RECREATION Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c.)		X				

12. CULTURAL/HISTORICAL RESOURCES Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a.)	X					

12a,d; There is the possibility of cultural materials being disturbed. Archeological survey and site testing will occur in the disturbed area to assess impacts to potential buried archaeological deposits in accordance with FWP ARM rule 12.8.505. Archaeological test excavations for the septic system in 2008 in the nearby vicinity did not yield significant archaeological materials. The testing will be completed before construction occurs. If significant archaeological materials are found, a data recovery plan involving further excavations will be developed to mitigate impacts from project construction in accordance with MCA 22-3-430 of the Montana Antiquities Act.

SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE Will the proposed action, considered as a whole:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that 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-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)		X				
g. For P-R/D-J, list any federal or state permits required.						

The proposed improvements to the storage and host pad area are not expected to generate substantial public controversy.

No cumulative impacts to the human environment are anticipated with the implementation of the proposed improvements.

PART III. NARRATIVE EVALUATION AND COMMENT

In 2009 Montana State Parks constructed a visitor center at Pictograph Cave State Park. This proposal is to complete the area located below the parking lot and visitor center to provide for a safer, more functional maintenance area and host site. In addition the appearance of the project when completed was aesthetically pleasing to visitors and complementary to the recent developments at Pictograph Cave State Park.

The proposed action is to remove the current shed and pump house and relocate all equipment and utilities to a new 12'x24' storage shed placed on a concrete pad. The two host sites will then be expanded to provide for a more private and functional setting. Utilities and pedestals will be routed to the storage shed and host pad sites to provide a safer and more unified appearance and function. Any required cultural survey work would be completed prior to installation of buried lines. This preferred alternative would provide a better appearance to park visitors as well as a safer, more functional and secure building for the parks tools and equipment. The presence of hosts on park grounds acts a deterrent to anyone that may vandalize or disturb Pictograph Cave State Park's significant archeological resources.

PART IV. PUBLIC PARTICIPATION

1. Public involvement:

The public will be notified in the following manners to comment on this current EA, the proposed action and alternatives:

- Two public notices in each of these papers: Billings Gazette and Helena Independent Record
- One statewide press release
- Public notice on the Fish, Wildlife & Parks web page: *http://fwp.mt.gov*.

Copies of this environmental assessment will be distributed to the neighboring landowners and interested parties to ensure their knowledge of the proposed project.

This level of public notice and participation is appropriate for a project of this scope having limited impacts, many of which can be mitigated.

2. Duration of comment period:

The public comment period will extend for (30) thirty days. Written comments will be accepted until 5:00 p.m., date , 2014 and can be mailed or emailed to the addresses below:

Pictograph State Park Host Site Improvements
3401Colburn Road
Billings, MT 59101 or email:jkostrba@mt.gov

PART V. EA PREPARATION

1. **Based on the significance criteria evaluated in this EA, is an EIS required? (YES/NO)?** No, EA is the proper level of review

   If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action. This project has very minimal impacts, many that can be mitigated below significance, while providing good benefit to the park and its visitors.

2. **Person(s) responsible for preparing the EA:**
   Jarret Kostrba, Park Manager

3. **List of agencies or offices consulted during preparation of the EA:**
   Montana State Parks, FWP Design and Construction Bureau

APPENDIX A

23-1-110 MCA
PROJECT QUALIFICATION CHECKLIST

Date: 8/4/14 **Person Reviewing: Jarret Kostrba**

Project Location: Pictograph Cave State Park

Description of Proposed Work:

The following checklist is intended to be a guide for determining whether a proposed development or improvement is of enough significance to fall under 23-1-110 rules. (Please check all that apply and comment as necessary.)

[ ] A. New roadway or trail built over undisturbed land?
Comments*:*

[x]B. New building construction (buildings <100 sf and vault latrines exempt)?
Comments*: 12 x 24 foot shed*

[ ] C. Any excavation of 20 c.y. or greater?
Comments*: We are anticipating 16 cubic yards.*

[ ] D. New parking lots built over undisturbed land or expansion of existing lot that increases parking capacity by 25% or more?
Comments*:*

[ ] E. Any new shoreline alteration that exceeds a doublewide boat ramp or handicapped fishing station?
Comments*:*

[ ] F. Any new construction into lakes, reservoirs, or streams?
Comments*:*

[x] G. Any new construction in an area with National Registry quality cultural artifacts (as determined by State Historical Preservation Office)?
Comments*: Appropriate cultural resource surveys and consultation with SHPO will take place prior to any construction or disturbance of soil. Montana State Parks Cultural Program Lead will assist in ensuring proper review and action if needed.*

[ ] H. Any new above ground utility lines?
Comments*:*

[ ] I. Any increase or decrease in campsites of 25% or more of an existing number of campsites?
Comments*:*

