Addendum 2024

The Challenges

The competition will challenge the student teams to address the design, integration, and construction issues associated with this project. Please keep in mind that the Challenges presented have been created for the sole purpose of the Student Design Competition. Submissions should address the following challenges:

1. Modularity. The building features many similar rooms and spaces throughout and may lend itself as an ideal candidate for modular construction. Modular construction has the potential for increased speed of construction, less material waste, reduced costs, and higher quality construction. For this project, the owner has a vested interest in high-quality spaces that can be delivered on a quick construction schedule.

- Project teams should identify which components can be modularized and should clearly communicate how the modules will be tied into the rest of the building systems. A focus on sustainability and quality control should be considered and addressed by the team.

2. Building Envelope: Performance Optimization. There was a time when constructing a new facility was based simply on how many square feet the operation required. Those days are long gone. Today, successful facility development and management involves deftly understanding the importance of the building envelope, energy efficiency and local energy codes. Energy management is now no longer a “nice-to-have” but rather a “must-have” to be competitive in the marketplace. The building envelope significantly impacts a company’s energy use and maintenance requirements. It should be a top concern when looking to reduce total cost of ownership and future operating expenditures. Making the right material decisions for the building envelope is vital to any energy management strategy.

- Provide an energy model that depicts a significant improvement over IECC 2021 and ASHRAE 90.1 2019. A minimum of 30% improvement of these standards is acceptable. Additionally, ownership would also like to track the performance of the envelope throughout the lifespan of the project, particularly as it relates to IECC 2021 and ASHRAE 90.1-2019. Please provide a life cycle cost analysis focusing on the envelope.
- Ownership would like to minimize the maintenance requirements and costs with an emphasis on how daylight, thermal comfort, acoustical performance, and other environmental factors provide a competitive edge with regards to typical building practices.

3. WELL Buildings. At its core, the VA Ambulatory Care Center will serve and honor our veterans. Furthermore, the facility's role is to provide a safe, comfortable, healing environment focused on all aspect on human health and wellness. Therefore, the owner would like the WELL Building Standard (https://www.wellcertified.com/). This certification program focuses on the interaction between humans and the built environment in 7 key concepts: Air, Water, Nourishment, Light, Fitness, Comfort, and Mind. At a minimum, the design team should meet Silver level certification. Teams are welcome to expand to other certification levels, if desired.

Building Information

Omaha VA Ambulatory Care Center is a three-level , 157,000 -square-foot structure Ambulatory Care Center on the campus of the Omaha VA Medical Center providing primary care services for veterans in Nebraska and Western Iowa. The building features the VA's Patient Aligned Care Team (PACT) prototype model and includes eight primary care PACT units, one specifically dedicated to women's healthcare. There is also a specialty care unit and an ambulatory surgery suite. The facility's design promotes patient-centered environments throughout to focus on the relationship between the physical environment and the patients' overall experience.

A document with applicable codes will be provided to registered teams with the other project documents.

Competition Timeline

Student Team Registration begins	**Friday, August 18, 2023**
Student Team Registration ends	**Wednesday, January10, 2024, 11:00 pm EST**
Deadline for Written Submissions	**Friday, February 23, 2024, 1:00 pm EST**
Notify Finalist Teams	**Friday, March 15, 2024**
Finalist Presentations	**Thursday, April 9, 2024 (San Jose, CA)**

All teams may continue to work on their projects after the written submission in anticipation of possible selection as a finalist team and in preparation for the finalist presentations. The architectural engineering programs are encouraged to have competing students present their projects to their peers and faculty. It is also encouraged that they receive comments and suggestions from these individuals at multiple instances throughout the project.