



# Home Addition

## In Search of Space

Located on a beautiful hilltop overlooking a wooded valley, our clients wanted to change their plain 1959 house into a home that reflected their daytime and nighttime passion for the outdoors and space. This desire for “space” was twofold: more actual living space and a desire to gaze into Space (the nighttime sky).

Our project was flavored with an unusual wish list due to our client’s NASA connection and her desires for new products and techniques. Though the house still has its foundations in the soil, it now reaches towards the sky.

The program called for larger and more dramatic spaces on the inside and the outside. The house’s basic form is a low-sloped roofed single story home with a full walk-out basement to the rear. Our in-house design team created a multiple level addition at the back of the house and remodeled the adjoining interior spaces.

As seen in the top photo to the right, the house now displays multiple angles in both plan and elevation due to orienting the main level spaces to the best views on the site, and creating a privacy block for the hot tub on the outdoor deck.

What started as a light-hearted joke by our client: “Can you put a star deck on TOP of the house for me while you are at it?” became a challenge for our team to make it a reality. That can be seen at the photos on this page and the next— an addition that completely takes advantage of the site while granting our clients’ wishes.



*The rear elevation is all new with multiple levels a ‘winged’ roof plane. Note the rooftop star-gazing deck.*

*The old rear elevation can be seen as framing begins*







*Two levels of decks are oriented to the incredible views of the horizon and the sky above. All decking is made of Ipe. Railings made of Ipe and round aluminum balusters.*



## Main Level Expansion

The enlarged living room, showing the angled walls and the deck beyond

The window that did not change location is highlighted in both photographs.



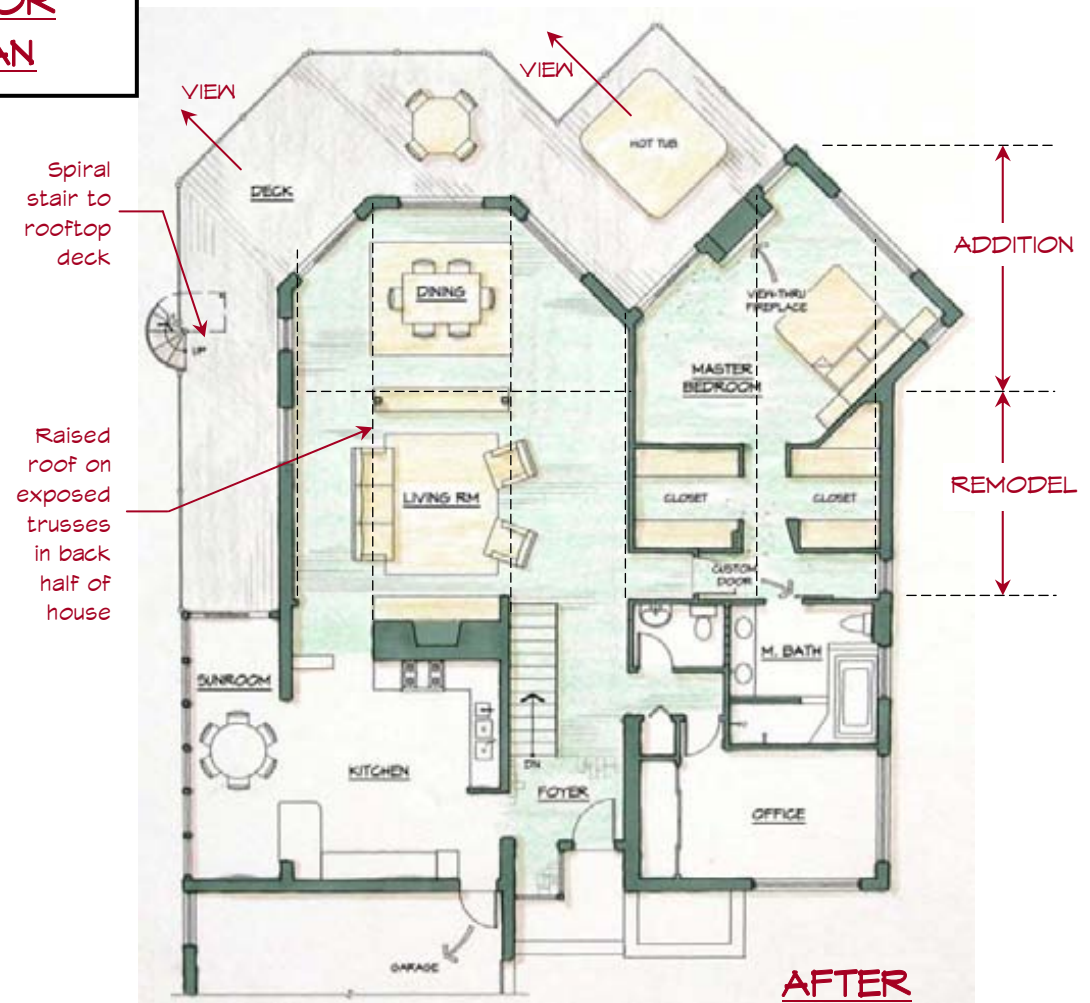
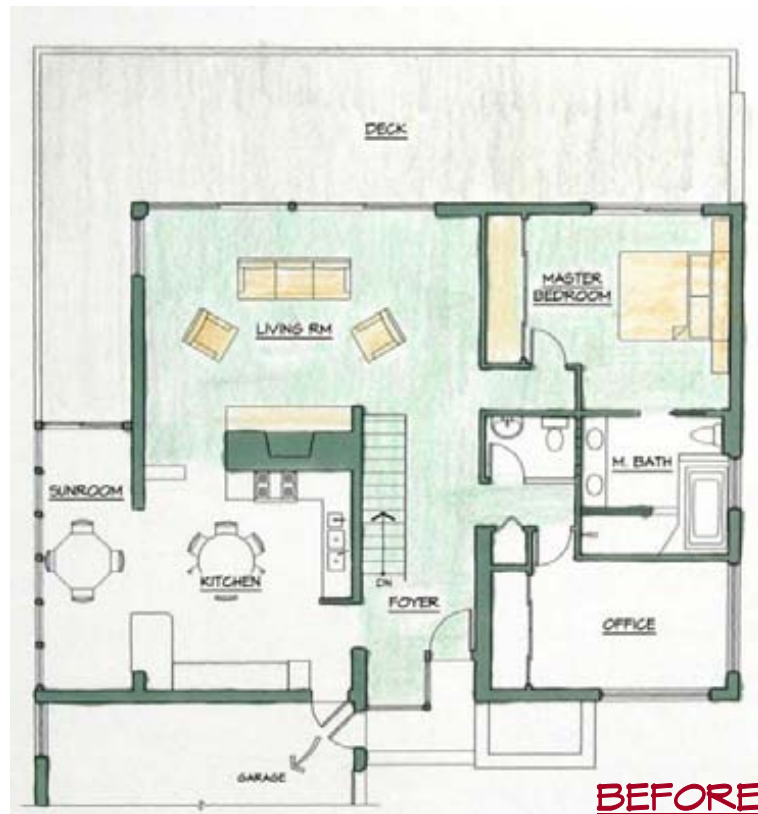
While there was some space added to the lower level, the main level was the primary focus. Our client's wish list:

