

'Learning Is Fun'

And Design of New Discovery Museum Appeals

By CRAIG MINOR

OPEN FORUM

There is a project underway that residents of the Shenandoah Valley should be proud of — a project that is truly unprecedented within the State of Virginia. This endeavor will serve to pique the interest of all who patronize this unique facility.

I am speaking of the new Shenandoah Valley Discovery Museum, which is slated to be built in Winchester's Jim Barnett Park. The focus of the museum is to spark curiosity and inspire learning of all ages through hands-on exhibits that focus on the Shenandoah Valley.

From a study of the current local urban habitat to a look at the paleontology of the area, the Shenandoah Valley Discovery Museum is designed with one key element in mind — learning is fun. Physics is even made to be entertaining and enjoyable through an exhibit that focuses on simple machinery found in an apple-packing shed. The museum provides a unique opportunity for a school-sponsored field trip, a family outing, or an impromptu lunch. Yes, the new museum will have its own café.

The exhibits, the café, the fact that the museum is designed for children of all ages are in its very nature appealing. However, what truly excites me about the new Shenandoah Valley Discovery Museum is the design of the structure housing these exhibits. The building itself is intended to be a teaching tool. The designers of the new museum have incorporated sun, wind, earth, water, and gravity into the plans for this innovative facility. Envision a day at the museum where, as a visitor, you are learning how the physical structure is interacting with the environment through solar, geothermal, and wind technologies.

From a design perspective the museum will be one of a kind. In fact, the building will most likely receive the highest rating offered for its sustainable construction. This accolade is known in green

building circles as the Platinum Achievement Level. No other building of this type has attained such an honor within the state of Virginia, most likely due to the strict criteria a building has to meet.

The conditions to which the museum is adhering, in order to gain the Platinum Achievement Level, are those established by the United States Green Building Council (USGBC). The USGBC has created the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, a voluntary consensus-based national standard for developing high-performance, sustainable buildings.

For the Shenandoah Valley Discovery Museum to receive the Platinum Achievement Level, 52 or more points must be scored in six categories. For example, in the Sustainable Sites category, there are seven possible points. LEED will consider the location of the museum in relationship to alternative transportation, reduced site disturbance, and stormwater management/treatment.

In the Energy and Atmosphere category, a total of 17 points can be scored, with renewable energy, ozone depletion, and green-power taken into consideration. In order to earn the major percentage of the 13 points offered in the Material and Resource category, the use of regionally manufactured and harvested building materials are of considerable importance.

Conceptually, the goal of the museum is to obtain LEED's Platinum Achievement Level; its design clearly reflects this objective.

It is true that the initial cost of construction of the new museum will be expensive. Sustainable building is not cheap, so why choose this route? Quite simply, to minimize environmental impact. Building materials, construction techniques, building operations, and building maintenance all have environmental impacts that can be minimized. Sustainable building meets the current building need while re-

ducing the impacts on future generations. This is accomplished through the integration of building materials and processes that promote environmental quality, economic vitality, and social gain through the building's design, construction, and operation.

Reduced operating costs as a result of energy- and water-efficient systems are among the many benefits which can be found in the museum's sustainable design. Climate-sensitive energy technologies can cut heating and cooling energy consumption by 60 percent. Water-efficient appliances and fixtures can reduce water consumption by as much as 30 percent or more. From a business perspective, a sustainable building can be considered an investment that will gain value over time, over and above investments at market interest rates.

The new Shenandoah Valley Discovery Museum will help to support the local economy through demand for local building materials and jobs. The museum will help in maintaining a high local environmental quality in many respects, one of which is the decreased dependence on the public infrastructure such as electrical power plants and water treatment facilities. The financial and community benefits of a sustainable building are numerous and extend far beyond the scope of those mentioned in this Open Forum.

The recent visit to my hometown was enlightening. Having always been known for its rich history, Winchester's past has created an allure that openly draws visitors to learn more of its beginnings. However, Winchester continues to further deepen this legacy by bridging the gap between past and present through its support of such a forward-thinking project as the Shenandoah Valley Discovery Museum — a place where the past truly meets not only the present, but perhaps, a large part of the future.

Open Forum is a column available to Star readers to address a subject of their choice. Craig Minor is a former resident of Winchester.