

# Green Remodeling An Investment In the Future

By Megan Matthews  
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## Part One: The Original “Vision” of Montecito School - Founded 1961

My parents, Molly and Jim Matthews, both loved children and believed the most important period of life were the early years. They felt that the instinctual bond and hands-on interaction between humans, animals and nature was a necessary part of each child’s development. In January 1960, my mother and father started their first preschool in Los Altos in a rented space on San Antonio Road. A year later in 1961, they discovered a charming old house on a tree studded parcel and covered in ivy, situated under sprawling 100-year-old California Oak Trees. This property located on Grant Road, with its Italian Stone Pines, Deodar and Atlas Cedars, and a myriad of animal and insect habitats, provided an ideal setting for exploration by young children. The setting reminded them of the fabled “grandmother’s house” in a little forest. They bought that property and moved their growing family into the old house. They also moved the nursery school from its San Antonio Road location to the new Grant Road property. They named this new preschool “Montecito,” which means “little woodlands” in Spanish. Montecito Preschool was then born from my parent’s core beliefs and desire to teach these values, using this beautiful natural oasis in Los Altos as a canvas.



Co-founder Molly Matthews in 1962 reading to the children at Montecito School in the first classroom...“the Green Room.”



Co-founder James Matthews sitting with the children in 1962 in the Green Room kitchen. Molly stands, passing out snacks and juice to her preschool students.

I was born in the spring of 1962 and Montecito School became my home. As I watched from my cradle, my mother and father taught the children and worked to build their student body. My siblings and I all attended Montecito as preschoolers. After several years sharing our home with the preschool business, we moved from the Grant Road property to a home in Los Altos Hills.



Montecito Class of 1967 – Megan Matthews sitting on the lawn (bottom left corner), under the oak trees with her class.

The original old house on the Montecito campus was built in approximately 1940. As the school expanded with more students, additional classroom space was needed. My father located another charming 20-year-old house for sale at the Foothill Baptist Church in 1967. He bought that house for \$100.00. Then he paid another \$3,000.00 for it to be moved down the street to add to the Montecito campus. As the school continued its growth through the 70's and 80's, once again additional classroom space was needed to house all the children. So in 1984 we added another classroom to the campus.

## **Part Two: Many Years of Nurturing Children's Bond with Animals and Nature**

Through many years of hard work, my parents watched as the student body steadily grew from the original 12 children to 348 students and 17 classes. Both of my parents went on to have careers and to become professionals in other fields, my father a real estate attorney, my mother a psychologist and child welfare advocate. My mother owns the school today and she looks back at those years of hard work, with no privacy and little financial reward, as some of the most rewarding and memorable days of her life.

Still located at its original site in Los Altos, my parents have dedicated this magnificent piece of land to generations of young children to explore, cherish and enjoy. Their legacy has touched thousands of children and their families in the San Francisco Bay community. Montecito had become one of the largest and oldest preschools in Northern California, offering preschool and drop-in care to children ages 2-6 years old. Over the many years, the wonderful Directors and teaching staff at Montecito continued to nurture and teach children about their bond with animals and nature through a developmental preschool curriculum based upon hands-on learning. My sister, Erin Mobley, has now taken the helm as Montecito's 5<sup>th</sup> Director.

## **Part Three: Going "Green"**

My husband and I are both in the construction and real estate development fields. We also are environmentalists, animal advocates and vegetarians. My husband had been adding to his credentials by obtaining a green building professional certification from [BuildItGreen](#), a prominent non-profit organization in the Bay Area. He also was pursuing his accredited professional LEED (Leadership in Energy and Environmental Design) certificate through the U.S. Green Building Council.

In 2002, we began looking at the school's buildings and facilities with an eye toward the future. Over time, after so many years in use, the school buildings had become worn down with outdated, old lighting and plumbing fixtures, heating and ventilation systems with single pane windows, and little or no ceiling and wall insulation. All the animal cages were old and in need of upgrading. We needed a plan to slowly "remodel" the campus so that it would last longer, cost less to operate, and improve the quality of the "Montecito" experience for future children, their parents, and the faculty. Within this plan we needed to reuse, reduce, and recycle in order to conserve natural resources, increase energy efficiency, add durability, and promote a healthier environment.

