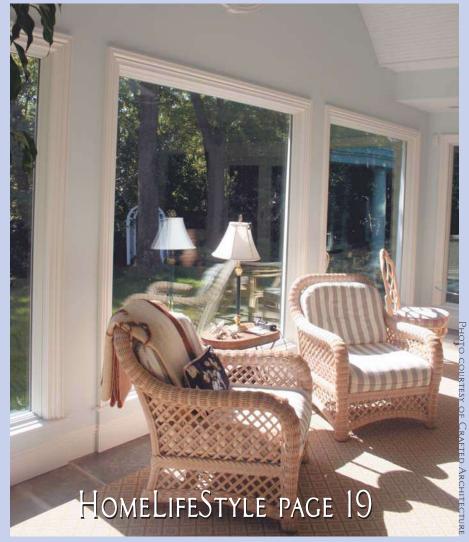
# Mount Pernon Gazette

Mount Vernon's Hometown Newspaper • A Connection Newspaper

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#### Next Generation of Green Homes

Mount Vernon-based architect Christine Kelly incorporated passive solar design into the recent renovation of the Mount Vernon home of Enid and Laing Hinson. Walls, windows and floors collect solar energy and then distribute it as heat during the winter months and shade against the heat in the summer months.

### A Towering Issue

Fed up with a lack of cell-phone coverage, residents look for a solution.

By Michael Lee Pope
The Gazette

n Waynewood, "not in my backyard" is losing ground to "can you hear me now?" Like residents across Mount Vernon, they're fed up with a lack of cellphone coverage. Unlike residents of Mount Vernon, they're supporting a resolution before the Mount Vernon Council of Citizens Associations asking for a new cell tower to be installed in their neighborhood.

"The coverage out here is terrible," said Waynewood resident Shannon Dubke. "My kids might be unable to get in touch with me if they were driving along the parkway and had an accident or broke down and didn't have cell coverage."

Not so fast, say other members of the council. Last month, the council passed a resolution supporting what many think may be a way out of the longstanding conflict between those who want service and those who oppose towers. It's a technology called Distributed Antenna Systems — known as DAS. Essentially, the technology allows existing utility poles, disguised antenna poles and short DAS poles. The resolution suggests that cell towers be permitted only if the DAS technology is not feasible.

"It's an alternative that seems much less disruptive and intrusive," said Wellington Heights resident. Eleanor Quigley. "And it's an approach that wouldn't have negative consequences on property values." But the jury is still out on DAS technology. Some industry sources say it would never work in a neighborhood setting. DAS technology is usually used in large buildings, such as the Tysons Corner Mall or the Pentagon. In some cases, it can be used in a stadium. But some are questioning

whether it would work in a place like Waynewood or anywhere in Mount Vernon for that matter.

"This is really only used in indoor settings or stadiums," said Amy Chang, a spokeswoman for AT&T. "It's not rarely used in outdoor settings."

ONE WAY OR ANOTHER, residents in Waynewood neighborhood say

they're tired of waiting. Some say they have to stay in a certain part of their houses if they're expecting a call. Others say they frequently miss calls and emails for work because of the lack

See Residents. Page 9

"It's like telephone poles or light poles.
They're not pretty, but you need them."

— Waynewood resident Brendon Harris

### Incumbent Storck Faces Challenger Nellenbach



Michelle Nellenbach and incumbent Daniel Storck are competing for the Mount Vernon seat on the School Board.

#### Five At-Large candidates participate in local forum.

By Gerald Fill
The Gazette

ount Vernon and atlarge School Board candidates tackled educational issues at the Oct. 5 forum sponsored by Hollin Meadows PTA and the Mount Vernon-Lee Chamber of Commerce.

Some of the major issues discussed at the debate included: teachers' salaries; why a declining number of Mount Vernon area students are being selected to attend the Thomas Jefferson Science and Technology magnet school, and restoring the honors (college preparatory) program to the curricula.

