

Owner's Project Requirements (OPR)

for



Sustainable Performance Requirements and Design Criteria Base & Enhanced Sustainability Versions

February 20, 2024

There are two versions of the section 4 and 6 of Owner's Project Requirements document below:

1. A base sustainability version
2. A sustainability enhancements version

1. Logistics

Type: Youth Wellness Center offering clinical services including mental health, physical health, substance use prevention, as well as supported education and employment, and peer and family support

Project Address: 1272 Beryl Street, Redondo Beach, CA 90277

Size: 9,400 sq.ft./ 2 floors

Groundbreaking: October 2024

Move in: August 2025

2. Mission/Purpose

Reinvent the Future of Youth Mental Health

This building is helping to reinvent the future of youth mental health and disrupt a mental health system that is currently unable to comprehensively meet the needs of young people. This youth-designed, welcoming space will reduce stigma, create community, and provide accessible, connected services to support the health and wellbeing of young people ages 12 - 25 in the greater South Bay.

allcove Beach Cities is the first ground-up, environmentally-conscious building in the growing network of allcove centers across the state of California. With a mission to be by and for youth, allcove Youth Advisory Group members have been decisionmakers in all aspects of the center, and they have been forthcoming about the negative impacts of environmental health on their mental health. This provides an opportunity to be leaders in ensuring sustainability is at the forefront of this project. This new construction will be a leading example of how to build in a more environmentally conscious way and produce better outcomes for the occupants of the buildings, provide cost savings over time and realize improved environmental impacts.

3. Background

Beach Cities Health District is the lead agency on the project and will be the long-term operator and owner of the allcove Beach Cities facility. Therefore, first costs and operational and maintenance costs need to be carefully considered in the design and development process.

This document is intended to help all allcove/BCHD team members work together to achieve:

- A healthier, safer and more durable building for the occupants and the broader community
- Lower first costs
- Lower operation and maintenance costs
- A more replicable, scalable system for building the allcove youth mental health model – as mentioned previously, this is the first ground-up construction for a network of a dozen allcove centers across the state.

BCHD and allcove Background

allcove Beach Cities is the first building of the Beach Cities Health District's (BCHD) planned revitalization of its 11-acre campus, known as the Healthy Living Campus (HLC) project. BCHD is making the HLC a Center of Excellence demonstration project focusing on wellness, prevention and accessibility through research, innovation and

emerging technologies. In its design, construction and operations, the campus will live up to its “Healthy Living” name and the preventive health care model of the BCHD. As a result, the allcove/BCHD project is setting ambitious goals for environmental sustainability, community wellness and cohesion, and financial sustainability.

The Beach Cities Health District is a preventive health agency, with more than 25 years of experience, and is dedicated to the wellbeing of the community through more than 45 programs and services. An example is the partnership with the highly acclaimed Blues Zones Project (the Beach Cities were certified as a Blue Zones Community in 2016) which created in the community a 42% decrease in smoking, a 19% increase in exercise and a 29% decline in overweight residents. The 2023 Gallup National Health and Well-Being Index (WBI) scored the Beach Cities 68.0, outpacing the national score of 58.2.

Another example is the partnership with Stanford’s innovative allcove model. Since opening in a temporary location in November 2022, there have been more than 5,000 visits by young people ages 12-25. More than 500 young people and their families have received free services that include mental health, physical health, substance use, peer support, family support, and supported education and employment. allcove Beach Cities has hosted more than 600 tours and 100 events, demonstrating that allcove centers can not only provide critical services, but also serve as safe gathering spaces for young people to pursue life skills and wellness offerings in a youth-led space.

4. Project Benefits and Features

The project team is looking to promote beneficial environmental and health impacts through:

Base version

- Certification – To ensure the allcove / BCHD building will be built and operate at high standards, it will be LEED GOLD Certified, WELL Certified and achieve Blue Zones Project Building Certification.
- Cleaner Air / Better Health Outcomes – Eliminating the burning of fossil fuels in the new buildings and, as much as possible, eliminating or reducing it in the construction process, sends a clear signal that health outcomes and climate change are of primary concern in this build. According to the American Lung Association, particle pollution is associated with increased mortality from all causes, cardiovascular disease, respiratory disease and lung cancer. This building has an opportunity to become a model for this type of construction and building design going forward.

