

Submission Category:

- New Building, less than \$5 million construction cost

Project Type:

- Single Family Residential

Project Address:

- 6935 Ravine Trail, Fennville, MI 49408

Date of Substantial Completion:

- September 2019

Architect's Statement:

BRIDGE HOUSE design process began summer 2017 for our clients, neuropsychology + therapy professionals who are long-time vacationers to Michigan. Ultimately, they decided the area would be an excellent location for their next phase of life. Located in Fennville, Michigan, south of Douglas and Saugatuck, the region has a rich history and culture rooted in the natural environment and art.

Interestingly, the acquired land and the adjacent Pier Cove Valley were formerly owned in the late 1800s by the Chicago landscape architect, O.C. Simonds, who introduced many unusual plant species to the area. This area became quite well-known to naturalists in the region for its many varieties of trillium and is now a protected nature and wildlife sanctuary. Pier Cove Creek directly north of the site, drains to Lake Michigan, ¼ mile directly west. This natural preserve affords walking paths, natural habitat, and beautiful year-long views directly from the project site. What a wonderful environment for spiritual and physical reformation; a natural canvas to become immersed in an experience of nature and art!

In keeping with the area's rich tradition of looking to nature, it was important to our client that the design for their quaint, humble program be inspired by the unique amenities of the site. Certainly, we wanted to capture valley views to the north and seasonal views northwest to the lake, but also wanted to be sympathetic to the natural condition by limiting our environmental impact and tread lightly on the land. Our clients were also inspired by the rolling topography and the coloration of the trees and their bark. The Black Walnuts stand-out for their darker color, and the Red Pines are distinct in their pattern and coloration. Also, we wanted to be sure to maintain the existing natural drainage swale.

The design solution positioned the living spaces on an east-west axis to maximize views to the north and passive solar exposure to the south. We pushed the house as far north as the setback would allow, but due to the existing topography, still needed to elevate higher to capture the best views down into the valley while also gathering south light via clerestories. The east end is anchored to the earth under Master Suite and Garage, while the west end is elevated on pilotis above the natural terrain. Accordingly, guests enter the home by way of the elevated entry bridge, inspiring visions of nearby jettys past and present.

The experience begins long before entering the site or dwelling and is friendly to pedestrians, cyclists, and automobiles. The winding roads, lush forestry, and views to Lake Michigan reveal themselves on the journey to Ravine Trail. Not until we are upon the site do we catch a dramatic glimpse of the Bridge House through the trees. The scale of the outside space is defined by the trees and strategic clearing, and the impact of automobiles is minimized. A curious but authoritative hound greets visitors at the foot of the entry pier day and night.

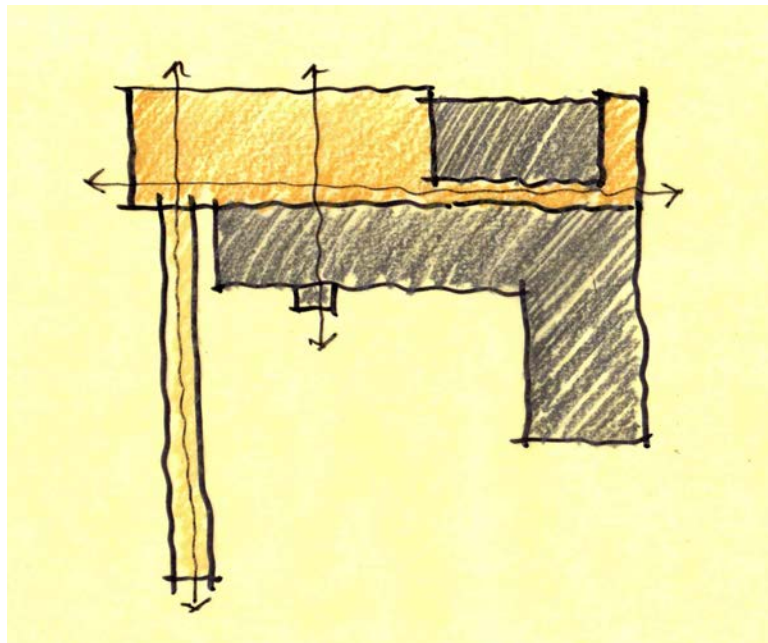
Moving through the property, the design focuses paths on views of nature while also accommodating art and artifacts. Primary paths terminate views to nature inside and out, with touches of art, classic furniture, and lighting throughout. The owners, one an artist and both art-lovers, rotate their collection, just as the natural exterior canvas changes hourly and seasonally. The elevated massing and outdoor spaces invite guests to be one with the trees and indulge in this unique experience.

The dark bronze and black exterior cladding was directly inspired by the Black Walnut tree, whose bark varies from mid-gray to dark brown. The natural Cedar decks blend with the pine fin-walls and soffits, natural elements contrasting with the darker shell. Elevated ceiling plane turns downward to become sheltering fin-walls anchoring the west porch literally and figuratively, while providing some protection from prevailing lake-originated gusts from the west.

