EXHIBIT PLANNING REPORT for the LOOMIS MUSEUM at LASSEN VOLCANIC NATIONAL PARK

for the Harpers Ferry Center Harpers Ferry, WV 25425

January 1, 1989

Prepared by

Daniel Quan Design 330 Townsend Street #208 San Francisco, CA 94107 415.495.3042

EXHIBIT PLANNING REPORT FOR LASSEN VOLCANIC NATIONAL PARK

FOR THE NATIONAL PARK SERVICE

Harpers Ferry Center Harpers Ferry, West Virginia 25425

111/164306

Issued January 1, 1989

Prepared by

Daniel Quan Design 330 Townsend Street #208 San Francisco, California 94107 415/495-3042

TABLE OF CONTENTS

l.

1.	EXISTING FACILITIES CONDITION 2
2.	EXISTING EXHIBITS CONDITION 4
з.	EXISTING INTERPRETATION CONDITIONS 7
4.	FACILITIES RECOMMENDATIONS 8
5.	INTERPRETIVE RECOMMENDATIONS10
6.	EXHIBIT DESIGN RECOMMENDATIONS12
7.	ACTION PLAN16
8.	EXHIBIT PLAN18
9	MUSEUM SECTIONS19

EXISTING FACILITIES CONDITION

This building is a masonry (native volcanic stone) and concrete building consisting of two large halls approximately 25 feet wide by 75 feet long (inside dimensions) placed in a T shape configuration. The ceiling is vaulted, with over a fourteen foot interior crown height.

The entire building is windowless except for two small windows in the main hall. A series of skylights runs throughout the roof of the main hall though. The interior finishes are basically painted plaster walls and ceilings (main hall), with vinyl asbestos tile over concrete on the floor. The rear hall has a suspended acoustic tile ceiling.

There is a small outbuilding just outside of the museum which was a seismograph station. Its construction and condition is exactly the same as that of the museum building. Across the parking lot is a one story wood frame house called the Loomis House. It is in fair condition and needs some general maintenance.

Although the museum building has not been serviced in the last fifteen years, visual inspection reveals no permanent damage. Barring any unforseen structural damage or problems with code compliance, this building appears to be still usable as a public facility. The following are specific conditions found during my site inspection.

- 1. Roof leaks in many locations. Skylights are more than likely leaking as well.
- 2. Water is seeping through the walls.
- 3. Water infiltration has caused paint and plaster to peel from interior wall and ceiling surfaces.
- Windows and doors are in need of maintenance. Re-glazing, re-caulking, cleaning, and painting are necessary. Replacement of glass will also be required.
- 5. The glass skylights have been painted over and the two windows in the building have been boarded up. No natural light comes into the interior of the building

except for that which enters from the front doors and transom.

- 6. The electricity is turned off and no general lighting is present in the main exhibit hall. A fairly new electrical panel does exist however.
- 7. A suspended acoustical ceiling with surface mounted fluorescent fixtures exists in the rear exhibit hall. The ceiling is water damaged and the lights are in need of repair or replacement (missing lenses and lamps; not known if in working order either).
- 8. A projection screen with curtains and a projection booth exist in the rear exhibit hall. All items are in need of upkeep and cleaning if they are to remain.
- The building lacks a heating system.
- 10. The flooring is vinyl asbestos tile over a concrete slab and is heavily damaged through use and by water. Replacement would be necessary.
- 11. The rear exhibit hall is being used as a storeroom for old cabinets and appliances. The main exhibit hall is packed with the cases and parts from the exhibits that existed when the building was closed fifteen years ago. The building would need to be cleared of all equipment and debris.

EXISTING EXHIBITS CONDITION

The existing exhibits are in various states of disintegration and disrepair. There is not one single display which still has all of its parts. In general, graphic elements such as copy, back-lit transparencies, and negatives are all totally unusable and would have to be completely redone in order to bring these exhibits back to a usable level. At that though, the exhibit design is quite dated and will never be contemporary with today's exhibit standards. The existing display cases are made of unfinished plywood with plain aluminum window frames. Every exhibit element is under glass or inside a display case - there are no touchable objects or anything that can be viewed without looking through a glass window. There is no real focus to the overall exhibit design. All of the cases are modular and they have been lined up down both sides of the main hall. Their construction is fairly crude and they are uninteresting and bulky lokking at best. The photographs and copy on all of the displays is very small and all of similar size and weight. Nothing stands out to the viewer. Furthermore, all of the wonderful photographs taken of the eruption of Mt. Lassen have been reproduced as tiny backlit transparencies, making them extremely hard to appreciate and totally invisible if light bulbs were burnt out.

