

'The best of the best' gather for green project

• Contractors are starting to give shape to a Bend couple's vision for the ultimate eco-friendly home

By Tim Doran / *The Bulletin*

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Editor's note: Tom Elliott and Barbara Scott invited The Bulletin to follow their efforts to build the ultimate "green" home, to document the project from start to finish. In this installment, the couple has moved into the construction phase.

After more than two years of designing and revising plans for their green home, Tom Elliott and Barbara Scott have started explaining their vision to the contractors who will build it.

The couple obtained building permits for the house and an additional dwelling from the city of Bend around the first of the month. Crews have started pouring the concrete footings at the property on Northwest Shasta Drive.

"We have been awarded permits ...," Scott told a group composed mostly of carpenters, framers and cabinetmakers Wednesday. "That's really huge for us. It's been over 2½ years. There's still much to do."

A dozen or so people attended Wednesday's meeting, the fourth organized by the couple, their sustainability coordinator, architect M.L. Vidas, and Jim Fagan, co-owner of the general contractor, Timberline Construction of Bend. About 100 others in the construction industry attended the first three.

To work on the project, all subcontractors must attend an hourlong orientation session to learn about the Living Building Challenge, green building standards designed to be "the most advanced measure of sustainability ... possible today," according to International Living Future Institute.

They make LEED, Leadership in Energy and Environmental Design, certification standards seem almost simple.

For example, the Living Building Challenge requires all water used



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Chris Symons sets concrete forms during the construction of the home of Tom Elliott and Barbara Scott in Bend.



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by occupants to come from captured rain or snow or from a well, or to be reused water purified without chemicals. The city of Bend has approved the couple's rainwater collection system, which will provide water for drinking and all other uses, Elliott said.

But the city rejected the initial proposal to handle all storm and wastewater onsite, another requirement.

The plan called for a two-stage system, involving a septic tank and a type of constructed underground bioreactor, a fully enclosed system using rocks, plants and soil, for the second stage. The couple plan to continue refining the idea to see if it can be approved. For now, however, the permit calls for connecting to the municipal sewer system.

Living Building Challenge requirements don't end with construction, either. Elliott and Scott must live in the house for a year to show it truly passes the test.

"Tom and Barbara are the pioneers," Vidas told the contractors Wednesday.

Only three projects have met all the requirements of the Living Building Challenge, according to the institute, which created it. All are education-related buildings, although one home in Victoria, British Columbia, received partial recognition.

"This is over and beyond what people do in the building trades, and we recognize that," Scott said.

For the builders working on Elliott and Scott's Desert Rain project, the Living Building Challenge will influence every aspect of construction.

For example, a contractor cannot simply wash out a truck onsite, Vidas explained. The activity could flush chemicals onto the area designated for the garden. No smoking will be allowed onsite.

The challenge also comes with a lengthy list of requirements for building materials. All wood must be certified under Forestry Stewardship Council standards, or reclaimed. PVC pipe is not allowed. Some raw materials must come from sites within certain geographic limits of the job site.

"You guys are here because you're the best of the best," Elliott told Wednesday's group. "You're leaders in the building industry.

"If you take this on, you're an agent of change, in an industry that's not always open to change."

The strict requirements don't exist simply to make construction difficult, Elliott said Friday. They seek to show the connection between people, their buildings and development.

"This whole process really recognizes the interconnectedness of all the elements," he said.

Despite the challenges that will surface as construction continues, however, the couple made it clear that obtaining their permits and starting construction marked a milestone.

"It's a big turning point for us," Elliott said.

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Learn more

To learn more about the Living Building Challenge, visit the International Living Future Institute at <https://ilbi.org/>.

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