

## **Project Information: Mouse Ranch Home, Skagit County, 2300 sf on 2.5 acres**

### **Design Program**

The client has Multiple Chemical Sensitivities. Location had to be somewhat isolated with clear air, per report by NW Clean Air Agency. It needed to be one level, to “age in place”, accommodate 3 generations of family, lots of books & art, at the same time with energy efficiency with totally non-toxic construction materials. The home should take advantage of the “big sky” views in Skagit valley. Principles of Feng Shui good health should be used. And...it had to be relatively inexpensive and simple construction.

### **Design Solution**

The home qualifies as Platinum Energy Star & LEED Certified Home. This is a net positive energy home. The average annual energy production is 5,543 kWh, and consumption is 66% less at 1,878 kWh. 100% non-toxic materials were used.

#### **Energy & Non Toxic Strategies include:**

- \* Heat Recovery Ventilation for constant fresh air.
- \* Electric Heat Pump for radiant heat and DHW, Passive cooling systems.
- \* Efficient Windows w/ “Suncoat Max Low E3” glass reduce UV rays by 84%
- \* Above code Insulation w/ non-formaldehyde wool insulation.
- \* Hydronic Radiant Heat; up to 50% more efficient than convection-based systems.
- \* Photo Voltaic Solar Panel System
- \* Insulated window shades
- \* Water Filtration systems & Lo Flow water fixtures
- \* All LED light fixtures reduce energy lighting consumption by 80%.
- \* Construction uses no Volatile Organic Compounds & are Formaldehyde-free.

#### **Home Design:**

- \*All windows are focused to the west view with higher angled roof to open up to the “big sky” desired. A semi-circular fence protects container garden from strong south winds, close to the kitchen.
- \*The floor plan modified to include changing family dynamic with Grandparents, Parents and Grandchild to live together.
- \*The site allowed this to be single level, and spaces were designed to accommodate future aging in place requirements.
- \* A semi-circular fence protects container garden from strong SW winds.
- \*To accommodate the cost of the strategies listed above, a very simple construction material and plan layout, with standard components, were dictated. Roof eave soffits were enclosed to prevent nesting birds and insects away.

*It's called the Mouse Ranch, because, the open fields around the home, has many, many mice, glad to feed off nearby barn animal leftovers. Low groundcover, near the home, keeps them away. ;)*



Mouse Ranch Site Aerial

Open Grass Field

Drain Field

Driveway

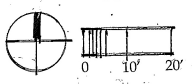
Mouse Ranch Home

Five ft Recess Terrace

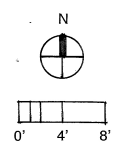
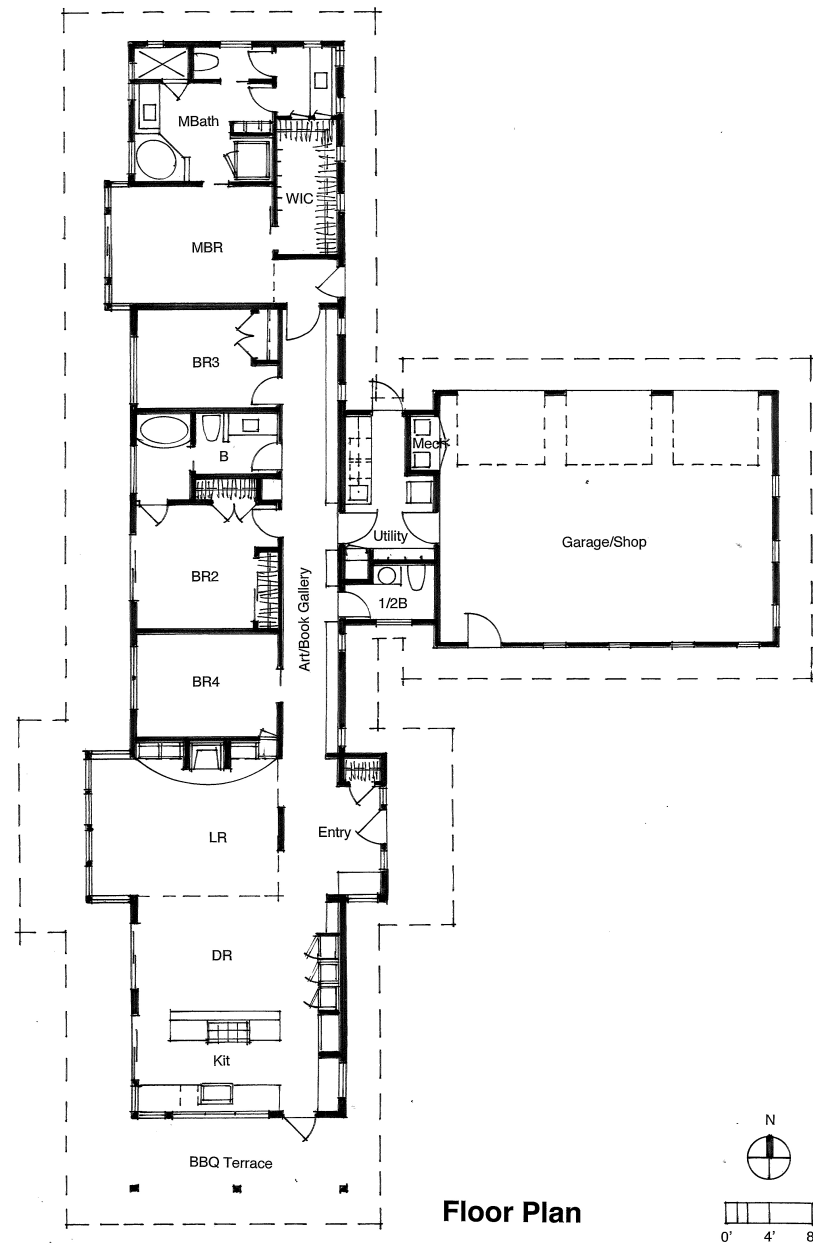
Terrace

Gardens

Private Road



Site Plan



Floor Plan







































