Smart House for a Steep Site

Despite zoning restrictions, a simple floor plan and traditional materials unite in a design of understated elegance

BY PETER SANDALL

On the eastern coast of Washington's Olympic Peninsula, Port Townsend is the city that got all dressed up for a party that didn't happen. Slated to be the northern terminus for the region's railways, the town was built in the late-19th century by speculators who filled the streets with lovely Victorian homes. Even though the railroad never came and the speculators left for greener pastures, the town is still a spirited place with terrific views of the water and a lively arts community. Over the years, the residential neighborhoods have grown to include a broad mix of mostly traditional architectural styles.

My firm was contacted by a software engineer who had purchased an undeveloped hillside lot with nearly unimpeded views of the Straits of Juan de Fuca to the east. He wanted a contemporary-style home that took advantage of the views and fit into the landscape. The house would be designed for informal entertaining on weekends, so he wanted a guest suite. The house also had to be designed with an eye toward retirement.

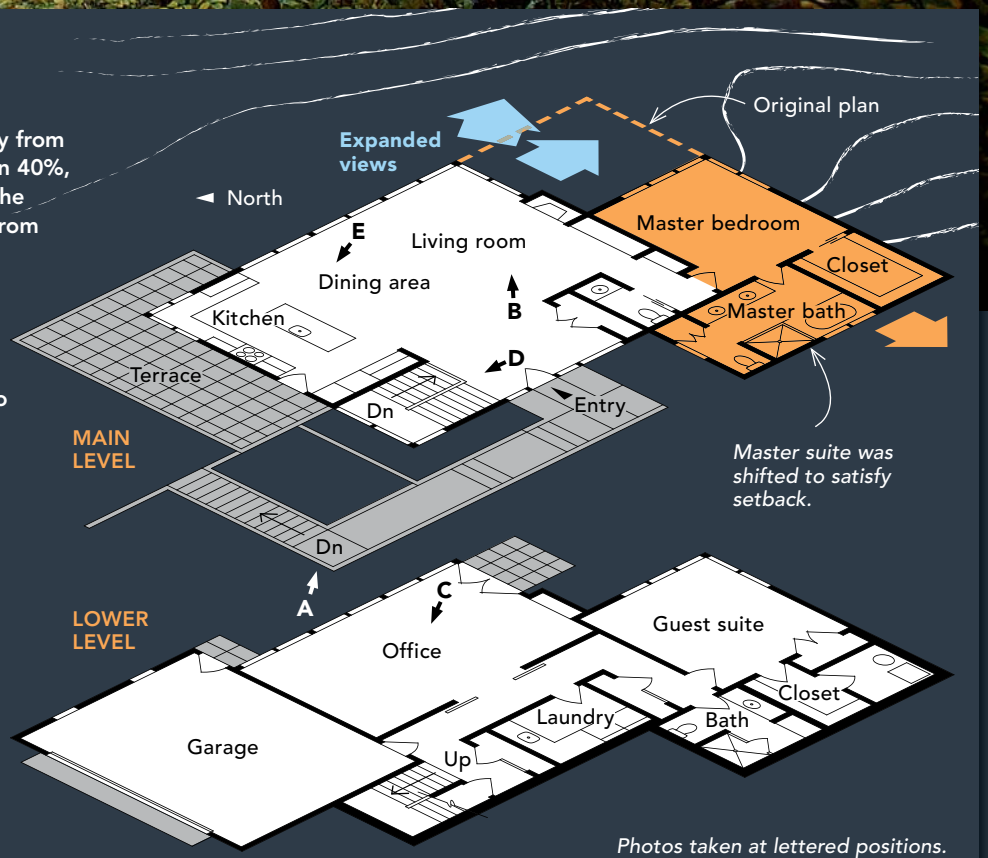
Site restrictions create opportunities

When I first began this job, I was most interested in the challenge of designing a small, contemporary home on an undeveloped hillside lot overlooking the water, a rarity in town. The property's difficulty was based on challenging zoning requirements. Anything built had to be below a 14-ft. height restriction from the center

Drawings: Rodney Diaz

SHIFTING THE PLAN OPENS THE VIEW

The east corner of the property slopes away from the house. Because the slope is greater than 40%, local zoning dictates a 15-ft. setback from the slope. The setback offset the master suite from the rest of the house, which originally was conceived as a basic rectangle. The good news is that the shift also opened the view from the corner of the living room. On the west side of the house, it helped to enclose and define the exterior entry. Photo above taken at A on floor plan.



SPECS

Bedrooms: 2

Bathrooms: 2½

Size: 3300 sq. ft.

Cost: $200 per sq. ft.

Completed: 2003

Location: Port Townsend, Wash.