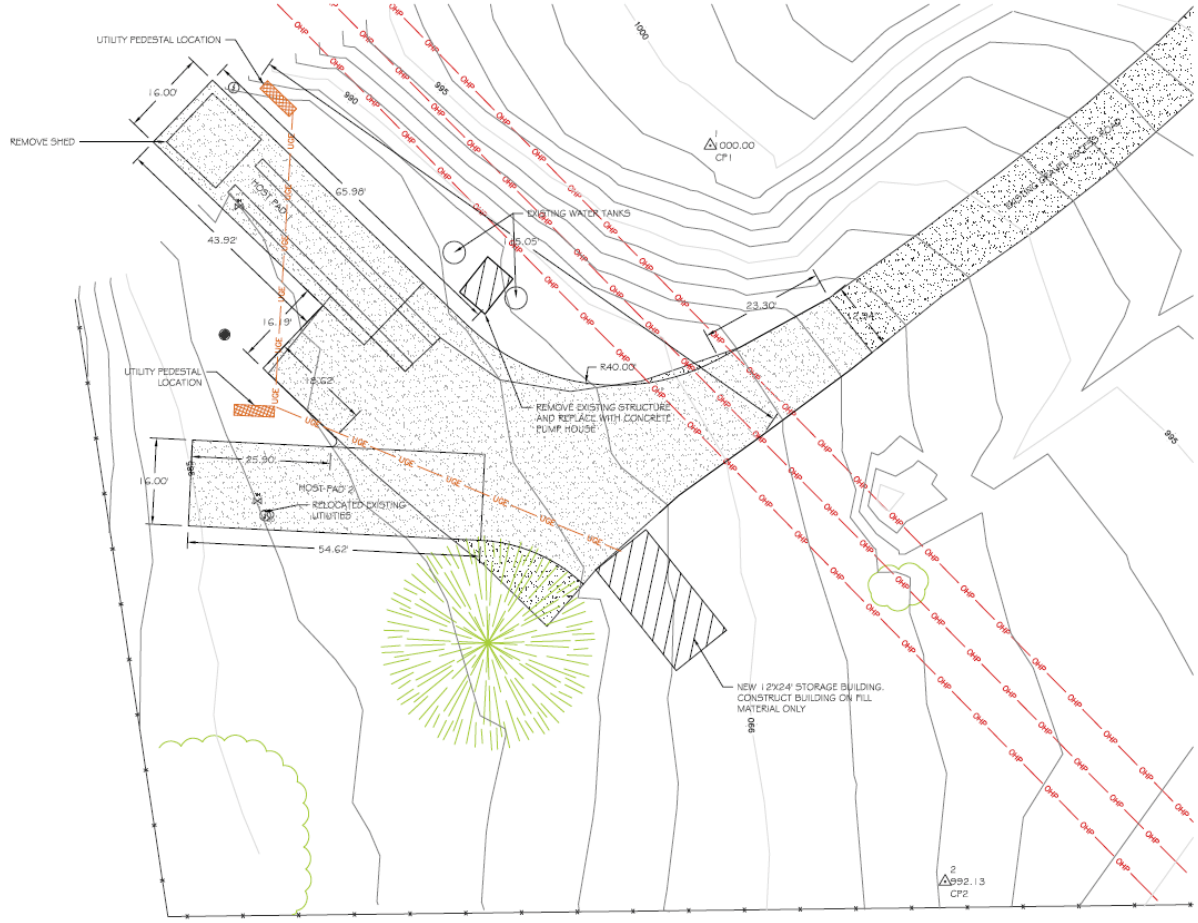
[ ] J. Proposed project significantly changes the existing features or use pattern; including effects of a series of individual projects?
Comments*:*

If any of the above are checked, 23-1-110 MCA rules apply to this proposed work and should be documented on the MEPA/HB495 CHECKLIST. Refer to MEPA/HB495 Cross Reference Summary for further assistance.

CONSTRUCTION NOTES:

1. ALL STRUCTURES AND SITE IMPROVEMENTS MUST BE INSTALLED ON IMPORTED FILL MATERIAL. DUE TO THE LARGE NUMBER OF HISTORIC ARTIFACTS FOUND IN THE AREA, THE REMOVAL OF NATIVE MATERIAL IS PROHIBITED.

2. ANY UTILITIES DEPICTED ON THESE PLANS ARE IN ACCORDANCE WITH THEIR ACHIEVED "QUALITY LEVELS" AS DEFINED IN THE AMERICAN SOCIETY OF CIVIL ENGINEERS DOCUMENT ASCE 38, "STANDARD FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."



J. Senn DRAWN BY: DATE: 06/02/2014	REVISED BY: DATE:	APPROVED BY: DATE:	Montana Fish, Wildlife & Parks
P. Valle CHECKED BY: DATE: 06/02/2014	APPROVED BY: DATE:	APPROVED BY: DATE:	

CONCEPT SITE PLAN
PICTOGRAPH CAVES STATE PARK

SHEET: 1 of 1