

2017

Sinatra Living: Workplan

University of Nevada, Las Vegas. Solar Decathlon Team.

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3 WORKPLAN

3.1 BUDGET PLANNING

The gross area of the home is 970 square feet. The total estimated cost for design, planning, construction, transportation, deconstruction and hauling back to Las Vegas of the UNLV Solar Decathlon is estimated as \$939,500. The cost is divided into three phases; design and planning phase, construction and transportation phase, and competition phase. The estimated cost of the design and planning phase is \$62,500. A detail breakdown of these costs is given in Table 3.1.

After the design is completed the home will be constructed as separate modules in Las Vegas and transported to the competition site. The pieces will then be reinstalled at the competition site with the help of paid student labor and professionals. The estimated cost of Phase II, Construction and Transportation is \$717,000. The cost breakdown is given in Table 3.2.

The constructed home at the competition site will be broken down and transported back to Las Vegas. The total cost of deconstruction and hauling-back is estimated at \$160,000. The detailed estimate of deconstruction and hauling-back the home is given in Table 3.3.

UNLV will dedicate resources to hire or assign a staff person to manage the budget, and keep track of orders and materials.

3.2 FUNDRAISING AND INSTITUTIONAL SUPPORT

The University of Nevada, Las Vegas has been long supported in the area of renewable energy as evident by \$1,000,000 donated by NV Energy over the past five years for education programs. Team Las Vegas is confident that with the support of various UNLV and community partners it will be able to reach a donation level at which funding priorities will be met. Team Las Vegas will work on traditional and creative methods to procure the necessary equipment and supplies to produce a high caliber home. Team Las Vegas will also rely on their UNLV and community advisors to help with fundraising efforts (see attached letters from UNLV President, Advisory Boards, and other community partners).

The UNLV Foundation is an IRS Code 501(c)(3) nonprofit organization that seeks and amanges gifts to the university. It was founded in November 1981 to coordinate all private giving for

UNLV. The Foundation solicits, receives, and administers gifts and financial resources from private sources for the benefit of all programs of the university. Gifts to UNLV through the Foundation each year provide scholarships, research facilities, equipment, and other enhancements that improve the quality of higher education. Earnings from UNLV Foundation endowment also provide a dependable, long-term source of income for the university. As a public nonprofit organization, the Foundation has members and no capital stock. The Foundation will offer a team approach to fundraising; a line of credit will be set up specifically for the Solar Decathlon 2017 in order to streamline the donation and purchasing processes.

3.2.1 Institutional Support for Integration into Graduate Education

UNLV has supported the development of the Solar Decathlon proposal submission in 2009 and in 2011 through travel funds which allowed students to visit the competition, undergraduate student worker support, and graduate student support. This support will continue if UNLV is selected as one of the 20 teams. \$200,000 will be provided to the team in the form of graduate student assistantships and undergraduate researchers who will assist in the design and construction of the home. Two assistantships will support students from the College of Engineering (Mechanical Engineering and Civil and Environmental Engineering) and two from the School of Architecture. All of the assistantships will be for the two-year period of the project.

3.3 INDUSTRY SUPPORT

Team Las Vegas will rely heavily upon various companies that provide commercial services in the Las Vegas region. Many companies that helped in the 2013 Decathlon have expressed interest in participating in UNLV's effort towards the 2017 Solar Decathlon. The team leadership has identified four major areas of the project that will need assistance; the four areas include architecture, engineering, construction, and medicine. Additionally, Team Las Vegas has also identified key companies that are suited to assist in the project and provide training to team officers and members to build, transport, and operate their home safely. These companies include Luchesi Galati Architects, NV Energy, and Bombard Electric. In addition, the Engineering and Architecture Advisory Boards and local engineering associations have shown their support for this effort (see Letters of Support).

Team Las Vegas had identified that in order to fully integrate healthcare into the house, they will need to utilize professionals and experts in the field. The Lou Ruvo Center for Brain Health has expressed interest in the project, and will be working closely with UNLV to develop the design and integrate necessary accommodations for healthcare and senior living. In addition, the School of Nursing and Allied Health Sciences as well as the School of Social Work will also begin working with architecture students in the schematic design phase (see Letters of Support).

Clearly, Team Las Vegas will have the support of the community to raise the anticipated amount of additional money needed to meet the goals of the project.