

A K-8 Sustainable School Facility: Experiential Environment-Based Education in Socorro, New Mexico

Cottonwood Valley Charter School (CVCS), established in 2001 in Socorro, New Mexico, is seeking \$1.5 million to design, construct, and equip the flagship building of a sustainable school campus. Our site plan, which includes classroom/administrative pods and the 7,500-square-foot multipurpose building that is the object of this proposal, has been designed to facilitate an experiential environment-based education. This is a community-centered K-8 school serving 170 students, whose proximity to New Mexico Tech allows for close interaction in education, including student-teaching opportunities for NMT students.

It is our belief at CVCS that we have a responsibility to our children to “lead by example”, and that “behavior leads to behavior”. For these reasons we have chosen a design which implements a harmonious integration of landscape and people with the following goals:

- Efficient energy planning for buildings
- Emphasis on harvesting of local natural resources: 95% heating from passive and active solar capacity; 100% electricity from solar photovoltaics; water conservation methods and reclamation of roof water and gray water
- Permaculture landscaping allowing the integration of school grounds into the core curriculum by creating areas for agriculture, aquaculture, and wildlife habitat for nature studies, along with aesthetic microclimates conducive to outdoor study and social areas
- Architecture exemplifying the unique building styles of New Mexican cultures

The school will demonstrate that energy efficiency and conservation can be achieved with no more than a 15% premium over current rates of PSFA capital outlay for similarly sized student bodies, with the additional capital recovered within the first 5 years of operation.

The funds awarded will support a program with a high likelihood of success due to the following key factors:

- High degree of parent involvement
- Deep commitment to experiential learning
- Outstanding natural resource base
- Strong history of efficient facilities planning
- Firm commitment to higher education/K-8 interaction
- A community-centered focus

This model education facility will be a showcase for New Mexico: a beautiful, sustainable, energy-efficient school which incorporates the natural environment and the latest appropriate technology.