

**Alternative Technology Review Committee
Meeting Minutes – February 28, 2008**

In Attendance:

Ed Vranizan – CH2M Hill, Architect and LEED AP
Jennifer Allen – Portland State University/BEST Center (Bio-Economy and Sustainable Technologies)
Andy Peterson – BDS Plan Review/Permitting Services Manager
Hank McDonald – BDS Plan Review Section Manager
Terry Whitehill – BDS Plan Review Section Manager
Jed Scheuermann - BDS Plan Review Section Manager
Debbie Cleek – BDS Green Building Specialist

Discussion:

Andy summarized the purpose of the meeting - to get feedback on the diagram sent to the group that showed the potential decision making path for the Alt. Tech. Committee. Andy mentioned that BDS and PSU had been partnering to do some testing for APEX blocks to see if they could be used in our seismic zone, which was a good example of what we had talked about at the previous meeting.

Debbie brought an example of an approved 2007 appeal for a house using SIPs (structurally insulated panels). To get the appeal approved, the applicant was required to design the structure 175% better than the seismic code requirement to satisfy the structural reviewer. It was discussed that structural issues surround many appeals, and that this is where it would be good to be able to look at other testing.

The group discussed the fact that the problem with the SIPs is not a “green” issue, but a structural issue. The SIPs have considerable value as a green product, but have never been tested for our seismic zone. It was concluded that many of the issues the committee will review will not be related to the fact that the product is green, but rather that it is a green product with other code issues. The goal is to find a way to allow green technologies to meet the code requirements. There are other technologies (ie. Hardy Plank) that have code issues but would not be considered by the committee because they are not green. So it will be important to establish what technologies will be reviewed.

Cob was discussed as an example. Cob is green, but it only addresses the insulation requirement. If built incorrectly, cob could create a fire hazard and someone might inadvertently create a dangerous building - so in this case it's a life safety issue. There should be a list of things you check off before approving a new product. So for insulation, for example, flame and U-value would be the issues. However, the criteria should not try to recreate the entire building code.

Debbie did a walk through to the decision making path chart. It was agreed that it matched what was discussed at the previous meeting. It was concluded that there needs to be better guidelines for what is “green”. Perhaps looking at the Natural Step's criteria would be helpful. SERA Architects also has some green criteria for the products they spec.

The question about what type of project should be allowed to enter the system was discussed. An example was presented of a recent permit where the house was going to be designed to be very green, but the applicant simply did not have enough information on the plans for BDS to review/approve the project. The applicant needed to hire an architect to help him show how the project met the code. In this example the “product” is very green, but the issue is not an appeal issue. It was decided that the flow chart needs to include a pre-step to figure out if this is the proper process for the problem. If not, then the City should work to divert the applicant down a different path to success.

Ed presented to the group a book entitled “Performance Based Fire Protection” as a good example of the process BDS is trying to create. The book included a flow chart that was similar to the one created for Alt. Tech review process. It was suggested that this might be a good model to follow for the testing piece of the process.

The ReCode List (From Tryon Creek Community Farm) was discussed. The list has some good examples, like reusing gray water. It was also discussed that the maintenance responsibility of such a system would be an important education piece for the future owners. The City may need to set up some of the training, because there is a knowledge gap when it comes to managing green buildings. The group concluded that it would be important to create a “hold harmless” or something that goes along with the deed to alert future owners that there is a unique or “experimental” system in the building.

The legal issues of the committee were briefly discussed. The State has given BDS the authority to make these types of decisions, and are pretty hands-off, as long as the City acts in a responsible way. This would include doing testing at 1, 3, 5 years after something is installed. It was decided that with in-field testing it would be good to have a cap on how many projects were allowed to use the new technology while it is being tested - so that if after 7 years we find out that the product has failed we have not approved it for a lot of projects. It was recommended that these questions be followed up on with the City Attorney.

Finally, the application process was discussed. Applicants will need to bring in good information to begin with. There is an education piece to helping applicants find the good information. The City will need to establish a checklist of what an applicant needs to provide for a successful review. We will also need to do outreach so that people will know that this process exists.

It was decided by the group that the next steps should be:

- Identify an “Assessment” box at the beginning of the process, where it would be determined if the Alt. Tech. Review is the right process for the problem.
- Contact SERA Architects to find out what criteria they use to determine if a product is “green”
- Flesh out the criteria – Identify different systems – have a variety of criteria (thermal, energy production, soil disturbance, reused materials, etc.)
- Review the information in Performance Based Fire Protection to help define when and how testing may occur.
- Follow up with City Attorney on the basic concept and the “hold harmless”

When these issues are more worked out the group will look at doing a pilot test with on of the issues on the ReCode list.