



A MODERN SHADOW

HOW ARCH11 TURNED A CONFLICTING WISH LIST INTO A HARMONIOUS HOME

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A Denver family lives in a Victorian home built in 1890, with its classical charm and conventions. That family lives in a modern home with cutting-edge efficiency and bold design elements. Both sentences are true. That they are true simultaneously is testament to how Arch11 Principal Ken Andrews, AIA deftly solved the homeowners' challenges and seamlessly melded two very different styles of architecture.
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THE OWNERS' WISH LIST

In approaching this Wash Park renovation, Arch11 gathered requests from the family, including: energy efficiency, modern style and advantages, a home that opened up to the outdoors, had free-flowing space inside, and was more spacious. The problem: also staying true to its original charms and not significantly expanding the footprint of the home. The owners wanted to be kind to the feel of the established neighborhood and not make the house look as though it had been dropped in from space.

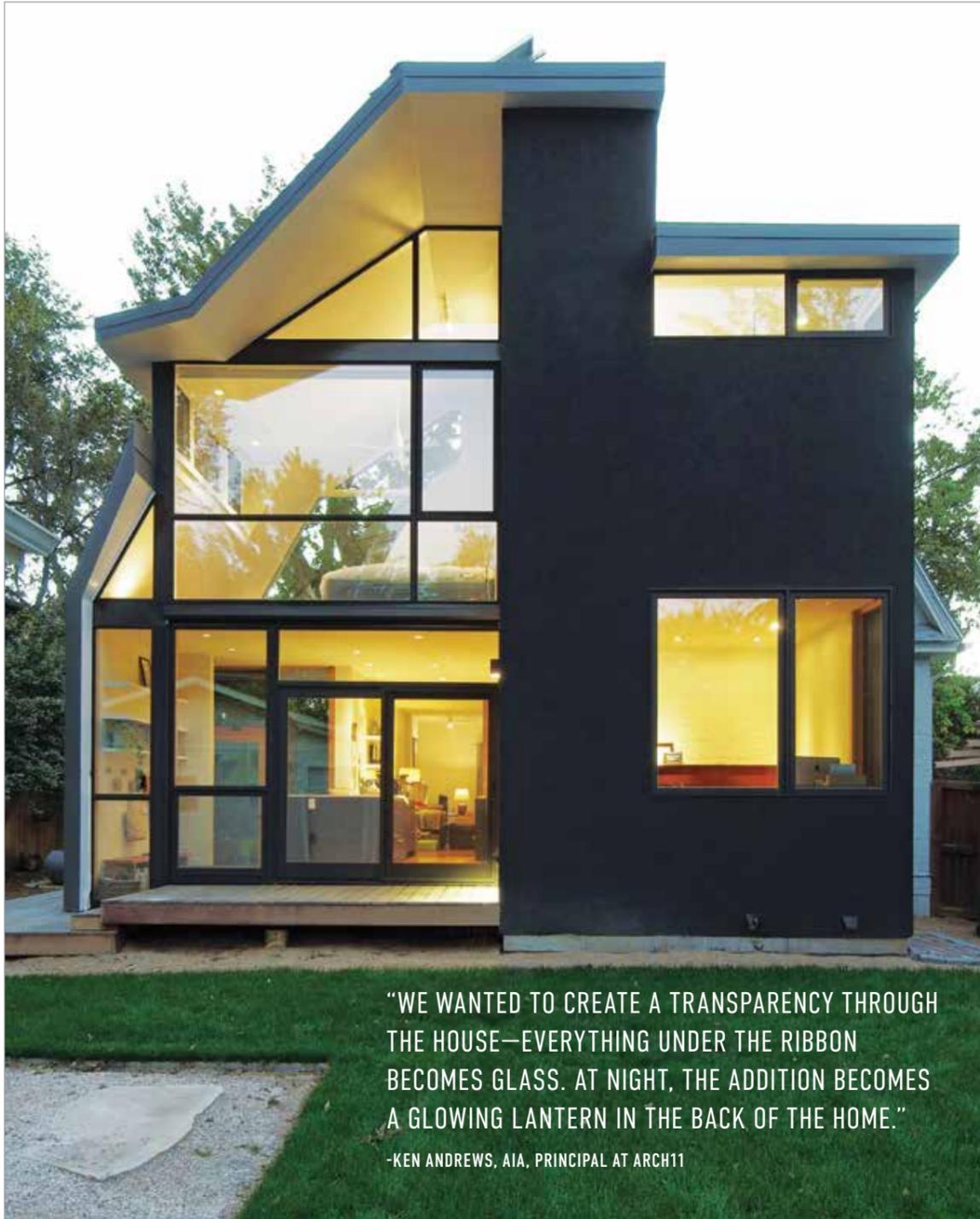
It was a long wish list with many contradictory elements. And what Andrews and his team at Arch11 had to work with was daunting. The ground floor of the home was broken into confined spaces with dividing walls and small doorways, a convention of homes built in that time to reduce draftiness and ease heating. The tiny kitchen discouraged socializing or big projects. The space simply did not suit modern sensibilities. "We wanted to open up the living room and the whole house, and to put in a gourmet kitchen," Andrews said. "We also wanted to open the house to the outside, because they have a wonderful, big yard." Transforming the ground floor had its challenges, notably with reconfiguring internal support structures, but it was relatively straightforward. While knocking down walls created an open feeling and the impression of added square footage, it didn't achieve the bolder goals.

