

Reprinted from



February 12, 2009

This Old, Green Farmhouse

By Ken Abramczyk

A motorist driving by the Greek Revival farmhouse on Seven Mile Road would easily miss it.

The 80 acres that once surrounded it are long gone, sold and subdivided into lots for homes and acreage, all part of Livonia's suburban landscape.

The farmhouse sits closer to the road than most of the other homes, as trees that once acted as a barrier for the road noise were ripped out during the widening of the road.

Today that farmhouse, believed to have been built some time in the 1840s, is getting a green facelift.



Brian Halprin and Brad Lavey of Green Building Services oversaw the green renovation of the house

Owner Jimmy Lowe hired Brian Halprin and Brad Lavey of Green Building Services to complete the restoration.

The house, well, looked its age and Lowe wanted to do something about it. Lowe saw an article in one of the local newspapers about Halprin and Lavey.

"I knew that with the house's age, that it had no insulation, an old furnace, and the water heater had broke, and I could have tried to do it piecemeal by myself," Lowe said.

"When Brian and Brad came to look at the house last fall, I could tell from discussions with them that they were very knowledgeable about building and energy conservation. For parts of the job that I thought would be difficult to handle, they proposed several practical options."

Tearing it down wasn't one of them, especially when someone who appreciates history and architecture views the interior. The house is supported with 8- by 8-inch oak beams, maintains much of the old paneling and wood molding, along with the original stone foundation surrounding the house. The oaken beams were so solid and dense that Lowe broke two hammers trying to remove nails from them, he said.

"You can't rebuild what's in that house at any cost," he said, referring to the history of the home.

Halprin and Lavey's contractors stripped down the exterior, covering the house's exterior during the removal of asbestos siding. "The house was pretty beat up," Halprin said.

The contractors installed exterior insulation, a new roof and new overhangs.

"The venting allows for air flow, and allows for the roof to be kept cold in the winter," Lavey said. "Vents are cut into the soffits and at the ridge and you get a convection loop." That means the heat rises through the ridge vents and wind blows through the soffits, keeping the attic cool.

That helps prevent heat loss and ice buildups on the roof in the winter and keeps the house cooler in the summer.

"It's an 1840s building with a 2009 exterior," Halprin said.

The cellulose insulation is recycled newspaper, treated with a natural fire deterrent. The insulation was blown inside each of the cavities between the interior and exterior walls.

To further insulate the house, foam seal packing was used for air sealing. All the windows were replaced with low e-4 windows. The windows are coated with a material that keeps heat in in the winter and prevents infra-red rays from entering and heating the home in the summer.

The builders also used green materials, such as HardiPlank, a fiber cement siding made with cellulose fibers and cement-like materials, and MiraTEC trim, which is manufactured with environmentally preferable phenolic resins. "Both have high recycled content and are relatively low maintenance," Halprin said. Old building materials that were torn out were sent to Recycle Ann Arbor.

While Lowe and the contractors looked at saving on energy costs through a more efficient house, they also wanted to maintain the historical integrity of the structure.

Greek Revival homes typically feature a large frieze on the structure, large cornerboards, pediment and crown molding, the builders said. That frieze was maintained in the current remodeling, while trim will be painted blue to match a color used during that period.

"This house has great prominence and is an icon of the neighborhood," Halprin said.

Taking these recycling and green measures may cost a little more, but often the return on investment is about seven years. "With the way the utility rates are going, the payback could be sooner," Lavey said. "Energy modeling can determine the cost of the energy retrofit."

The builders needed to obtain a variance from the city for the front porch, which was approved. The builders and Lowe visited Greenmead to get a feel for the homes from that era.

Lavey and Halprin also conduct energy audits with an energy scanner that checks infrared readings for areas that need better sealing.

Once the home's exterior is remodeled, and the furnace and water heater replaced, the home will be checked for an Energy Star rating.

Lavey and Halprin started Green Building Services in Bloomfield three years ago.

"We thought that it's time," Halprin said. "It's a perfect time for us in our careers. We care about it and it's a chance for us to do something great in the community."

Lowe is pleased with the work.

"I'm lucky I found them. I've learned by watching them. They thought of things that I wouldn't have done with the insulation and the siding. Even though it's close to the road, it's quieter."