Architect: Sandall Norrie Architects

Builder: Discovery Bay Construction, Port Townsend, Wash.

Dividing the space. *Clustered around the black-granite fireplace, an arrangement of chairs and couches creates a separate sitting area in the main public space. Photo taken at B on floor plan.*

of the lot and could cover only 20% of the lot. (Typically, 35% coverage is standard.) There was also a setback dictated by the steep slope on the east side.

The site restrictions meant that the floor plan, originally a simple rectangle, would step back from the critical slope area. The logical garage location was on the lower level facing the street, a somewhat discrete spot that also would de-emphasize the garage. I located the entry at the end of a long walk at the upper, or main, level.

The lower level is set below the street, on the low side of the existing slope. Any lower, and the driveway would be too steep; any higher, and the distance between floor and ceiling wouldn't work because of the height restriction. This way, each floor steps directly out to grade on its respective side.

A different look for work. *On the lower level, the well-lighted office space has bright walls and ceilings, due in part to a full wall of windows. The floors are stained concrete. Photo taken at C on floor plan.*

The roof height was set by the height restriction. The roof slope mimics the site's natural slope and lets southern light enter on the house's high side. The sloped portion of the roof is standing-seam metal, and the flat portion is covered with a torch-down membrane. It's always a good idea to slope the roof here in the Northwest, but because the Olympic Mountains temper Port Townsend's rainfall, a flat roof is acceptable.

Traditional design for the climate

A common design dilemma in our region is whether to have a roof overhang. Although an overhang provides protection from the elements, it also can block valuable daylight. Here, I designed both flush walls (at the garage and at the master-bedroom wing) and walls that have a 3-ft. roof overhang on the main body of the house. The combination was done for aesthetics as much as it was for protection; the roof overhangs give the main body of the house some added prominence.

The overhangs also protect the wood windows and doors from the sun and the rain. For this house, the homeowner and I chose custom wood windows with true divided lites. They were more expensive and require more maintenance than clad or all-vinyl windows, but we wanted the look of true divided lites and couldn't find it anywhere else. The remainder of the exterior is also traditional. Although we

briefly considered stucco, we went with clear cedar clapboards and trim.

Exposed concrete is a little more work

Any house built into a hillside is going to require retaining walls, so I suggested that the garage be built with exposed concrete walls that tie into the retaining walls. Because the garage is the first thing you see from the street, my partners and I knew that the concrete surfaces would be important to the exterior design. Instead of an industrial look, we wanted something more refined. Architectural concrete, most often seen on public or commercial buildings, has a near-perfect finish with no visible seams and patterned snap-tie holes. We knew that architectural concrete wasn't in the budget (it usually costs 20% to 30% more), so we thought we could get a similar finish by having the seams ground and the snap-tie holes filled.

Unfortunately, one of the two different batches of concrete used to pour the garage contained lamp-black coloring from a previous pour that day. The resulting mismatch didn't look good, so we had to find a way to conceal the two different shades without losing the concrete's natural porous look. After some research, we had the contractor apply a light mix of Ardex Tilt Wall Patch (www.ardex.com) to the surface, which seemed to do a decent job of blending the two colors. Later, we added a steel beam as a trellis support for the clematis that conveniently diverts attention from the concrete.

The garage roof was a great place for an outdoor terrace. It takes the place of a deck on the view side, which would have shaded the windows below. The terrace is a tiled surface that slopes to drain into two scuppers. The slope is created by sleepers laid over the framing and sheathed successively with plywood, a waterproof membrane, and the tile substrate.

Wood warms up the main level

Initially, we planned a painted drywall interior to save money, but when we saw the potential of the main living area's open plan, we chose tongue-and-groove clear fir for the vaulted ceiling. The fir adds a rich color to the space and complements the cabinets, which were fabricated by Mark Sabella of Niagara Woodworks in Port Townsend. Downstairs, the ceilings were drywalled; fir would have been too dark there.

Using a concrete slab for the lower level's finished floors was a great way for us to incorporate a radiant-heating system, which eliminated the need for a crawlspace as well as the need for the ducting and soffits that often can compromise ceiling heights. □

Peter Sandall is a partner in Sandall Norrie Architects in Seattle. Photos by Charles Bickford.

A window wall lights the stairway. *Extending to the eaves, a corner window floods the stairwell with natural light and views of the street beyond. Photo taken at D on floor plan.*

The open-plan plan. *The main entry, at left, is at the center of the house, eliminating the need for a traditional hallway. The adjacent kitchen's minimalist painted drywall breaks up the largely wood interior of tongue-and-groove ceiling, fir cabinets, and bamboo floor. The kitchen is oriented for access to the exterior terrace on one side and the dining room on the other. Photo taken at E on floor plan.*