I approached my mother with our ideas. My mother was thrilled and immediately committed herself to these ideas. She felt that refurbishing the school using green technologies, would be a chance to make a difference in the world, and to model these new ways of "Green Construction" for the parents of the school as well as for the teaching staff and children.

So in 2002, the work began and now, after 4 years, Montecito has invested hundreds of thousands of dollars into environmentally responsible improvements and energy saving upgrades to the entire campus. There is much more to be done but these upgrades have given us a great start to improving the campus for all future students:

## 1) ENERGY USE – How can we reduce electricity and gas usage?

- Bulbs- Lighting accounted for over 30% of all the energy used at the school. All interior incandescent light fixtures and bulbs were replaced with all fluorescent fixtures and bulbs and halogen units in select exterior applications.
- Windows- In order to reduce heating and cooling costs and improve on building insulations, we are replacing all existing old single pane windows with energy efficient double pane windows.
- Refrigerators- Older units were replaced with ENERGY STAR label energy efficient units. This label denotes products that exceed energy performance guidelines for efficiency.
- Insulation – In order to reduce heating and cooling costs, we placed additional ceiling insulation with increased R-value and no formaldehyde content in the classroom buildings.
- Future Actions- Replace the water heater to a new energy efficient unit, install on-demand hot water circulation pumps. Seal all HVAC ducting with mastic to reduce energy loss and improve room comfort.

## 2) RECYCLING – How can we reduce waste and/or reuse materials?

- Recycling Program- We now have separate bins for recycling of all paper goods, cardboard, plastics, tin and aluminum products.
- Paper Products- No paper plates or disposable utensils are used for the staff, and all purchased paper goods at the school are non-bleached products made from recycled paper.
- Construction Waste- All jobsite construction and demolition waste is separated for recycling or for delivery to vendors that re-use materials and related construction products. This includes wood waste, Styrofoam, metals, rubber, etc.
- Hazardous Materials- All paint and stain products, cleaning solutions, etc., are delivered to the appropriate County agencies for proper disposal when no longer needed.
- Future Actions- A compost station will be constructed on site to provide new mulch to the landscape areas and also to improve the soil biology.

## 3) WATER – How can we reduce the amount of water used?

- Drip Irrigation- All existing sprinkler systems on the campus were replaced with drip irrigation systems to use much less water with little or no waste.
- Lawn Replacement – An existing lawn in the middle of the campus is used as a general play and outdoor assembly area for the school. The lawn needed constant watering, mowing, fertilization, and care. We replaced the lawn with artificial Field Turf. This surface has silica sand and rubber infill made from recycled tires and tennis shoe soles. It is laid on a base of open graded stone which provides a fully pervious surface that drains water back into the soil below. As a result, we have a durable, resilient and safe play area that requires no water, no fertilizer or pesticides, and no gas or electricity for mowing.
- Drought Tolerant Plants- We replaced the old landscaping with new indigenous and drought tolerant plant species. As a result we again use less water and have less maintenance with native and hardier plant selections.
- Toilets- A preschool for young children has many toilets. All the old fixtures were replaced with new generation low-flow toilets for better efficiency and less water use.

#### 4) **BUILDINGS – What can be done to improve building components?**

- Flooring- We removed carpeted areas and replaced it with laminate flooring for durability and ease of maintenance. This surface uses less wood product, has no glues, and can be reused for other locations as needed.
- HVAC Filtration- Our intake vents for each new system now uses HEPA filters with high efficiency ratings per MERV (minimum efficiency reporting value) for better removal of micro-particulates. This not only protects the HVAC equipment but primarily improves the indoor quality of conditioned air.
- Composite Wood- Many exterior decks, stairs, landings and play equipment needed to be replaced or rebuilt. Recycled-content lumber (made from recycled plastic and wood fibers) is a durable, environmentally sound option for nonstructural deck components. As a result we have a long lasting component that requires no paint or stain and contributes to reducing the pressure to harvest forests for such wood applications.

