This document contains the written comments on the new revision of the Eco Handbook / Construction Guide by BIB POA Board members.

From Beth Weary:

Revising the old handbook was definitely needed and I appreciate the time that Doug and Renie put into it. I feel that the new version should be made available to all lot owners before the board votes on approving it. This can be a valuable tool when building your home and members should have a say in it before the board votes on it. With that being said there are some issues that should be addressed.

Numerous times it is mentioned that you only need professional architectural drawings if the home is over 1,000 sq ft. Page 7, page 9 and page 38. Our CCR's clearly state otherwise.

CCR's 4.1

construction plans shall be submitted from a professionally licensed architecture or design firm and should bear official seal or stamp of the said firm. The plans should include all architectural, landscape design, electrical, utility, and mechanical drawings with complete specifications in order that EAB can clearly identify location, layout, materials, power source, water source, sewage disposal, and other design features of proposed structure, ancillary buildings and landscaping

Page 8 #5 topographical maps are needed In order to do so clearing of the lot will need to take place in order to see where large rocks are located and also the slope of the lot. So on page 11 it states about protecting existing vegetation and you will not be permitted to clear the lot so you can see it better. You may rake the lot but you may not cut out any vegetation without approval from the EAB. This is not in the CCR's at all. How is a lot owner supposed to know what kind of house will work their lot and where to place it if they are not allowed to clear the underbrush?

Page 9 if you own a canine consider a securely fenced yard. Doesn't that go against not disturbing the wildlife? CCR's 5.4.2

Domestic animals will be allowed in BIB but owner takes responsibility for all waste removal and non-interference with residents, flora and wildlife. Dog and cat Owners must provide proof of rabies vaccination. All pets (including cats) must be on leash when outside of the dwelling. Cats must be kept indoors so as not to disturb the wildlife

Water storage advice is greatly underestimated at 2,000 gallons for one person and 3,000 gallons for two. Should be at least 4,000 for one person and 8,000 for two people.

Page 27 humanure systems in many ways are superior to flush toilets.

Page 29 traditional septic field design is not useable. These two statements are simply not true. There is absolutely nothing wrong with a conventional septic system with a flush toilet if installed properly. There are strict protocols with a

humanure system and if not followed could easily cause health concerns. How do you enforce the proper management of a humanure system?

Page 28 minimize toxic waste by recycling. This statement should be removed.

BIB should not be responsible to ever handle and maintain toxic waste from lot owners.

From Paul Prescott:

I have reviewed the new Eco Handbook. This is a major improvement over the previous version and Doug and Renie should be commended for their work on this.

I do have a few concerns as follows. They are listed by page number, followed by the quote from the Eco Handbook in *italics*, followed by my concerns or suggestions.

- 1) Page 5: "...average annual rainfall at BIB is about 60." What are the units?
- 2) Page 6: "In fact the goals of the eco-community are to keep the environs as natural as possible by maintaining the 10' NO disturbance zone around each lot and discouraging the clearing away of natural vegetation within that border except where needed to situate buildings and such things as cisterns and solar panels." What about clearing vegetation around your house for fire prevention?
- 3) Page 8: "The project must also identify if the design goals intended to achieve eco-improvements over the conventional standards, e.g., better envelope standards than minimum energy goals, better water efficiency, etc., than most developers use." Why are we expecting owners to identify and quantify both conventional efficiency

- standards and improved goals? That seems like a lot of work with no valuable outcome. Are we going to reject someone's plans if they don't reach a certain threshold in improved efficiency?
- 4) Page 8: "Before beginning drawings, submit a proper topographical land survey sketch of the lot to the BIB EAB...". A topographic survey requires clear lines of sight throughout the lot. So if the lot has a lot of underbrush, that will have to be cleared in order for the topographic survey to be performed. I think a topographic survey is useful, however, we need to understand what that entails.
- 5) Page 9. "For structures of more than 1000 sq/ft, final construction plans for contract bid shall be submitted by the owner from a professional firm and bear official seal or stamp of that firm." All construction plans should require the approval of a professional engineer. There are a lot of lots with steep slopes at BIB, therefore all structures should be certified to be structurally sound for their lot.
- 9) Page 9. "Water storage should be no less than 2000gal for one person, 3000gal for two.". If we are going to recommend minimum water storage, it should be much higher, at least 5000 gallons per person.
- 10) Page 11. "...you will not be permitted to clear the lot so you can see it better. You may RAKE the lot, but you may not cut out any vegetation without approval from the EAB.". I agree with the general purpose of this, however, it should be examined on an individual lot's characteristics. A lot that is already sparsely vegetated would not need any clearing. But a lot that can't even be walked through without a machete should be given some leeway to thin out the vegetation so that proper planning can be carried out. Also, what about clearing vegetation for fire prevention. And is there any prohibition against a lot owner clearing all the vegetation on their lot up to the 10' non-disturbance zone once the house is completed?
- 11) Page 11 "On-Site Sanitation": Only porta-potties should be allowed. Since humanure takes at least a year until it is sufficiently decomposed, is this really a good idea? This also requires that a

