

# Environmental



## WILDLIFE CONSERVATION SOCIETY BREAKS GROUND

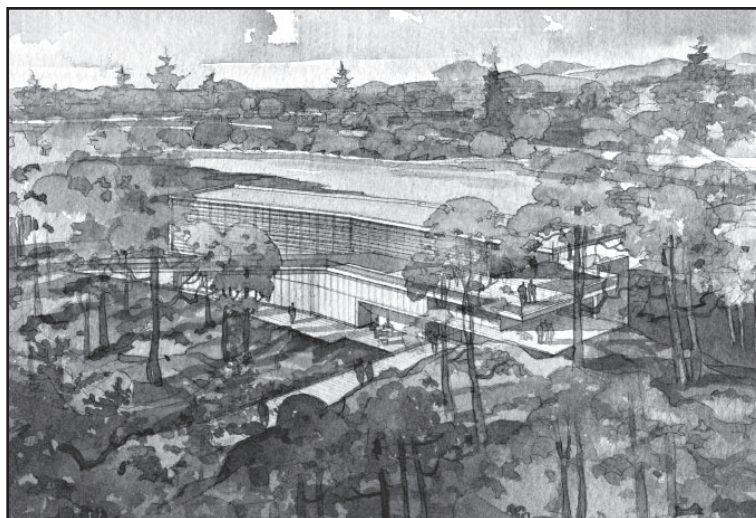
# FXFOWLE Architects to design José E. Serrano Center for Global Conservation

**BRONX, NY** The Wildlife Conservation Society (WCS) broke ground on October 16, on one of the most anticipated and exciting projects at its Bronx Zoo headquarters – The José E. Serrano Center for Global Conservation on the C.V. Starr Science Campus. This state-of-the-art building, designed by FXFOWLE Architects, PC, will physically bring together key WCS staff to shape sound conservation policies, disseminate cutting-edge information to the scientific community and share a unique depth of experiences with the public.

WCS's leadership in conservation and commitment to sustainable practices has been incorporated in this project through a "green" architectural design and environmentally responsible operations. FXFOWLE's design of the José E. Serrano Center for Global

Conservation will be a model of sustainability, in resource efficiency and environmental sensitivity, and a healthy work place for its staff.

"The new José E. Serrano Center for Global Conservation is a powerful statement of conservation through architecture," said Sylvia Smith, AIA, principal of the Cultural/Educational Studio at FXFOWLE Architects, PC. "The Center embodies the Wildlife Conservation Society's mission of preserving wildlife and wild lands and the organizational synergy of its international programs. The building merges with its natural setting, reflecting its intimate quality while optimizing solar orientation and capturing views. Efficient and right-sized systems heat and cool the building, daylighting is maximized, and renewable and recycled materials are incorporated so that the



center consumes less and while lasting longer, a true reflection of environmental, social and economic sustainability."

FXFOWLE's design of The Center for Global Conservation will

emphasize a natural relationship between the site and the facility, and will maintain the aesthetic qualities of the Bronx Zoo, with the building seeming to "grow" out of its natural surroundings. The three-story building will incorporate rock

outcroppings within the exterior walls or even inside the building. It will seem to nestle among existing large trees and blend in with its surroundings, whether viewed from within the park or outside.

The new center will allow the staff from its international programs, exhibition and graphic arts design, information technology and public affairs divisions to better integrate their distinct bodies of knowledge and expertise, and will further bridge the connection between zoo exhibits and the wild. The new facility will promote collaborative programmatic integration, not only through its physical space, but by making available the most advanced technological resources that will quickly and efficiently connect staff in New York with WCS field staff and other collaborating researchers and scientists around the world.

## Going "green" will benefit not only you, but your wallet

By Edward Winiarski,  
Optimum Applied Systems, Inc.

As the heated battle for the world's oil and natural gas reserves rages on, individuals who want to safeguard their wallets are taking steps toward ending fossil fuel addiction by drastically conserving what is consumed.

While the public in general quickly blames "gas-guzzling" SUV drivers for the high costs and dependency on fossil fuels, most people are unaware that the typical commercial office building accounts for 65 percent of total electricity consumption in the U.S., 36 percent of total energy, and 30 percent of greenhouse-gas emissions, according to published studies.

