

To: Mt. CB Research Space Design Committee

From: Ian Billick

RE: Design document update

Date: March 7, 2019

This is a draft of the final feedback from the design committee. Based upon the last call, we also wanted to capture several discussion items.

High-throughput laboratory space: We did not see a lot of demand for this in the community survey. However, we have enough unmet demand in the GRC that we are keeping this as one of the priorities for the new facility.

Fabrication space: Because of the location it is unlikely that there will be much outdoor space for fabricating materials outside, or temporary storage of materials that are being processed. For this reason, it is important that the research shop space be adjacent to the barn, and that the barn be big enough. Steve Jennison will review potential uses of the barn space to test whether 1400 square feet is enough, after including space for temporary storage of materials being processed.

Greenhouse space: The committee discussed whether it would be appropriate to have a high quality, year-round environmentally controlled facility. The decision is that given how costly this space is to build and maintain, and given current demand, it is not justified. However, there was discussion of creating a cheaper “shade” space that is a step up from the Gothic tents and weatherports, possibly on the Weese building site if that is moved to Mt. Crested Butte.

Collections: There was discussion of whether collections should be moved to Mt. Crested Butte, allowing year-round work on them. The decision was made that rather than house all of the collections in Mt. CB, it would be more practical to have a workspace in Mt. CB. If someone wanted to work on the collections in the winter, they could temporarily move that part of the collections to Mt. CB.

Recreation pressure on Gothic and research sites: While the intent of the committee was not to solve this problem, the committee indicated anything that could be done to reduce recreation pressure is a high priority. Moving as much of the Visitor’s Center to Mt. CB as possible was one identified mechanism. Other mechanisms that RMBL is exploring, and which will require collaboration with other key stakeholders, include: increasing attractiveness of recreation opportunities starting in Mt. CB (e.g., trail from Mt. CB to Gothic, public bathrooms), as opposed to Gothic and points beyond and transit center and associated public transportation to provide opportunities to manage traffic.

Housing: There is agreement that housing will be a priority and may be what limits how many scientists work at RMBL (not just the new facilities, but Gothic).

Objectives for campus (in order of priority)

1. Housing
2. Lab space
3. Reduce public pressures on Gothic corridor
4. Improve Gothic bandwidth

Objectives for research space (in order of priority)

1. Accommodate increased summer research demand
2. Telecommunications/data management hub for Gothic and Mt. CB campus, including videoconferencing
3. Support winter/year-round science, with a focus on serving field science
4. Support high-end equipment, including high throughput processing lab
5. Encourage collaboration

Research Spaces

Table 1: New Research Space				
<i>Use</i>	<i>#</i>	<i>Sq ft</i>	<i>Tot Sqft</i>	<i>Comments</i>
Research Offices	2	100	200	Two offices integrated with labs
Wet lab	1	500	500	Same as wetlab in GRC
Large shared lab	2	360	360	Same as precision techniques lab
Small shared lab	1	280	280	
GIS/data offices	3	120	360	
Server room	1	100	100	Telecommunications hub for Gothic and campus
Research storage	1	150	150	
Collection/archives	1	200	200	Reduced based upon feedback. Most such space in Gothic.
Cleaning closet	1	30	30	
Mechanical room	1	400	400	Slightly larger than GRC
Bathroom	2	100	200	
Useable space			3140	
Circulation	.3		942	
Total			4082	

Table 2: Admin, Office, and Conference Spaces
 Between these offices and the offices in the research space we would have room for 32 people to have offices. Currently we have need for about 14 RMBL staff, so this would give us plenty of room to grow and for scientists to share space. The conference rooms and lounge would be shared among all users.

<i>Use</i>	<i>#</i>	<i>Sq ft</i>	<i>Tot Sqft</i>	<i>Comments</i>
Private offices	13	75	975	Small private spaces, just big enough for desk
Shared office	3	125	375	2 people per office
Large shared offices	2	150	300	
Lounge	1	400	400	
Conference room	2	200	400	
Big conference room	1	430	430	
Storage	3	120	360	
Cleaning closet	1	30	30	

Mechanical room	1	200	200	
Shower	1	100	200	
Bathroom	2	100	200	
Copy room and mail	1	50	50	
Seminar/large space	1	2000	2000	
Useable space			5920	
Circulation	.3		1776	
Total			7696	

Table 3: Facilities spaces				
These spaces will be used for vehicles, shop space, and staging outdoor research space.				
<i>Use</i>	<i>#</i>	<i>Sq ft</i>	<i>Tot Sqft</i>	<i>Comments</i>
Barn	1	1,400	1,400*	We are doing further analysis to see if this is enough space.
Storage	1	500	500	
Bikes	1	400	400	
Research shop space	1	500	500	Wood and metal shop, power tools such as band saw. This space needs to be integrated with the barn.
Total			2800	

Design Guidelines (in order of priority, though items not necessarily exclusive)

Here are the main ideas that seemed to emerge.

1. Minimize carbon footprint
2. Flexibility
3. Promote collaboration
4. Dark skies
5. Family and pet friendly
6. Natural light
7. Outdoor space, including managing wind
8. Control noise in offices
9. Electricity is important, including having 220 Volt outlets to minimize the cost of retrofitting service as equipment is added, back-up power integrated into the building, and surge protection for equipment