- Less noise, disruption, and localized pollution – This project will utilize modular construction to speed construction time and reduce cost and disruption for the community.
- Financial Sustainability – Especially because public funds are involved, this project is not only concerned with first costs, but also ongoing operations and maintenance costs. This building will have durability built in and features mechanical systems and solar PV and batteries, which will significantly reduce the operations and maintenance costs of the building.
- Cleaner air and less congestion – EVs and electric bikes will be able to charge at the allcove / BCHD facility, demonstrating and supporting the future of mobility.
- Water savings through a water and energy recycling shower – Both water and energy will be recycled in this safe and efficient appliance installation that uses 0.5 GPM Circulating with a 1.8GPM flow rate.
- Eliminate ocean runoff from the site – Rainwater picks up air pollutants, automotive oil, animal feces and other toxic elements, then dumps them into the ocean through storm drains. allcove / BCHD will be a model for how to retain stormwater and use it for irrigation or percolate it back into the aquifer.

Sustainability Enhancements

- Certification – To ensure the allcove / BCHD building will be built and operate at the highest standards, it may be LEED PLATINUM Certified, WELL Certified and achieve Blue Zones Project Building Certification.
- Community Resiliency – The solar PV and batteries on this building will provide resiliency for the community in the event of an earthquake or other emergency. Neighbors will be able to find a place to charge their phones, gain access to WiFi a refrigerator for critical medical needs and maybe even charge their EV.
- Reduced noise, vibration and air pollution during construction – This project will provide a case study for how modular construction and all-electric construction vehicles can be deployed for less community disturbance and localized pollution, and more community health and wellness during construction.
- Landscape irrigated from rainwater – The facility will collect and store rainwater sufficient to irrigate and maintain a native, drought tolerant, but beautiful and lush landscape.
- Lower carbon footprint – Through the use of innovative materials and technologies, like low-carbon cement, all-electric construction, variable speed

heat pumps and load shifting insulated thermal mass, allcove/BCHD strives to make a beneficial impact on building construction standards and practices.

5. Operational Cost Efficiency/ Durability/ Sustainability

- Beach Cities Health District is the lead agency on the project and will be the long-term operator and owner of the allcove Beach Cities facility. All projects must strive to reduce operational and maintenance expenses in addition to reducing capital expenditures.
- The building should have a robust thermal envelope with advanced insulation and air sealing.
- The building should maximize opportunities for passive heating/cooling and ventilation, as well as natural daylight.
- The building should maximize renewable energy opportunities and the roof should be seen as “the engine of the building” where roof obstructions and shading are minimized.
- The building will be designed and built with *no* natural gas.
- The project should maintain healthy indoor air quality. Interior materials should be selected that prioritize human health and well-being.
- Building systems should be simplified and streamlined and maximize efficiency and be easily replaceable. Focus on first-time, operational and ongoing maintenance costs.
- Materials should be selected to maximize the product warranty and reduce replacement costs.
- Utilities should all be metered to create the occupants’ sense of ownership in efficiency and conservation.
- Products used will meet the specification requirements to comply with the Inflation Reduction Act tax credits and rebates.
- The building, using an area-weighted average, shall meet the below envelope properties at a minimum. These are based on Title 24 Part 6, 2022.
- The building shall achieve a window-to-wall ratio lower than 40%.
- The building shall achieve a skylight-to-roof ratio lower than 5%.
- The building requires an air barrier.
- The building envelope shall be designed to prevent water leaks during both normal and extreme rainfall events.
- The building facade shall be designed to keep out any moisture that will degrade building elements.
- The building envelope shall achieve a low air leakage rate, less than 0.40 cfm/sf at 0.3 in of water.
- The envelope shall be designed to limit exterior noise entering the building.
- The building shall prioritize natural daylighting to reduce electric lighting usage.
- The building shall make use of natural ventilation through operable windows.
- The building enclosure shall be designed to be durable, so that it lasts as long as possible.