- Enlarge the living room, raise the ceiling, and create a 'wow' space.
- Enlarge the master bedroom, adding a fireplace, a skylight and an outdoor hot tub.
- Add more daylight in these spaces, improve natural ventilation, and orient them for views.
- Add a large outdoor deck.

The additional space beyond the living room was created as a dining room with a low bookcase as a separation. Angled walls were introduced to the house to allow the view to be shared by multiple spaces. This alignment to the view was enhanced in the master bedroom by aligning the bed with an indoor-outdoor fireplace and a hot

tub located just outside of it. Both the bed and the hot tub enjoy views to the fireplace as well as the treetops beyond. We then turned our attention to how would extend the existing roof over the addition, raise the ceiling, and increase daylight and ventilation. We creatively decided to raise the roof

### MAIN LEVEL FLOOR PLAN



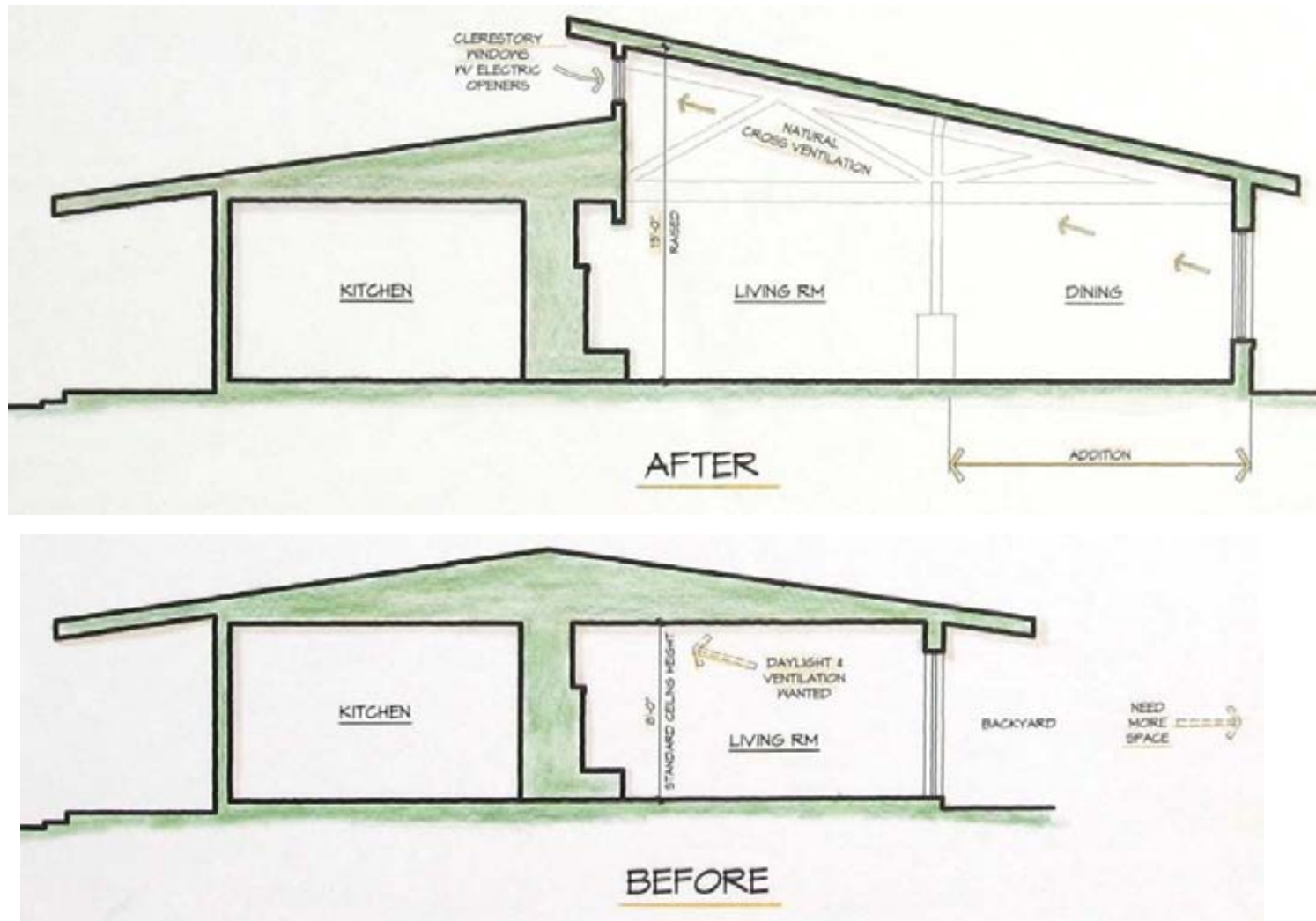


## Raising the Roof

Our goal was to enlarge the living spaces and increase the natural ventilation that the site already enjoyed being located on top of a hill. After investigating skylight wells and low vaulted ceilings we opted for the dramatic approach of raising the roof on the back half of the house.

Running a ribbon of operable clerestory windows at the high point created a natural upward current for cross ventilation and helped to bathe the spaces with daylight from above. We detailed glu-laminated timber trusses with exposed steel plates for rustic styling in order to provide visual

strength for the dramatic volume we were creating. The SIPs we used for the roof deck easily handled the 8' spans between trusses, provided good insulation value, and allowed the 'changing of the roofs' to be done expediently, as shown on the page below.



## Raising the Roof: Interior Sequence



*Before: Standard 8' ft ceiling, uninspiring*



*Design Phase: 3D rendering*



*Demolition of the old ceiling, new exposed beam*



*Sliding the new trusses into slots in the old roof.*



*Structural insulated panels (SIP) on top of trusses, framing of clerestory wall*



*After: "Wow" . Note how operable clerestory windows are visible across entire house, with a fun view of the chimney outside.*



## Master Bedroom

Continuing the theme: the clerestory window ribbon and exposed trusses flow into the master bedroom.