- proper humanure composting bins be constructed, and inspected to make sure that composting is actually occurring and the proper conditions are being maintained.
- 12) Page 18. "Plan to use your generator as little as possible for this reason.". Generator usage, as stated in the CCR's are for emergency usage only. Using them for power tools is not emergency usage. If an owner expects to be using power tools, they should size their solar system appropriately, and not rely on using a generator.
- 13) Page 18. "Solar Power". I think we should strongly recommend that owners work with a local solar system expert to size, design, and install their solar system. That should help reduce the amount of undersized solar systems.
- 14) Page 23: "In areas with dense forest where it is necessary to cut or trim trees to get sunlight to solar arrays, several adjacent homeowners can join forces to specify a common area for solar panels.". How can this be done without violating the 10' non-disturbance zone? The lots at BIB are not set up for common utility sharing.
- 15) Page 23 "Wind Power". Add a note to consult the CCR's regarding limitations on wind power.
- 16) Page 24 "Future Possibilities". Communal energy supply systems are unrealistic and it is not the job or purpose of the BIB POA to get involved in such schemes. Those four paragraphs should be deleted.
- 17) Page 25: "A storage tank or cistern situated above your house also extends the life of your pump considerably, since it will not be forced to go off and on with every turn of the faucet." Pressure tanks serve the same purpose and are easier to install than raised platforms.
- 18) Page 26: "Fire Hydrants". If we are going to recommend this, then the actual design and fittings should be specified.

- 19) Page 27: "On many sites at BIB there is no place for waste water to diffuse. Where the effluvia is likely to migrate downhill it could end up in the reservoir when the community expands. Therefore, flush toilets are not recommended at BIB.". This and the remaining paragraphs against flush toilets are inappropriate. I think it is up to the owner to decide the best waste management strategy. Since housing plans that include septic systems are being certified by a professional engineer, that engineer is certifying that the septic system design is appropriate for the lot. For humanure and compost toilets there is no similar certification. If composting toilets and humanure systems are to be allowed here, there should be guidelines on their usage and design included in the Eco-Handbook. For example, the minimum depth for burying output from a composting toilet should be specified, construction standards for the humanure bins and their minimum maintenance should be specified, including that they should be covered due to the heavy rains that are experienced at BIB. If a humanure system is not properly maintained then blackwater from a humanure system is "likely to migrate downhill". How would you like to be a homeowner who lives downslope to an improperly constructed or maintained humanure system? We should also specify the 1 year minimum amount of time required for composting, that the resulting compost can not be used on food plants, and that all output must remain on the owner's lot. Anyone's waste disposal system should be subject to examination if complaints are received.
- 20) Page 28: "At some point, arrangements will be put into place to help homeowners minimize toxic wastes...". Again, this is beyond the scope of the BIB POA. We do not need to be storing toxic waste on site. If an owner brings in a toxic product into their home, it is their responsibility to properly dispose of it.
- 21) I suggest adding an "As-Built" review to the process, to verify that everything was completed as designed.

From Kathie Miller:

A revision of the current "Handbook" of 2010 was definitely required. A lot has been learned over the past years as a result of additional construction/building being completed. There is no doubt a lot of time, effort, etc. has been spent on this new "Handbook" and it is a great improvement. This being said, I am in agreement that ALL lot owners should have a chance to read it before the board votes on it.

In addition to the comments made by Beth and Paul, I add the following:

- To maintain consistency, the CCR's refer to an Eco Construction Workbook; therefore, it should be titled and referred to as the BIB Eco Construction Workbook.
- 2. Page 2 Creative paradigm shifts. Will everyone know what this means? Consider changing this to Creative shifts in thinking (paradigm shifts).
- 3. Page 7 The example from CBA would take preference over our CCR's; therefore, consider clarification that a firm does not have a seal or stamp. It is the individual of the firm that has a seal or stamp. Wording in our CCR's appears to be incorrect.
- 4. Page 9 Item 6) would require a correction to reflect 3 above.
- 5. Page 11 midway down the page, it states...Lots at BIB don't come with a plat plan???...is this simply a typo error?
- 6. Page 45 CCR's 4.3.6 Any removal of trees for land preparation or any other reasons MUST be done by the

- EAB building site preparation team. I do not see this anywhere in the **Eco Construction Workbook**.
- 7. Page 49 CCR's 5.4.13 & 5.4.16 Perhaps "Vendor" should be defined in the **Eco Construction Workbook**.
- 8. Very little reference to "Commercial" is mentioned throughout the **Eco Construction Workbook**.