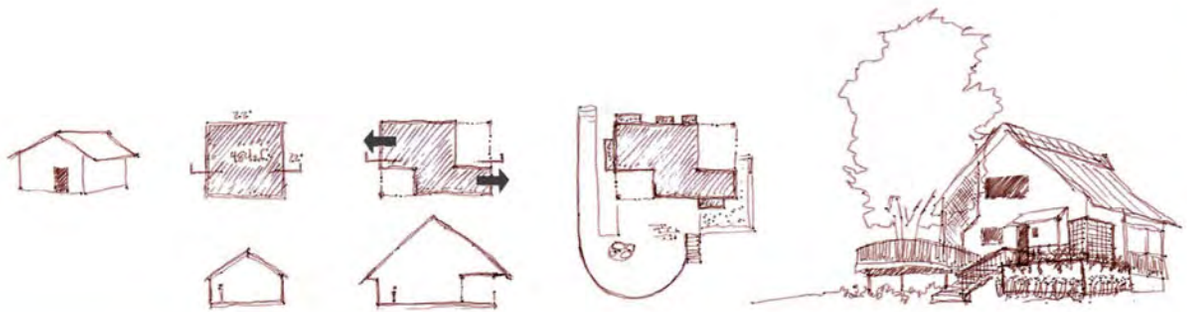
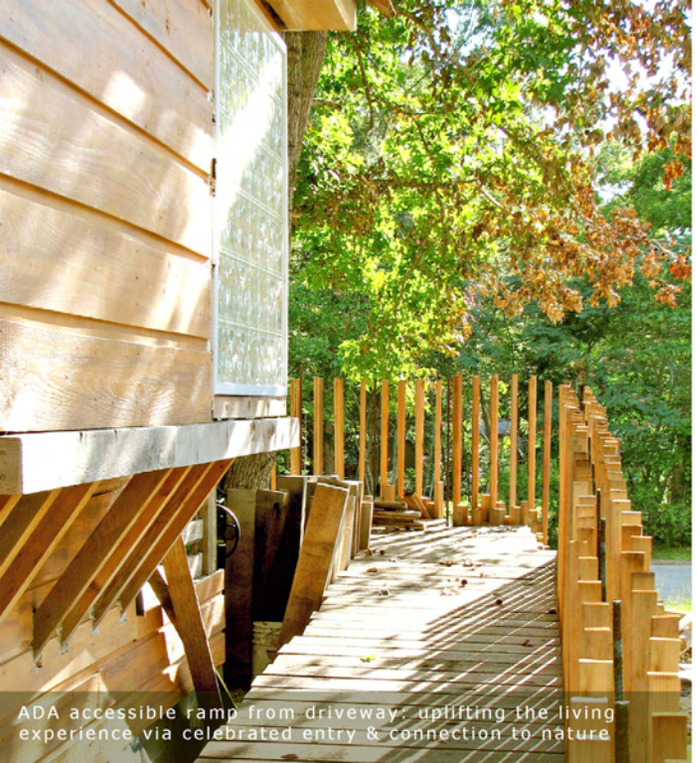


Concept Sketches | Breaking outside the "enclosed box" & making the house look and feel larger than 484 s.f. (22' x 22')

For more information or drawings, please contact Lukas Petrash at lukaspetrash@gmail.com

A $12,000 [GREEN] DREAM HOME



ADA accessible ramp from driveway: uplifting the living experience via celebrated entry & connection to nature

NOTE: PHOTOS TAKEN AT 90% COMPLETION

How a 22-year-old architecture student turned scraps into a sustainable paradise on a $12,000 budget for a family in need

The MCDhouse was built in cooperation with the Sustainable Builders' Guild of Huntsville (Texas) as part of a local initiative to increase earth consciousness while providing homes for low-income families. **Built to the minimum square footage allowed by law (for three residents), the house challenges the "hermetically-sealed box" mentality and sets out to prove that large enclosed homes are not necessary for comfort, functionality, and dignity.** The design creates the *feeling* of space with minimal square footage through constant connection to the outdoors via calculated views and adjacencies to covered outdoor patios for dining, lounging, circulation, etc. Not only was the house meticulously designed in order to make it *feel* larger than it really is (484 square feet, the size of a standard 2-car garage); it was also designed to *appear* larger and thus more dignified from the street.

