

## LOOM HOUSE

One of the most sustainable residences in the world.

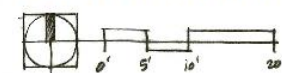
Targeting Living Building Challenge certification through net positive energy and water, food production, and a strict Red List materials requirement. Loom House became the first residential remodel in the world to be certified as a Living Building.

A pollinator garden over the former driveway is underlain by a 10,000 gallon rainwater catchment system and septic treatment tanks. Captured rainwater and treated septic effluent provide the majority of irrigation water needed for the dry Seattle summer.





## SITE PLAN







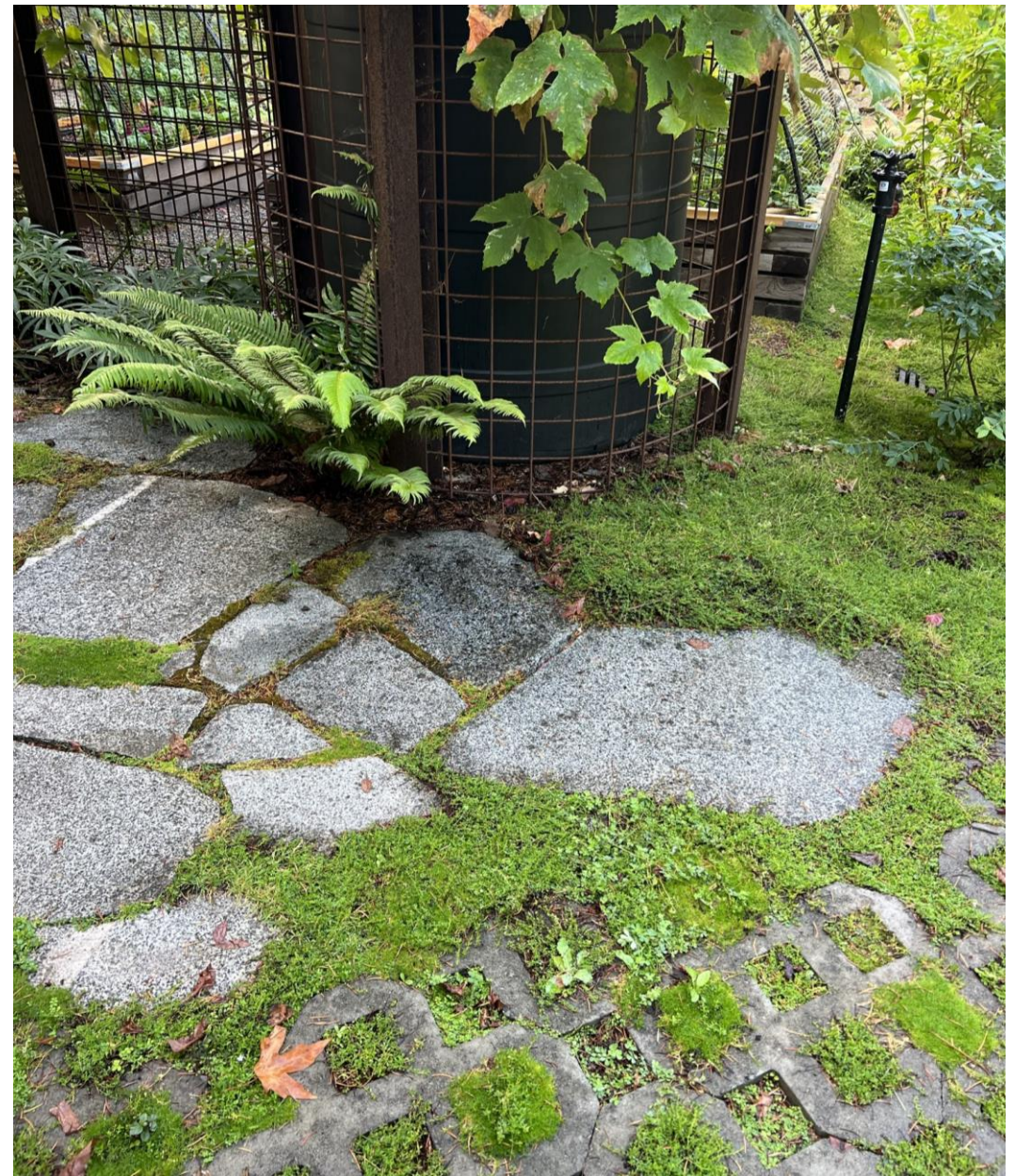
Located on a bluff overlooking Puget Sound, Loom House site is dominated by a canopy of large native evergreens, under which a new sustainable garden was developed.





Views across Puget Sound toward Seattle and the Cascade Mountains are enjoyed from indoors, the cantilevered deck outside the main living area, and from various garden spaces throughout the site.





At the site entry, above-ground rainwater cisterns are filled with runoff from the carport roof. Cisterns are wrapped in steel mesh and planted with grapes. The veggie garden is to the left of the mesh fence, along the quiet lane. A community berry bramble can be seen across the driveway. Local Cascade granite with planted joints was used for pedestrian paving; driveway is Turfstone, with openings planted with drought tolerant creeping plants.