Candidates' opening remarks included mention of the need for a new generation of leadership on the School Board, the need to establish an independent auditor reporting to the board, discipline policy reform, and what steps are needed to improve educational outcomes among minorities and students with disabilities. Several

of the candidates pointed out that this is a pivotal election; five incumbents are not running for reelection, and the current superintendent has announced his retirement at the end of the next school year. Thus, the newly elected School Board, including at least five new members, will decide on

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### Home Life Style

## The Next Generation of Green Living

Cutting edge green home design emerges in the region.

> BY MARILYN CAMPBELL THE CONNECTION

magine a home that is so well insulated that a furnace is obsolete. Picture the elimination of rooms that run hot during the summer and basements and tile floors that are frosty during the winter. Visualize trimming your energy bill by 90 percent.

Meet the passive house, dubbed the next generation of green living, and named one of the top green building trends of 2011 by the Earth Advantage Institute, a nonprofit organization that promotes sustainable building practices.

The region's first passive house, a five-bedroom, four-and-a-half bathroom home in Bethesda, was designed by Alexandria-based architect David Peabody of Peabody Architects and built by Potomac-area builder Brendan O'Neill Sr. of O'Neill Development. The home, which sold recently, had a price tag of \$1.4 million.

"This home gets all the heat it needs on the same amount of energy it would take to run two hairdryers," said Peabody. "We wanted to demonstrate that an ap-

proach that reduces basic energy demand is far more cost-effective than an approach that relies on adding expensive technology."

The project began when Peabody, an award-winning pioneer of green architecture, approached O'Neill. Skeptical at first, O'Neill and his son Brendan O'Neill Jr. flew to Illinois to tour the first passive house ever built in the U.S.

"As luck would have it, my son and I arrived during a snow storm," said O'Neill. "We were blown away by the warmth and temperate conditions inside that house. It was incredible. We said, if this is what a passive house can do under extreme conditions, we're going to try one."

**MOUNT VERNON**-based architect Christine Kelly of Crafted Architecture and Falls Church-based contractor Tom Chapa of Potts and Chapa Construction, Inc. incorporated passive solar design into the recent renovation of the Mount Vernon home of Enid and Laing Hinson. The Hinsons had lived in their home in their Mount Vernon neighborhood for 20 years when they decided that



Photo courtesy of Crafted Architecture

**Mount Vernon architect Christine Kelly of Crafted** Architecture designed an addition for the Fairfax County home of Enid and Laing Hinson. She salvaged stone from the original home and incorporated it into the new design and used large, energy efficient windows to maximize the natural light. Passive solar energy contributes to the comfort of the home.

it was time to remodel. The couple decided

"We've always been interested in recy-

cling, and we also knew that we would be living in this house for the next 20 years, so the additional cost that we might have incurred to ensure that it was energy efficient was probably going to be worth it to us in the long run," said Enid Hinson.

"This home gets all the heat it needs on the same amount of energy it would take to run two hairdryers."

> — David Peabody, **Peabody Architects**

"[Passive solar design entails] designing walls, windows and floors to collect or reflect solar energy and then distribute it as heat during the winter months and shade against the heat in the summer months," said Kelly. "[The Hinsons] had a sun room that had a slate floor, and we took up that slate during the demolition, salvaged it and then designed a new sunroom with large windows that are facing south so that as the sun comes into the room, the floor is heated and retains heat and makes it a very comfortable space

in the winter time without the use of mechanical systems. A stone floor can be designed to collect heat

during the day and then radiate it into the room at night to help keep the space warm."

The Hinsons noticed a difference.

"As the weather got chilly and it was going down into the high-40s at night recently, we didn't have to turn our heater on at all. The house never got below 71 degrees," said Enid

The Hinsons' remodel received a National Green Building Certification from the National Association of Home Builders (NAHB) for meeting NAHB green building standards.

"A green certification is not necessarily a certification that comes with a ton of expenses," said Chapa. "The important thing about certifying a project green is building smart, not necessarily building expensive. The green inspection is basically certifying that all of the applications [e.g., windows, insulation and duct work] are done tight, efficiently and without any air gaps so that everything can perform at its optimal level."