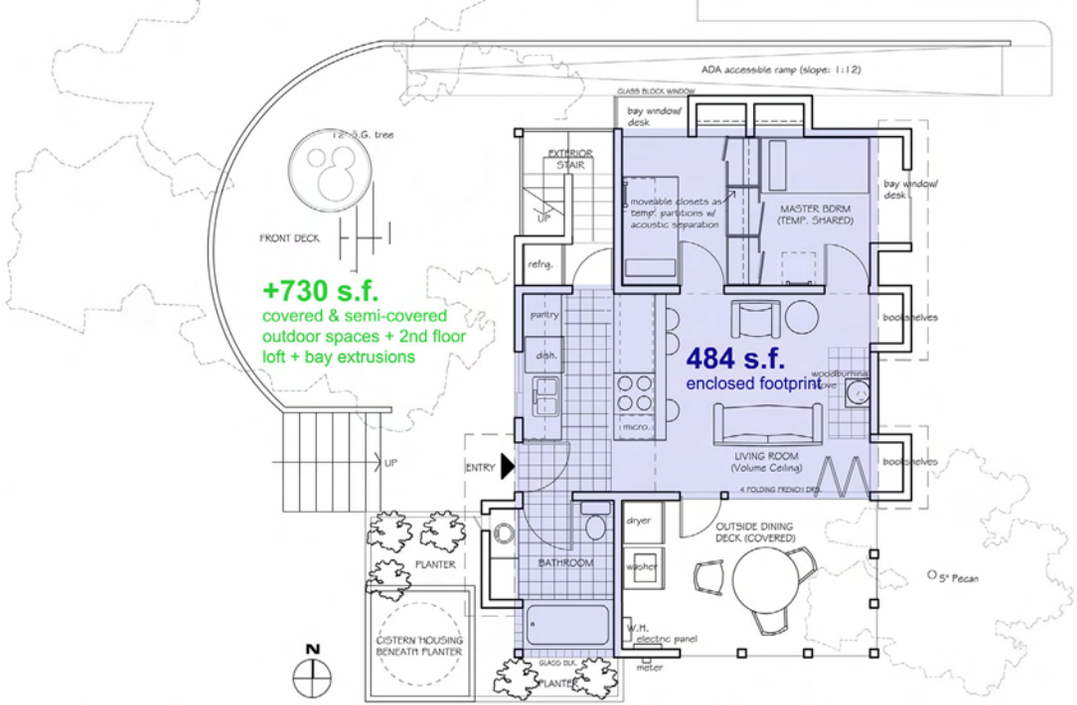
Front deck built around tree & bathed in soft natural light

Despite the extreme temperatures in Texas, the house does not have air conditioning or heating, but rather is designed to take advantage of the sun and prevailing breezes for heating, cooling, ventilation, and light. Constructed almost entirely of scraps and contractor waste diverted from landfills—and able to sustain itself with almost no electricity—the house has a very low embodied energy and operating cost. Built around a 65-foot-tall sweet gumball tree, **the MCDhouse is meant to show that harmony with nature is not a hindrance to comfortable and affordable housing, but a means for radically improving the way we live.** The house was designed and constructed as a volunteer effort by Lukas Petrash, a 4th-year architecture student, with the help of friends and family. Despite its unconventional nature, it satisfies all building codes.

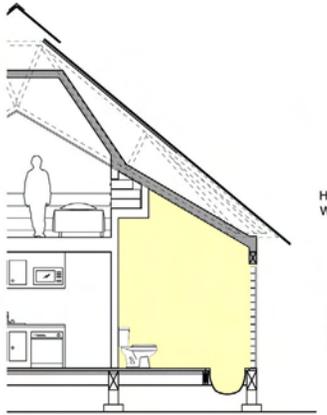
House Size: 484 s.f. (legal interior s.f., excl. loft); 1,214 s.f. (total usable s.f.)
Final Cost: $24.79/s.f. (legal s.f.), or $9.88/s.f. (total usable s.f.)
Applicable Codes: IRC 2003 (International Residential Code); ADA (Americans with Disabilities Act); TMCS (Texas Minimum Construction Standards); SBGH (Sustainable Builders' Guild of Huntsville, based on localized LEED Standards)

Sun-lit, semi-enclosed stairwell which allows the house to "breathe" 24/7 and doesn't count as square feet

