Common House with Community Kitchen for the Domes

Location: Baggins End Domes Sustainable Living/Learning Community (SLLC), UC Davis, California

Organization/Client: Solar Community Housing Association,
Ben Pearl and Kaitlin Oki

Project Background:

The Baggins End Domes is an affordable, cooperative housing community of 26-residents, one of the Sustainable Living Learning Communities (SLLC) in the Orchard Park neighborhood at UC Davis. The Domes were built in 1972 by UCD students, and are the oldest (if not the only) student-built co-housing community in the US. The Domes celebrated their 50th anniversary in 2022.

The SLLC is a group of programs on the UCD campus linked by geography and centered on shared values of Sustainability, Community, Experiential Learning and student leadership. The Solar Community Housing Association is a community-supported, 501(c)(3) non-profit organization that owns and operates affordable housing cooperatives in Davis, and serves as a manager for the UCD Domes and Tri Co-op communities.

Project Problem Statement:

Shared meals and shared cooking are cornerstones of the cooperative living experience. While each Dome has its own (small) kitchen, the community lacks a kitchen with sufficient capacity to cook together. A new Common House for the Domes should include a community-scale kitchen and bathroom, and may include additional housing/shared living space (i.e. private bedrooms, indoor/outdoor dining area, laundry facilities, tool storage). As for all new projects in the SLLC, the design should consider ADA accessibility and parking, as well as sustainable design elements such as solar & rainwater capture and wastewater recycling.

Suggested Project Goals and Objectives:

1. Assess Community Needs
    - Conduct a study on community needs and interests
    - Work with the client to determine design criteria
    - Perform prior art on common house/community kitchen design
2. Produce Site Plan/Inventory
    - Compare potential sites within Baggins End for the placement of the common house considering ideal solar exposure, connectivity to existing infrastructure, outdoor common space(s) and preservation of existing gardens.
    - Assess water supply, and scope out greywater treatment and re-use
3. Create Conceptual Design
    - Include accessible ground floorplans;
    - Include shared living and kitchen facilities;
    - Include sustainable building elements (i.e. solar & rainwater capture and wastewater recycling.)