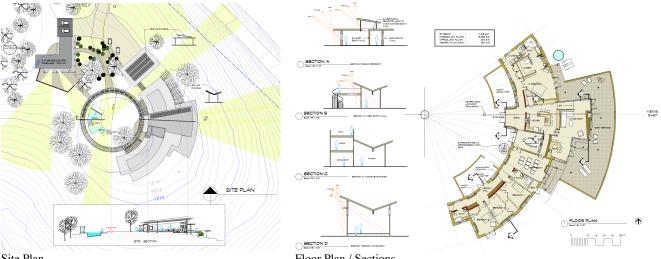
## E[360]: Full Circle Living

Paso Robles, CA Marilyn Miller Farmer, AIA, LEED AP

Integrated, intergenerational living / working in balance with nature was the directive for this project. The clients, who work from home, living with extended family including two children, and both grandparents wished to create a family compound that would support their combined lifestyles, capitalizing on the dramatic location and preserving the natural environment for future generations. They were particularly interested in healthy, elegant and efficient design to suit the Mediterranean climate while focusing on 360 degree views, the most spectacular of which is the downtown Paso Robles City Park and 12<sup>th</sup> Street axis.



Focus on connections to natural environment and central Paso Robles.



Site Plan

Floor Plan / Sections

The multifamily residential work/live compound concentrates development on a small portion of the site, at the keyline of the western foothills of Paso Robles, saving the majority of the site as natural habitat. A central courtyard is shared and defined by a circular trellised walkway with solar panels to heat the pool and spa as well as to grow grapes.

The 3800 s.f. home is to be constructed using energy-efficient, environmental materials including:

- ICF, steel beams,
- Exposed interior FSC glulam beams,
- Recycled urban forestry roof decking,
- Metal roof in east-west oriented main living,
- Strawbale walls with FSC wood monitor lanterns for north and south bedroom wings,
- North-south rammed earth mass wall defining the main circulation spine, and
- Exposed, stamped concrete floors extending out to west courtyards and east terrace.



Interior spaces flow out to exterior spaces in all directions, expanding and connecting living with the beauty of the location and natural environment. Solar panels are integrated with the graceful butterfly roof, to gather rain and transport through an artful gargoyle downspout into entry cistern pool. The focus and axis of the butterfly roof defining the main living spaces aligns with the main axis and center of downtown Paso Robles.

Extensive solar modeling during schematic design fine-tuned the orientation to allow solar heat gain in winter months, and omit solar gain in hot summer months where a combination of cross-ventilation via the raised lantern roofs, deep overhangs, trees for shading work with interior mass of concrete floor and rammed earth spine to negate the need for mechanical air conditioning.



## **Energy/Resource Efficient Design Features:**

Solar gain south windows, min. north & shaded west openings Grid-tied solar PV system On-demand water heaters Cisterns for rain catchment/ water recycle Solar heating for pool Grid-tied solar on-site energy generation Low flow toilets/water fixtures

## **Environmentally Conscious, Healthy Non-Toxic Materials:**

Exposed concrete interior mass floors / exterior terraces Reclaimed urban forestry wood Recycled flooring for interior baseboard trim Insulation: Recycled cotton batt insulation Cellulose insulation Rigid insulation Rammed earth interior and exterior walls Recycled plastic lumber decking Water-based low VOC clear wood finish No VOC interior paint Biofiber composite agriboard - built-in shelving Recycled glass terrazzo bath tiles On-demand water heaters Light dimmers Construction waste recycling

## <u>Credits:</u> Architect:

HabitatStructural Engineer:Craig DoContractor:SemmesEnergy Consultant:JenniferPhotographs:Habitat

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