

# WINTERGREEN

A monthly update on Steven Winter Associates, Inc.'s work in the realm of Energy Efficient, Sustainable, and High-Performance Buildings

Volume 4, Issue 10

April 2003

## *Visitor Center Will Be Green in Queens*

In Queens, New York, the **U.S. National Park Service's** Jamaica Bay Visitor Contact Station will soon be a paragon of green design and construction. Located within the Gateway National Recreation Area, the station will act as gateway to the Jamaica Wildlife Refuge beyond. The project consists of a 3,400-square-foot addition and rehabilitation of a 33-year-old existing facility, with lobby/gathering spaces, a bookshop, a presentation room, administrative offices, a resource management room, a library/conference room, rest rooms, and support spaces. The design by **Beyer Blinder Belle Architects & Planners** (with Steven Winter Associates [SWA] providing LEED consultation and energy modeling, co-funded by the National **Renewable Energy Laboratory [NREL]** and the **New York State Energy Research and Development Authority [NYSERDA]**), takes full advantage of natural light, ventilation, and views of the refuge. Skylights will maximize natural light throughout the interior spaces; solar panels will deliver domestic hot water; a trombe wall on the south façade will provide heat for the presentation room; operable windows, ceiling fans, a ventilated cupola, and wind-driven turbine exhausts will provide natural ventilation in non-air conditioned public spaces. Recycled and renewable construction materials will be used throughout the project. A ground-water heat exchange system utilizing primary and discharge wells will provide a heat sink for the building's air conditioner. A large array of photovoltaic panels is planned to supplement the electrical service. The Visitor Contact Station will not only be LEED certified (a Gold rating is the goal), but the National Park Service wants the center to serve as a demonstration project for sustainable design for other facilities throughout the entire park service system.



## *Support the War for Energy Independence*

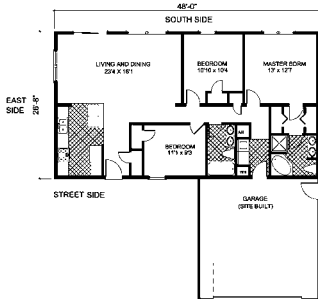
White Plains, New York will host "Energy Independence: Real World Solutions for Homes and Businesses" on Saturday, May 3, 2003 at the Westchester County Center in White Plains. The day-long conference will focus on energy reduction in residential and commercial construction through conservation, optimizing heating and cooling efficiency, renewable energy, and sustainable building design. The conference will feature presentations by **NYSERDA** and **New York Power Authority (NYPA)** staff, who will provide information about programs and incentives for increasing energy efficiency in building design in New York. Other topics of interest include an introduction to the LEED rating system, innovative technologies available to increase energy efficiency, solar and geothermal options in New York, and successful examples of green building and site design. SWA staff is heavily involved. Andrew Padian will present a residential track, "Best Practices in Home Retrofit"; Carl Ian Graham will conduct a session on the LEED rating system and the Green Building Tax Credit; and Steven Winter will present on "Green and Energy Efficiency Strategies in New Homes." For more information on the conference, visit [www.fcwc.org/confs/energy.htm](http://www.fcwc.org/confs/energy.htm).

## *Homebuyers Thirsty for More Info on Zero Energy Homes*

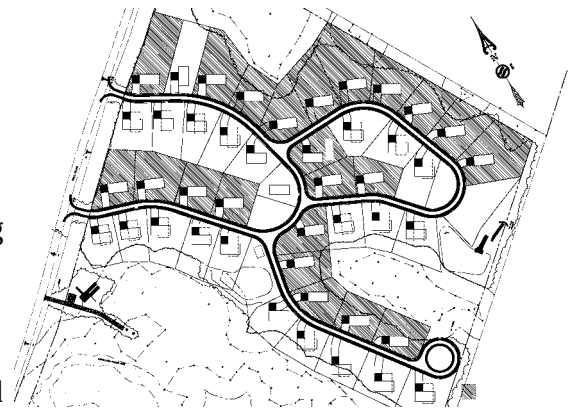
What does the public know about Zero Energy Homes? SWA recently conducted a market survey for **Mercedes Homes** of its customers to determine interest in solar hot water and solar electric systems (which are typically incorporated into Zero Energy Homes). The survey revealed that the public is interested, but wants more details. Of 200 surveys distributed to potential homebuyers by Mercedes sales staff in the builder's East Florida market, 117 surveys were completed and returned (a healthy response of nearly 60%). Most of those surveyed indicated a lack of knowledge about solar hot water or electric systems. Sixty-six percent and 54%, respectively, reported that they are not familiar with solar electric and solar hot water systems and 14% and 21%, respectively, indicated familiarity. Only 3% and 4%, respectively, said they are "very familiar" with the systems. Because many respondents indicated that they are not familiar with solar systems, but suggested overwhelmingly that Mercedes should offer the option, the need for homebuyer education is crucial. SWA concluded that the best approach to gain near-term market acceptance and penetration is to showcase solar systems on a model home, and recommended the design and construction of a model home prototype that features the solar systems to familiarize potential Mercedes customers about the technology during model home tours.



## *Passive Solar Manufactured Homes in New Hampshire*



The **New Hampshire Community Loan Fund (NHCLF)** believes that manufactured homes are the answer to affordable housing needs, and the **U.S. Department of Housing and Urban Development** wants to help. HUD, through its PATH program, is providing technical assistance through SWA on NHCLF's first manufactured home community development project. "Pepperidge Woods" is a 44-home, cooperatively owned community located in an attractive wooded site in



Barrington, intended as the prototype for future similar developments throughout the state to provide badly needed affordable housing. Supported by many funding sources, including the **Ford Foundation**, NHCLF is partnering on the project with the **Society for the Protection of New Hampshire Forests (SPNHF)** and the **New Hampshire Minimum Impact Development Partnership (MID)** at the **Jordan Institute**. As part of the effort toward minimum environmental impact, all of the homes are oriented to achieve the greatest benefit from passive solar energy through "sun-tempering" – plans oriented so that as many of the windows as possible face south and east. SWA had to develop some entirely new designs (with the main entry on the opposite side of the plan from the main living spaces, for example), where many of the homes have fronts facing north. NHCLF will offer a variety of plans, each selected specifically for the individual site to ensure that the home is sun-tempered.

For more information  
visit the SWA Website:  
[www.swinter.com](http://www.swinter.com)

WinterGREEN is published monthly by Steven Winter Associates, Inc., 50 Washington Street, Norwalk, CT 06854. SWA is solely responsible for content and cost of publication. For further information contact Michael J. Crosbie at SWA, phone 203-857-0200 ext. 210, fax 203-852-0741, e-mail: [mcrosbie@swinter.com](mailto:mcrosbie@swinter.com). Visit us at [www.swinter.com](http://www.swinter.com).