These two photographs show the open air connection to the living room (empty nesters), walk-in closets, skylight over the bed, indoor-outdoor fireplace, and hot tub just outside on the deck. The hot tub was partially recessed into the deck structure for the optimal height for easy access.





## Finish Deck Details

The rooftop deck surprises all visitors in its construction and the unexpected view from the top.

A galvanized stair was built, starting on top of the raised main level deck and rising above the roof top. This deck was framed directly over the trusses of the living room, using Ipe lumber for a low-maintenance high-beauty look. It is large enough for a small gathering and a telescope.

The deck has a red rope lighting installed along the curved handrail to safely guide you up the stairs at night without compromising your nighttime vision.









## Overcoming Obstacles



*Problem: the property's steep drop off meant that an addition would take all of the usable backyard area.*



*Solution: we built a 16' high x 75' long retaining wall for the property's width, used engineered infill, and created the backyard space seen above.*



*The SIPs required a flat structure to set on— the angles in plan view and the angle on the roof required complicated wall framing before the panels arrived.*



*The clients' visual dislike of gutters and the exterior's bold look sparked the detailing of custom soldered gutters made of galvanized and paintable steel.*



## Final Detailing



A custom door at the master bath. A pocket door was eliminated for needed structure in the wall, and a frosted glass door was hung like a barn door along with a glu-laminated header to accentuate the trusses above.



The exposed timber and steel plate trusses are a dominant element in the main level, providing a contrast to the smooth painted drywall ceiling and walls.



The solid Ash flooring provides a strong grain pattern and is also light and bright in color. This guard railing was created to compliment the floor, the outdoor railings, and the trusses, maintaining the exposed timber theme.

## The Dramatic Results



The heart of the home for entertaining.





Sitting on the deck that gracefully embraces the treetops and the valley below, or looking up at the constellations from their observation deck, our clients' passions are clearly reflected in this home addition.