## SUSTAINABLE DESIGN AND "GREEN" APPROACH

**Seth Harry & Associates, Inc. and Ruth Landsman, Architect** is a full service architectural firm, which has been designing projects of a wide variety of scale and complexity since 1992. Over the last fifteen years, we have also developed an expertise in the design and planning of therapeutic riding facilities throughout the United States. Specifically, the firm has been responsible for the long range planning and design of more than twenty full-service therapeutic riding and instructional riding programs, nationally. Our design approach for all our projects has always included an emphasis on sustainable design and "green" products and practices.

This sensitivity to "green" concerns comes from the principals' background in sustainable design and environmental engineering. Ruth Landsman was an environmental engineer for the Environmental Protection Agency prior to becoming an architect and views design issues within the context of environmental design practices, from energy efficiency to life cycle product assessments. And, Seth Harry's educational training focused on inherently sustainable design principles, technologies, and techniques -- both passive and active -- as well as sustainable community design approaches and strategies.

In the design of any new project, the first step is site planning. This is one of the most critical steps with regard to considering the effects of local climatic conditions in the design of not only the buildings, but also open areas such as outdoor arenas. For example, one can minimize cooling requirements, and/or maximize the potential for passive solar heating, through optimal solar building orientation. Or, locating an outdoor arena to the south side of an adjacent building can block north winds from late fall through early spring, providing an opportunity to taking advantage of sunny days to extend the outdoor riding season. For these reasons, all our projects go though a detailed site analysis as the first step in a design process which looks at such factors as climate zone, prevailing wind direction, soil conditions, rock outcroppings, tree breaks, natural features, existing buildings (if present), egress to the site, topography, etc., in addition to considering adjoining neighbors, easements and zoning issues.

Beyond site planning issues, there are many cost-effective design strategies which can reduce one's reliance on fossil fuel resources for energy and power. Our designs optimize occupant comfort levels through careful design of the building's envelope: Overhangs can be sized to allow the lower sun angles in winter to bring natural light and the sun's heat into a building when appropriate, yet still shield against the high sun angles in the summer. And, maximizing natural ventilation wherever possible, means less mechanical ventilation is required, or, taking advantage of natural day lighting reduces the need for artificial illumination -- these are simple design solutions that cost no more or very little to plan in advance.

We are also familiar with the LEED (Leadership in Energy and Environmental Design) point system and though it is a worthy certification program, LEED essentially just codifies the sustainable "best practices" we have been using in our own practice over the last 20 years, in creating our own high performance "green" buildings.

In short, "sustainable design" considers the economic, ecological, and social circumstances of a project. Ultimately, sustainable design conserves natural resources and maximizes human and animal comfort. Our firm promotes this philosophy and endeavors to achieve the highest level of sustainable design in all of our projects.