A welcoming portal between two mature Douglas Fir trees help direct visitors to the new primary entrance. All existing trees were carefully protected during construction.





A new elevated walkway built of reclaimed wood leads to the new primary entry; the bridge spans over the landscape, minimizing disturbance to tree roots.





New plantings included a variety of deciduous trees and shrubs that provide a colorful contrast to the evergreen backdrop in the fall.





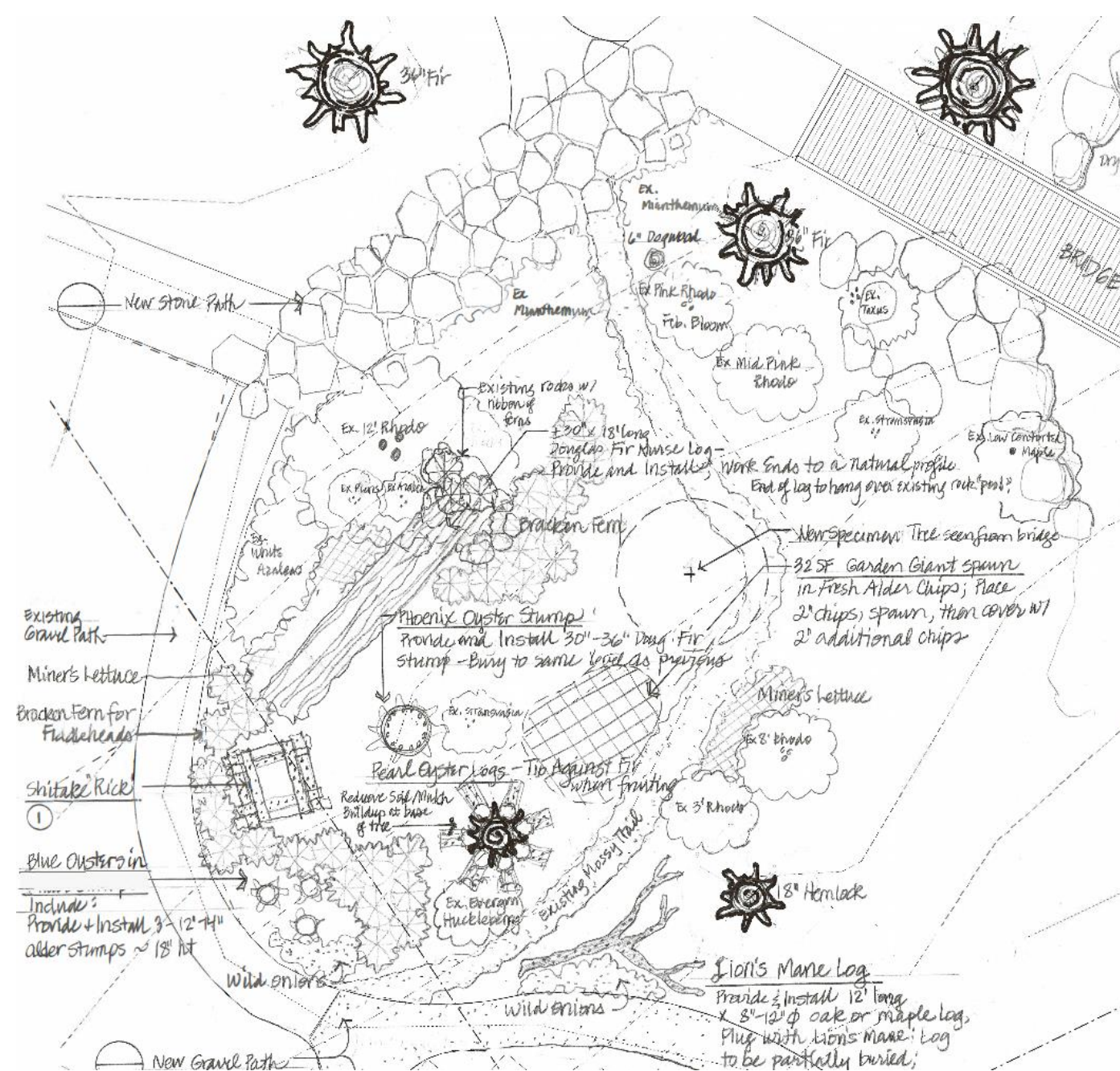
New deck of thermally modified wood links the main residence and studio building to the north. Sliding doors open wide at both buildings, blurring the line between indoors and outdoors, providing a wonderful space for entertainment and outdoor living.





Forest Garden is nestled under the canopy of native trees and provides a quiet, reflective space to relax away from more active areas.





Creating a mycological foraging forest under the canopy of the native evergreen trees helped meet the urban agriculture requirement of the Living Building Challenge.





**LOOM HOUSE**



## **NEW FROM OLD**

The Living Building Challenge begins by asking : *“What if every act of design and construction made the world a better place?”*

The Loom House project can serve as a sustainable, alternative model to inspire and encourage other homeowners to renovate (not remove) outdated/degraded existing homes and revivify their gardens and landscapes, giving them new life. This approach can help reduce the environmental impacts of residential design and protect and improve the ecology of the landscape in a changing world.