There are however, some exhibit components which may still be salvageable. There is a scale topographic model which, if cleaned up and embellished, could provide a good orientation tool for the visitor. Another good exhibit is a scale model that shows Lassen before the eruption and after. The before/after sequence is done with a clever mirror trick and the visitor appears to see the model transform in front of them magically. Again, if cleaned up and incorporated into the new exhibits, this particular display (entitled The Great Eruption) could be quite interesting.

In summary, I would conclude that the present exhibits, with the above exceptions, are no longer of any use in a new exhibit plan. Taking into account the cost to rehabilitate each exhibit and the fact that these were not

the original exhibits in the building when it opened, it would be safe to say that they are not worth saving.

The following listing is of the exhibits found in the building during my site survey.

- 1. <u>Pacific Rim of Fire Model and the</u> <u>Cascade Range Model</u>: One display case with two models and a modest amount of copy explaining the continental and broad regional relationship of Lassen to North America and the Northern Hemisphere.
- 2. <u>Topographic Map and Large Graphic Map</u> with a Question and Answer Console: A general orientation device.
- 3. <u>Three Native American Display Cases</u>: These cases dealt with Atsuwegi basketry and food gathering. They also showed turn of the century photographs of local Indians.
- 4. <u>The Loomis Story</u>: Two panels dealing with the Loomis family were found lying on the floor. Their contents had been removed so it was hard to tell what they said.
- <u>Cinder Cone</u>: A whole display was devoted to photographs of Cinder Cone. Sample rocks were displayed under glass.
- <u>Hot Springs</u>: A whole display was devoted to photographs of various hot springs and boiling lakes, and the like.
- 7. <u>Chaos Craggs and Chaos Jumble</u>: A display module highlighting this area of the park because of its geologic uniqueness.
- 8. <u>Declining Activity of Lassen Peak</u>: A series of photographs taken over the years showing various volcanic activity in the area.
- 9. <u>The Great Eruption</u>: The before and after 1914 eruption model that transforms one scene into another through the use of two models, a halfsilvered mirror, and a light source.

- 10. <u>A Sleeping Volcano Awakens</u>: This display shows the series of photographs taken by B.F. Loomis during the active period of volcanic activity at Lassen.
- 11. <u>Glass Display Cases</u> (three empty cases in center of main exhibit hall): It is unclear what these cases contained originally.

EXISTING INTERPRETATION CONDITIONS

I found the existing interpretation to be lacking a focus or direction. Presently each theme or story is interpreted equally and no thread is woven between the stories. In fact, no real attempt is made to make any kind of connection between the different exhibit units there. For the most part, the stories are not bad, and each has its place in the overall picture. However, too broad of an interpretive base was chosen to start For example, it was very difficult to from. see the connection between the Pacific Rim of Fire model and the Hot Springs display (see Existing Exhibit Conditions for description of these displays). Furthermore, throwing in three Native American displays with all the geology information did not make much sense either. These three displays did not place the Indians in the context of the area, nor did it tell us how they related to the volcanic activity.

FACILITIES RECOMMENDATIONS

- Commission a structural study and testing of the building to determine its stability and structural integrity. Determine if it is adequate to meet today's building code in regard to seismic loading, snow and wind loading. This study should also include a cost estimate to perform all work necessary to bring the building up to code.
- Provide new general lighting for the main exhibit hall. Replace existing general lighting in rear hall. Provide track display lighting in both halls.
- Verify the load capacity of the present electrical panel. A 100A minimum service is recommended. Upgrade electrical service if required.
- Remove old vinyl asbestos flooring. Caution should be exercised in its removal. Replace with new vinyl composition flooring or polish and seal existing concrete floor.
- Reroof the entire building. Pay particular attention to flashing details where roof meets parapet wall and at skylight curbs.
- Repair broken skylights. Replace all glass with wire or safety glass, reglaze all frames or provide new frames. Build storm covers.
- Repair two windows and frames in main hall. Build new storm shutters as well. Match existing wood frame and shutter details.
- Re-glaze and re-caulk existing front door, window, and transom frames. Scrape, clean and repaint all frames. Provide new door hardware (front and back doors) to meet Federal Accessibility Standards.
- 9. Provide new handrails at front steps.
- Provide handicap parking with path to new handicap ramp at rear door. Provide

new rear door if required. Remove existing steps from rear door. Provide ramp handrails and landings as per Federal Accessibility Standards.

- 11. Provide site improvements: Men's and women's rest rooms. Clear off parking area and paved paths.
- 12. Patch interior plaster. Repaint entire interior.
- Provide new heating system (perhaps simple gas fired space heaters with additional fans for recirculation of warm air would be adequate).
- 14. Seal exterior stone with a clear water sealer. Consult manufacturers for test data and sample products.
- 15. Remove all old displays, furniture, appliances, and debris from building.
- 16. Repair acoustic ceiling in rear hall.
- 17. Remove, clean and reinstall projection screen and curtains in rear hall. Reface walls of projection booth to match interior of hall.
- Repair boarded up window in Seismograph Station. Repair and repaint as per museum building.
- 19. The Loomis House should be cleaned inside and out and all equipment and debris removed from it. Inspect wood floor for damage and structural soundness. Repair and replace as required. Remove old porch from front of building. Repaint building inside and out. Repair any damaged roofing.