#### 5) **TRANSPORTATION – How can we reduce fuel consumption for school related activities?**

- New Hybrid Vehicle- The school purchased a new gas-electric vehicle that has low emissions and greatly increased gas mileage.
- Bio Diesel- The school work truck runs on this alternative fuel source made from refined soy bean oil, meeting ASTM standards, for a big reduction in fossil based fuel use.
- Reduce- The school initiated a carpool program for its faculty and parents.
- Donate- The school donated a 2003 luxury van to Project Purr, a non- profit cat rescue organization based in Santa Cruz County.

#### 6) **ANIMALS – How can we give the Montecito animals a healthier environment?**

- Enclosures- New custom built outdoor animal facilities were constructed on site, including a chicken coop, iguana house, rabbit and guinea pig walk-in run, a large bird aviary and indoor terrariums, fish tanks and rat and mice condos. The outdoor animal enclosures have special PVC coated open wire mesh on all sides for plenty of fresh air. The framing allows for removable vinyl sheeting to be placed in winter for cold protection. Polycarbonate roof panels let in plenty of light but block out all UV rays. The cages are also over-sized so that a teacher may share hands-on learning with the children right inside the animal's homes.
- Care- We hired a professional animal care giver who visits the animals every other day to provide organic bedding and food, fresh vegetables and fruits and even special treats from her own kitchen. We also provide each animal with an annual veterinarian health check.
- Community- We formed a partnership with the Humane Society Silicon Valley to help bring attention to our homeless domesticated animals and bring in additional animal care instruction and awareness to all the students.

We now have completed an initial round of improvements that have reduced our electrical use by over 20% and reduced our water use by over 15%. We have reduced our waste generation substantially through all the above mentioned items. All these energy efficiency, durability, safety, and conservation projects have paid off and make us want to do more. We are convinced that going “green” does not mean substandard or expensive, but actually better products and choices that positively affect all those who use the facilities.

## **Part Four: Today**

As Montecito heads towards its 50<sup>th</sup> year in business, we are thankful for the opportunity to play a part in bringing awareness about the need for individuals to make a difference in the future health of our planet. We continue to celebrate the bond between children, animals and nature through hands-on teaching by our professional and sensitive staff, and modeling environmental stewardship. Montecito abounds with flora and fauna. Children experience frequent nature study excursions, observing the abundance of native animals, insects and flora on the campus. The children are also able to touch, pet and learn about a myriad of small domestic animals at Montecito, including a flock of chickens that run free around the campus every day.

The newly refurbished campus at Montecito is beautiful, with its lush landscaping, thriving animals in their specifically designed enclosures, children snug in their well cared for classrooms, all still keeping that wonderful charm of “old Grandmother’s house.” We hope people will come by to visit us at Montecito School anytime, just to see our lovely upgraded campus and to experience the sound of the joyful children frolicking, carefree on the new “pervious artificial turf” in the center of Montecito’s native, sustainable, and intact habitat...just like they did 46 years ago.

## **Earth Day 2007**

On Friday, April 20<sup>th</sup>, 2007, Montecito will celebrate Earth Day 2007 by holding a fun family festival open to the public to join in the fun with craft tables, pony rides, games and prizes. There will be a representative from the Humane Society Silicon Valley on site to answer questions about our homeless domestic animals and to teach children proper handling of those animals. Our animal habitat and care specialist will also be there, providing guided tours of all the new animal cages. The children can pet and feed the animals. Our Facilities Manager will be there to answer any Green questions about our projects to date, and to help individuals thinking about what they too can do to make responsible changes to their home environments.

Call for information about the “Montecito Earth Day 2007 Celebration” and to get a flyer with activities and family prices. A portion of the revenue from this event will be donated to a worthy animal and/or environmental cause.