- Low maintenance materials should be prioritized and specified.

6. Metrics

Base version

1. EUI (energy use intensity/sq ft): **EUI is 10.54 kBtuh/sqft (with solar 37kW PV included). With solar PV *not included*, the EUI is 58.70 kBtuh/sqft**
2. Window to wall ratio: **27%**
3. Wall, window, roof and floor insulation R values:
 1. **Walls: R-21, assembly U-factor 0.072**
 2. **Windows: see below**
 3. **Roof: R-38, assembly U-factor 0.039**
 4. **Floor: no insulation raised slab, U-factor 0.730*****
4. Window and door U values:
 1. **Windows: double pane clear glass with thermal break, NFRC-rated, U-factor 0.55, SHGC: 0.69, VLT: 0.83**
 2. **Doors: opaque doors modeled as U=0.70, glass entry doors modeled similarly to windows: double pane clear glass, U-factor 0.55, SHGC: 0.69, VLT: 0.83**
5. HVAC system size and type: A combination of VRF heat recovery systems (16tons total cooling capacity) and electric rooftop package unit (6tons total cooling capacity)
6. Hot Water type: Heat pump water heater
7. Ventilation and air quality standards: **Per Title 24 (which is largely based on ASHRAE 62.1). Zone ventilation obtained from the Ventilation Schedule, sheet M-0.3 on the prelim M&P set.**
8. Lighting standards: **Per Title 24 prescriptive requirements for Area Based Categories. The prelim energy model assumes an average of 0.75watts/sf for the entire building (some areas are higher, some are lower). Controls are also per Title 24 prescriptive requirements and include, as required by given area/application: dimming, manual control, automatic/occupancy-based control, daylight harvesting, and demand-response capable.**
 - Minimum Sustainability/Certification: LEED GOLD, WELL, Blue Zones Project Building Certification
 - Annual Opex Target:
 - Water Efficiency: water consumption of X gallons/person/year

Sustainability Enhancements

1. EUI (energy use intensity/sq ft): **EUI is 0 kBtuh/sqft (with solar ?kW PV included). With solar PV *not included*, the EUI is 25 kBtuh/sqft. Include battery storage sufficient to island through the night.**
2. Window to wall ratio: **27%**
3. Wall, window, roof and floor insulation R values:
 - a. **Walls: R-21, assembly U-factor 0.072**
 - b. **Windows: see below**
 - c. **Roof: R-38, assembly U-factor 0.039**
 - d. **Floor: insulation under slab, U-factor ??? *****
4. Window and door U values:
 - a. **Windows: double pane clear glass with thermal break, NFRC-rated, U-factor 0.55, SHGC: 0.69, VLT: 0.83**
 - b. **Doors: opaque doors modeled as U=0.70, glass entry doors modeled similarly to windows: double pane clear glass, U-factor 0.55, SHGC: 0.69, VLT: 0.83**
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 - Minimum Sustainability/Certification: LEED PLATINUM, WELL, Blue Zones Project Building Certification
 - Zero Net Carbon (operations)
 - Zero Net Energy
 - Annual Opex Target:
 - Water Efficiency: water consumption of X gallons/person/year

7. Grant Requirements

As a reminder, an overview of the key grant requirements is included below:

- Utilize the allcove Facilities Guide, Experience Playbook and Environmental Guidelines.
- Comply with the Behavioral Health Continuum Infrastructure Program requirements for the allcove Beach Cities project and acknowledge that the State of California and its contract manager, Advocates for Human Potential, Inc. are relying on this information in awarding and disbursing Program Funds.
- General Contractor shall certify that all construction work performed on the Project shall comply with California Labor Code Section 1720 et seq. and require the payment of prevailing wages.