INTERPRETIVE RECOMMENDATIONS

The existing displays are patterned after many done during the 1950's and 1960's. Basically, a number of interesting topics were chosen and individually developed. Then, individual displays were designed for each individual topic. In the end, they were all thrown together in one place. Todav's audience is generally more sophisticated and inquiring about what they see. It would be appropriate to change the interpretive message to focus more on the volcanic activity that can be seen first hand rather than to dwell on individual geologic concepts (which are not visibly evident). Simplification, in the sense of limiting the number of themes, would also help.

- The story of the Great Eruption is a primary theme. The photographs taken by B. F. Loomis bear witness to this geologic event, and they should be shown in a series to interpret the different stages of volcanic activity that occurred.
- The evidence of current volcanic activity and the monitoring of this activity is of significance today. How and why we keep track of this information, and what it tells us are important issues to present.
- 3. The unique geologic features of the park caused by volcanic activity through the ages is another good topic of universal interest. Identifying what the visitor might see in the park and how it relates to the volcano story will give the park experience more meaning. Showing cones, bubbling mud pots, boiling lakes, fumaroles and geysers will help tie together the many disparate features that can be seen.
- 4. Allowing visitors to touch display items such as different volcanic rocks will aid in identifying similar soils or rocks in the field. It is important to vary the visitor experience to keep interest high.

- 5. Placing a real seismograph into the exhibit will be an excellent way of involving the visitor in what is happening today.
- 6. Interpreting who B.F. Loomis was and what he did for the park (and his relationship to the museum) should be done at this site.
- 7. A very brief overview and orientation to the park would seem necessary near the entrance. Locating where you are in relation to other significant geologic features would be the thrust of this display.
- 8. Programmatically, it would be pragmatic to leave one place in the museum for use as a multi-purpose conference/meeting room where a large area would be free of obstructions.

EXHIBIT DESIGN RECOMMENDATIONS

The following are exhibit concepts and ideas, most of which fall into the new exhibits category. The basic design premise is that the museum should focus on the chronicling of geologic history and geologic features in the park as opposed to being a general, broadbased visitor center. When a new visitor center does open, it would interpret human history, plant and animal communities, and general geology. Information on recreational activities and book sales would also take place there.

- 1. Eruption! Capturing a Geologic Moment in <u>Time: The Photographs of B.F. Loomis</u>. This will be the main feature of the museum. A series of six mural sized photo prints depicting the eruption sequence of Mt. Lassen will adorn one side of the main room of the museum. The mural prints will be approximately eight feet wide by six feet high. They will be accompanied by text as well as diagrams and detail photographs at a reduced size.
- Before and After. This exhibit will 2. come at the end of the series of Loomis photographs and will depict what the mountain looked like before the eruption and what it became afterwards. An existing exhibit entitled "The Great Eruption" will be restored and reused in this display. It features two scale models, of which only one is seen at a time. The model is viewed through a half-silvered mirror. A light source which you control can light either the front or the back of the mirror, and a different model is seen depending on what light source is on. At the halfway point of both light sources, one image of the model is superimposed over the other fading image. This is a good three dimensional representation of the event and is fun to view.
- 3. <u>The Lay of the Land.</u> This is the orientation device that will greet visitors as they enter the museum. An existing topographic model of the entire park will be restored and reused for

this exhibit. The model will be supported by graphics highlighting the salient geologic features to go out and see. Safety information will also be contained in the overall message. The exhibit should be centrally located in the main hall near the doors and should be low enough so that children can look down on it also. The model should be encased to avoid exposure to excess moisture.

- 4.
- Who was B.F. Loomis? This will be mostly a graphic display presenting the man and his work. It should talk not only about his photographic exploits but about the geologic data that he gathered as well. His role in helping to establish Lassen as a national park and why he built the museum should also be discussed. The story could be supported with artifact replicas of his camera equipment, glass plates, traveling kit, etc. to show how hard it was for him to have taken these pictures. Replicas of his diary or data journals and photographs of himself and his family could help round out this display. (Located in main hall)
- 5. <u>Keeping Track of Volcanic Activity.</u> This display will center around a real seismograph that is monitoring a point nearby the museum. Mounted alongside this seismograph would be actual charts showing seismic activity, with the key features interpreted. Visitors can look at the real seismograph to see if the earth shook in the last 24 hours. There will also be a spot reserved for new charts if any significant activity occurs. (Located in main hall)
- 6. <u>Beauty in Lassen's Unique Geology.</u> This display will consist of mural size and smaller color photographs of the numerous features that are a result of Lassen's geologic history. Included will be locations such as Chaos Craggs and Chaos Jumble, Cinder Cone, Painted Dunes, and the Devastated Area. Various boiling lakes, miniature geysers, bubbling mud pots, hot springs, and fumeroles will likewise be

represented. Interpretively they will be tied together and each item will also have a very brief explanation. Alongside this display should be touchable specimens of the different rock formations. (Located in main hall)