Kelly says that when it comes to green design, she begins with the basics. "I like taking what was already in the house and repurposing it that so that a lot of materials don't go into the landfills. And then I like to move to insulating. Not only do I like to insulate the new addition, but I like to go back and examine the existing house and figure out how to make that just as tight as well."

The Hinsons were pleased that they did not have to compromise aesthetic appeal for energy efficiency. "Our house is not bigger; it is just flows better," said Enid Hinson. "The windows are really energy efficient. We have the [George Washington Parkway]

SEE GREEN LIVING, PAGE 20



PHOTO BY MARILYN CAMPBELL

**Alexandria architect David Peabody** designed the Washington-region's first passive house. The home runs on 90 percent less energy than a traditional



PHOTOS BY MARILYN CAMPBELL

The first passive home in the Washington region runs on the energy it would take to run two hairdryers, says architect David Peabody, who designed the house.

#### HomeLifeStyle

### The Next Generation of Green Living

"I like taking what was

and repurposing it that

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- Christine Kelly, Crafted Architec-

already in the house

so that a lot of

the landfills."

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closed we cannot hear the traffic noise at all."

O'NEILL SAID his one condition was that the design of the passive house be consistent and compat-

ible with the rest of the homes in the neighborhood. "David hit a home run. We would not have proceeded if the style had not fit in with the others architecturally. It is designed as an integrated system, with site, energy, ventilation, air quality, humidity, health and comfort all taken into account. And yes, you can open the windows."

Peabody, who is now designing smaller and less expensive passive house models, acknowledges that such homes are more costly to build. "But

we're finding that the marginally higher costs of construction are more than offset by savings in monthly energy bills," said Peabody. In fact, he says, affordable housing organization Habitat for Humanity is building a passive house in the Washington, D.C.,

Even though the home is airtight, it is well ventibehind our house, and if the doors and windows are lated. "During heating and cooling seasons, when you don't want to open the windows, there is an imperceptible but constant flow of fresh air to all the living spaces and exhaust air from all the bathroom and kitchen spaces. Air essentially makes a one-way

trip through the house, as opposed to being churned around and around as with standard heating and cooling systems," said Peabody.

While there are only 23 passive houses in the U.S., in Europe more than 20,000 homes, apartments, offices and schools have been built to passive house standards.

Although solar orientation is a factor, it is not the same as a passive solar house. Instead, it uses a robust building envelope to achieve as much as 90 per-

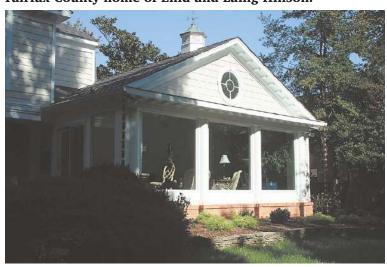
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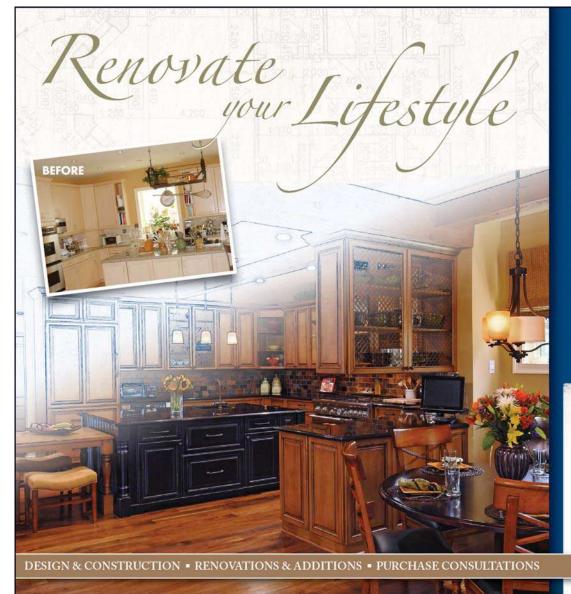
ture, Mount Vernon

While the passive house concept is still emerging, passive solar design is more prevalent in the region. Solar orientation is a factor in both, but the passive house uses a building envelope to save energy.



Fairfax County home of Enid and Laing Hinson.





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*—Ebner-Eschenbach* 