CUES FROM THE PAST

The house, typical of its time, has a beautiful gambrel roof with slopes and angles that give the entire house more personality. Destroying it would have robbed the home of its tradition, its original charm, and the draw that brought the family to it. A previous plan would have popped the top and given it a more modern feel—but would have sacrificed the integrity of the historic design.

By simply looking at the graceful roofline, inspiration was found. The solution was referred to as "the metal ribbon"—a modern addition projecting over the side of the original home mimicking the original gambrel roof. The home's glass addition leans gracefully out like a shadow made tangible, matching all of the original angles. It extrudes out back, and this echo of the home packs additional square footage with elevated ceilings, allowing a richness of light to pour into the home.

WORDS: ROB BOWMAN • PHOTOS: LARRY SYKES



“WE WANTED TO CREATE A TRANSPARENCY THROUGH THE HOUSE—EVERYTHING UNDER THE RIBBON BECOMES GLASS. AT NIGHT, THE ADDITION BECOMES A GLOWING LANTERN IN THE BACK OF THE HOME.”

—KEN ANDREWS, AIA, PRINCIPAL AT ARCH11

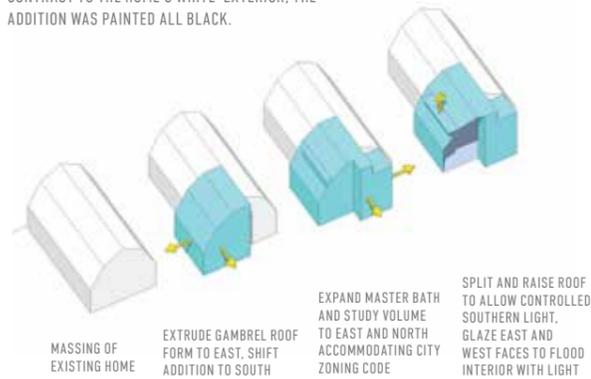


ARCHITECT KEN ANDREWS COMES FROM A CONSTRUCTION BACKGROUND THAT ALLOWS HIM TO BE PRAGMATIC IN HIS DESIGN AND QUICK TO SOLVE PROBLEMS THAT ARISE. “BUT I’M ALSO ABLE TO TURN THAT OFF AND CONCEPTUALIZE BIG IDEAS,” ANDREWS SAID. THIS COMBINATION OF SKILL SETS CLEARLY INFORMED THE CONSTRUCTION OF THE ADDITION. “IT ALLOWS A PROGRESSIVE WAY OF THINKING ABOUT CONSTRUCTION VERSUS SIMPLE STICK FRAMING. WE HAD TO USE VERY DIFFERENT STRUCTURAL STRATEGIES TO ACHIEVE THESE SHAPES.”