- 7. <u>A Park for all Seasons.</u> This will be a series of color photomurals showing the most spectacular views of the park in each of the four seasons. Their use is mainly as an emotional, uplifting visual backdrop in the museum. (Located in rear hall)
- 8. <u>Regrowth and Plant Succession</u> (as it relates to the geology of the area). This exhibit will graphically depict what happens to life in places that have been devastated by volcanic activity. The use of Mt. Lassen as a role model for Mt. Saint Helens will be discussed as well. Photographs and diagrams would be the main tools to explain this story. (Located in rear hall)
- 9. What's in Store for the Future? This exhibit will present several scenarios of what Lassen might look like or be in the next 10 or 20 million years. Will it be in the same place? At the same elevation? Will it be under water? This exhibit could help summarize the idea about the dynamic nature of this land. (Located in rear hall)
- 10. <u>The Original Seismograph Station</u>. This little building, which stands outside of the museum, should be cleaned up and restored. If possible, the original (or a replica) seismograph could be put inside and the boarded up window could be repaired so that visitors could look inside. A short interpretive panel would present basic facts about the seismograph and itsuse. A path would have to be put in that would pass in front of the window.
- 11. <u>The Loomis House.</u> The house needs to be cleaned up and all surplus material removed from within. Interpretively, the darkroom is probably the only room which should be furnished and outfitted as it

would have been in Loomis' day. Some of his photographs, along with some interpretation about Loomis and his family, should be put in the living room. All other rooms of the house should be roped off.

ACTION PLAN

- a. Structural study of building with cost estimate for upgrading if required.
 - Preliminary cost estimate for all architectural work and fees.
 - c. Preliminary cost estimate for design and fabrication of exhibits.
 d. Prepare Phase 1 funding request.
 - d. Prepare Phase 1 funding request

(Total elapsed time = 2 months)

- 2. Funding request for building maintenance, facilities upgrade, and interpretive planning and exhibit design.
- 3. If funds received:
 - a. Make building watertight: Roof and skylight repair, stone wall sealer, caulk and re-glaze windows and doors.
 - Demolish and clean out interior.
 Restore and repaint.
 - c. New heating and electrical work.
 - Facilities planning for site improvements and handicap accessibility.
 - e. Interpretive planning and exhibit design.
 - f. Prepare second phase funding request.

(Total elapsed time = 2 months demo and construction, 6 months planning)

- Funding request for exhibit implementation, site improvements, and handicap requirements.
- 5. Construction.
 - a. Site improvements, handicap work.
 - b. Exhibit graphic production and casework fabrication.
 - c. Exhibit installation.

(Total elapsed time = 6 months)

Total estimated time for completion of project is approximately 24 months, depending upon funding. Project could take place over a period of 2.5 to 3 fiscal funding cycles. In the event that funding is limited for interpretation, it is suggested that the exhibits in the rear hall be held back to ensure that the main hall is completed first. It is felt that even if only the main hall were finished, the exhibit would still tell a complete story.



1/1/89

LOOMIS MUSEUM SECTIONS

1/1/89

TUBULAR LIGHTING

Start 10

SKYLIGHTS.

ERUPTION PHOTOS

MURAL SIZE 2-D GRAPHICS



TRACK LIGHTING

WHO WAS LOOMIS ?

VIEW THRU ARCH TO

OBJECT-ONENTED DISPLAY

Q

GENERAL NOTES : I. VARY THE TYPES OF EXHIBITS (I.E. FLAT



TOUCH, THINGS TO MANIPULATE, THINGS TO FIND OR COMPARE, THINGS TO ENJOY VISUALLY), 3. VARY THE SCALE OF EXHIBITO FOR IMPACT & EMPHASIS. (MURAL SIZE PHOTOS AS WELL AS DETAIL PHOTOS; HEADLINE TYPE & CAPTIONS) MAINTAIN CLEAR SIGHT LINES. 5. USE DURABLE MATERIALS 6. KEEP THE EXHIBIT SIMPLE & FOCUSED.

VARY THE VIGITOR EXPERIENCE BY INVOLVING THEM AT DIFFERENT LEVELS (THINGS TO

GRAPHICS, MODELS, OBJECTS) TO KEEP INTEREST UP.