If the recent swell of crude oil prices does not push building managers to invest in energy saving technologies, perhaps the government will.

Last year, Congress passed the Energy Policy Act of 2005 to provide tax incentives for buildings that "go green." The policy calls for deductions for energy-efficient commercial buildings. The provisions allow a tax deduction for energy-efficient commercial build-

ings that reduce annual energy and power consumption by 50% compared to the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) 2001 standard. The deduction would equal the cost of energy-efficient property installed during construction, with a maximum deduction of \$1.80 per s/f of the building. Additionally, a partial deduction of 60 cents per s/f would be provided for building subsystems.

Current fuel costs, the global warming effect, energy security and common sense dictate that we should stop "gas-guzzlers," take control of our buildings and make them green.

As CEO of Optimum Applied Systems, Inc. I oversee a team of engineers who can transform any outdated, energy squandering building into an eco-friendly Smart Building by integrating an interoperable Lon Works system. The Lon protocol provides the ideal solution to complete building system integration – from HVAC to lighting, from security to elevator control and overall energy management.

The benefits of utilizing energy-saving technologies are far-reach-

ing. The New York Times explains that developers who invest the "2 to 5% [additional cost of building green]...can get higher rents and sales prices." A report to California's Sustainable Building Task Force, based on LEED (a Green Building ranking system) buildings in the State of California, states that "an upfront investment of 2% in green building design, on average, results in life cycle savings of 20% of the total construction costs – more than ten times the initial investment.

Research from the U.S. Environmental Protection Agency estimates "tenants can save about 50 cents per square foot each year through strategies that cut energy use by 30%. This can represent a savings of \$50,000 or more in a five-year lease on 20,000 s/f."

Employing Smart Building technology allows for a reduction of greenhouse gas emissions, single point control over a building's systems and cost savings. The futuristic conveniences dreamed up decades ago are now today's reality.

Edward Winiarski is CEO of  
Optimum Applied Systems, Inc.,  
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## The Verifier is the latest innovation from U.S. Energy Group to check oil deliveries

**FRESH MEADOWS, NY** The latest innovation from U.S. Energy Group is "The Verifier Fuel Gauge" — a computerized, ultrasonic measurement system that verifies oil deliveries, records oil tank inventory, and monitors oil use. The system checks the accuracy of fuel deliveries and provides both onsite and remote access to real-time inventory status and usage.

"I come at the market from my own experience as an apartment building owner," said Jerry Pindus, president of U.S. Energy Group, "and it's always bothered me that I had no easy way to verify my oil deliveries and track usage — especially given the price of oil these days. I think that both property owners and the oil companies themselves should welcome this accurate, double-check on deliveries. Plus, oil companies could greatly improve their delivery scheduling by knowing how much inventory customers really have."

Elie Jabbour, v.p. of U.S. Energy Group's Heat Controls division, said, "The Verifier has been in beta-test at more than 60 buildings for over six-months. We install it and enter the tank company's measurement chart for each building's tank in the computer. Then, in the traditional way, we 'stick the tank' with a heavy-gauge ruler and adjust the Verifier to be sure it matches. After

we calibrate the computer, the results are consistently accurate within 1/10<sup>th</sup> of an inch."

V.P. Marketing for The Verifier, Warren Zaretsky, said, "The principle of checks and balances is as American as apple pie. If truck meter tickets stating the delivered amounts are confirmed by records produced by The Verifier, then a system of checks and balances is really working. I'd like to see all the oil companies and the leading property owners' organizations get together and agree to standardize this new system of checks and balances... and while we're at it, The Verifier can virtually eliminate instances of truck meters getting out of calibration and going unchecked for long periods of time, and what's more, The Verifier can prevent buildings running out of oil because the actual balance remaining in their tanks is unknown."

Reservations are being taken for Verifier installations before the coming oil delivery season. Options are available for low oil-level and short-cycling alerts... plus boiler run-times, a fuel-use meter with day/night/and total oil gallons usage, and more.

Since 1978, U.S. Energy Heat Controls has designed, manufactured and marketed Energy Management Systems.