



deliberately been limited to the width of a single room to ensure both optimized environmental connections as well as reduced spans for primary structural elements. Exterior cladding is envisaged as timber siding, alternating in vertical and horizontal directions for adjoining dwellings.

Roofing is envisaged to be membrane on plywood, and covered with removable timber decking to create supplementary outdoor living space for residents above, as well as providing a considerable cooling benefit by shading exposed roofs. All timber is to be Forest Stewardship Council certified to ensure best practice sustainability and LEED accreditation.

A passive approach to environmental sustainability ensures the lowest possible carbon footprint for the community. Energy consumption is reduced by the use of solar hot water systems and optional roof mounted photovoltaic solar arrays. The distributed site planning, ensures that at least one dwelling provides the ideal solar orientation for photovoltaic systems, and subject to operational efficiency, provides an opportunity for a zero net energy goal.

The scale of the community generates a critical mass in the feasibility of ground source heat pump systems for distributed heating and cooling requirements. The unbuilt upon terraces adjoining Bahia Drive provide the ideal opportunity for a ground source heat pump system to be installed, with agricultural plantings above. Proximity to the waters of the lower Petaluma River provide further opportunities for energy efficiency within the heat pump system.

Stormwater harvesting and retention play a key role supporting and enhancing the landscape character of the sites. Significant quantities of both individual and communal rainwater storage are envisaged to provide the means of fire suppression within the community as well as meeting irrigation requirements for dwellings, agricultural uses and communal landscaping needs. The scale of the community provides excellent opportunities for grey water re-use in both interior (laundry) and exterior (garden) operations.

Agricultural plots 1-8, along Bahia Drive. Profiting from the existing terraces to provide flat land for agricultural uses compatible with a senior demographic. Agricultural market stall conveniently located at the midpoint of the Bahia Drive street frontage.

Community center (optional according to budget and project staging).

Community amphitheatre/moonlight cinema (contours existing, cost for screen/stage according to budget and project staging).

Community park & playground, at entry to Misty Court site. Although this is a senior housing community project, the inclusion of a children's playground is to provide facilities for visiting family to encourage more frequent intergenerational contact.