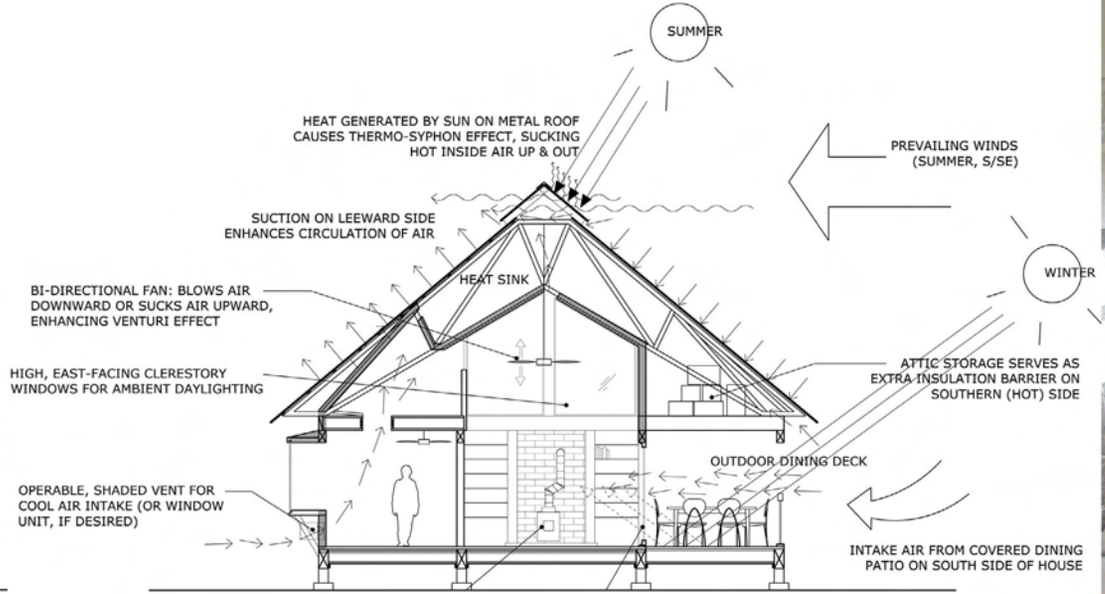
Double-height living room (above left) with clerestory windows and spatial/visual connection to dining patio (right) and trees outside



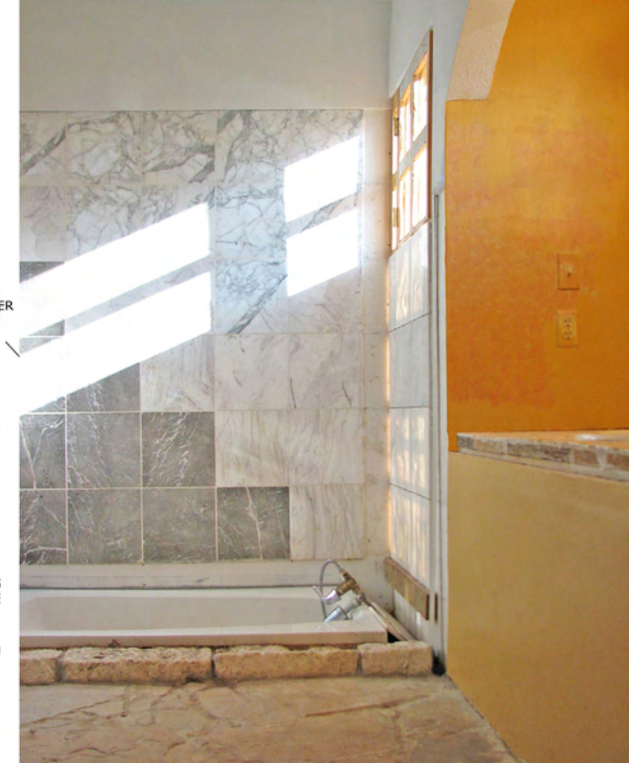
Floor plan, showing heavy reliance on outdoor spaces for dining, lounging, circulation, & views



Translucent Tile Bathroom Wall | Making a small space magnificent with sunlight while maintaining privacy & adding visual intrigue



Early conceptual heating/cooling/ventilation/lighting diagram



About Lukas Petrash

From his youth, Lukas Petrash always dreamed of being able to design better homes for average people. Having grown up making kites from plastic grocery sacks and building clubhouses out of dirt, he learned to think creatively and to make great things out of whatever was freely available.

At the time of the project's conception Lukas was a 4th-year architecture student at the University of Southern California, eager to test all that he had learned and to prove that earth-friendly houses can be *cheaper* and *better* than traditional homes. The opportunity to provide a home for a single mother and her children—one that they could not only afford, but also be proud of—made him willing to accept what friends and builders warned was an impossible challenge. No one believed that piles of contractor waste could be transformed into a dignified home, or that a 484 s.f. home for 3 people could be comfortable, or that a house with no HVAC could survive the Texas summers (110 F). Accomplishing all of this within a $12,000 budget ($25/s.f.), the MCDhouse makes no small statement.

Lukas is now studying Housing & Urbanization at Harvard University's Graduate School of Design. He firmly believes that the greatest designs and innovations are born out of the greatest challenges, and is currently researching methods for mass-prefabricating affordable, sustainable housing to meet the pressing needs of the 21st century.

For more information or drawings, please contact Lukas Petrash at lukaspetrash@gmail.com