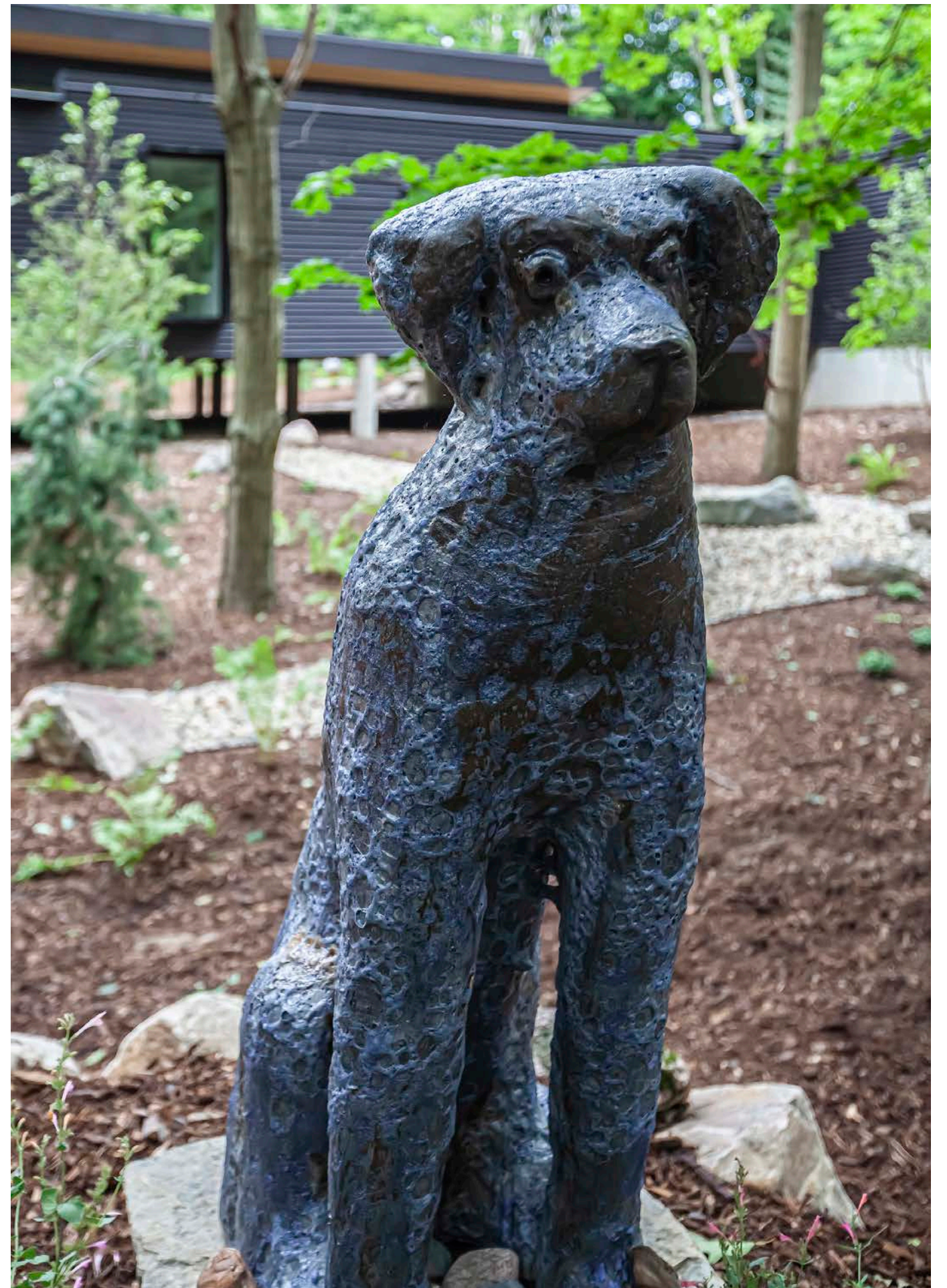
Sustainable features:

New double-glazed, aluminum-clad wood, low-E windows + sliding doors oriented for *passive solar*. Windows on east and west exposures are minimized and sheltered to limit east-west solar gain – *reverse passive solar*. New unvented roof system integrates closed-cell board insulation over deck + fiberglass under deck (R-45 or better) + 2x6 walls with full foam air barrier insulation + insulated headers – *highly-insulated thermal envelope*. Kynar-coated metal siding is long-lasting for low-maintenance and durability (limits damage from insects and woodpeckers) + elevated shed roof is standing-seam in dark anodized aluminum – *resilient materials*.

White Pine + Cedar clads bridge, fin-wall, porch + living ceilings + wool carpeting – *natural materials – indoor/outdoor relationships*. Flat roofs are protected with black EPDM – *supports heating days over cooling days in local Michigan climate*. Flat roof rainwater is channeled to custom open-mouth scuppers that won't clog from site debris + flat roofs sized for future intensive green roof and solar panel integration – *resilient, low-maintenance, sustainable drainage solutions*. New high-efficiency appliances and plumbing fixtures, high efficiency gas-fueled HVAC systems, gas-fueled generator, and LED light fixtures further contribute to project sustainability. Baseline Energy Use Intensity (EUI): Typical Residential Home (130 Zero Score) - Target EUI: (50 Zero Score) - Projected EUI: (50 Zero Score) - Percent Reduction from Baseline: 60%











- 01: Entry Bridge
- 02: Porch
- 03: Entry
- 04: Guest/Office
- 05: Bathroom
- 06: Living Room
- 07: Dining Room
- 08: Kitchen
- 09: Pantry
- 10: Laundry
- 11: Master Spa
- 12: Master Bedroom
- 13: Hall/Gallery
- 14: Mudroom
- 15: Dog Run
- 16: Garage



0' 24'





























