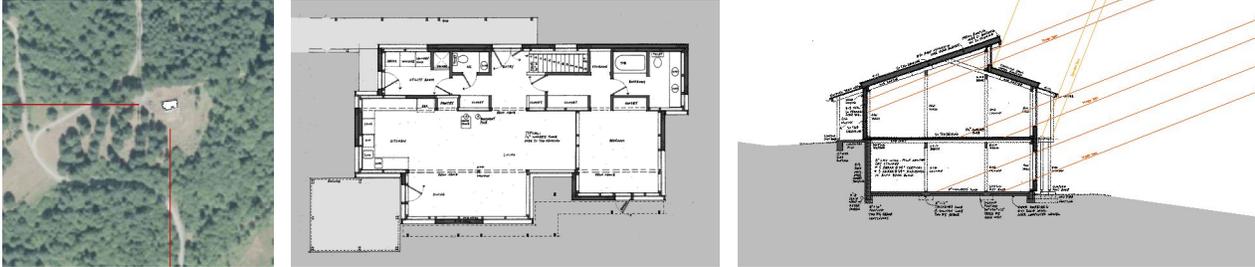




Lockwood Creek Residence, Clark County WA
Brent Hinrichs : Designer



SITE & PROGRAM

The site of this project is in a clearing on a south-facing hillside in a wooded rural setting. This area of conifer forest was thinned a number of years ago but there is a solid zone of mature trees bordering the site. The program included a home and a detached garage which was to be incrementally self-built by the owners and their family. The construction was designed to utilize directly exposed natural materials and finishes at the interior to alleviate chemical sensitivities. The construction is set into the slope taking advantage of the solar access on both floor levels, and through the clerestory at the roof section.



MATERIALS & CONSTRUCTION

The foundation walls are built of dry stacked concrete block. All of the concrete block cores are fully grouted, include steel reinforcement, and rigid insulation is attached to the exterior both below and above grade. This provides some amount of thermal mass for solar gain heat storage. The 4x timber frame is built of site fabricated wall frame panels coordinated to the concrete block module. The basement floor is a concrete slab, while the upper floors are constructed of 4x timber beams and 2x tongue & groove planking; with a concrete topping slab planned for some areas. The exterior walls also use the 2x planking attached to the exterior face of the 4x framing. An insulated 2x wood construction is hung outside this planking at the walls, and built above the planking at the roof section.



The operable windows and doors are stock units. Internally the wood frame, planking and concrete block are all clear finished. The external surfacing consists of metal panels over the rigid insulation at grade, wood board & batten siding and trim at the wood construction, and metal roofing. Wood stoves at each floor level provide heat supplementing electric resistance units, and an electric heater provides the domestic hot water.