THE ILLUSTRATION BELOW SHOWS HOW THE ADDITION FOLLOWED THE MASSING OF THE EXISTING HOME. TO CREATE A CLEAN VISUAL CONTRAST TO THE HOME'S WHITE EXTERIOR, THE ADDITION WAS PAINTED ALL BLACK.



MASSING OF EXISTING HOME

EXTRUDE GAMBREL ROOF FORM TO EAST, SHIFT ADDITION TO SOUTH

EXPAND MASTER BATH AND STUDY VOLUME TO EAST AND NORTH ACCOMMODATING CITY ZONING CODE

SPLIT AND RAISE ROOF TO ALLOW CONTROLLED SOUTHERN LIGHT, GLAZE EAST AND WEST FACES TO FLOOD INTERIOR WITH LIGHT

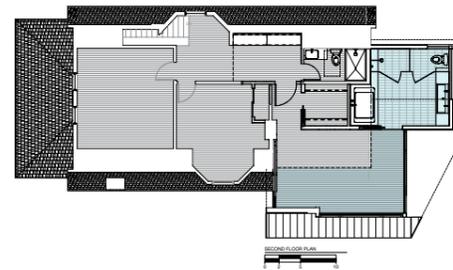
ON PRESERVATION

Ken Andrews and the Arch11 team worked closely within historical preservation guidelines. "Ideally, you want to be respectful of the old, but also clearly be of present time," said Andrews. "As a result, we didn't want to try and hide what was new and what was original, but we wanted what was new to give a nod to the traditional house."

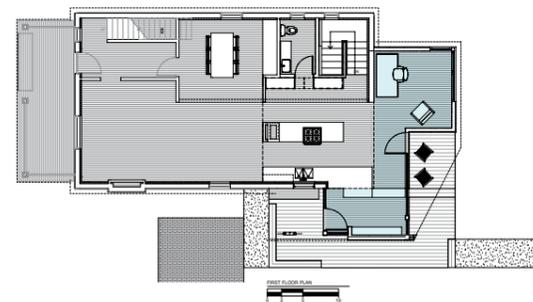
ENVIRONMENTAL MEASURES

Arch11 first set about correcting many of the problems in the original home, replacing the windows and sealing every possible source of a draft, and they updated fixtures to the most stringent conservation standards. The materials were all particularly durable so that there would be little upkeep, and insulation was added and blown in wherever possible. But that was the easy part.

Arch11 removed a hydronic solar system, installed a photovoltaic system, and dug in heat wells to depths up to 200 feet, using the natural warmth of the earth to power the forced air heating and the hot water inside the home. They removed the natural gas lines, drastically reducing the homeowners' energy needs to such an extent their energy bills are nearly a wash at the end of the year. "From a green position, we felt it was more environmentally conscious to preserve most of the home instead of putting it into a landfill," said Andrews. "The challenge was to modify and update those elements and augment them responsibly."



THE MOST DAUNTING LIMITATION ON THE FAMILY'S WISH LIST WAS NOT TO SIGNIFICANTLY CHANGE THE FOOTPRINT. AS A RESULT, ARCH11 EXPANDED THE SQUARE FOOTAGE BY CREATING A SILHOUETTE OF THE ORIGINAL ROOF SHAPE, STRETCHING OUT THE BASEMENT, MAIN LEVEL, AND UPPER FLOORS. THE CEILING WAS RAISED, AND THE WALLS STRETCHED UPWARD AND OUTWARD TO ALLOW MAXIMUM NATURAL LIGHT TO POUR THROUGH THE HOME. WHILE THE HOME'S SIZE INCREASED BY ONLY 30 PERCENT, THE EFFECT ACHIEVED WAS THAT OF A TREMENDOUS EXPANSION IN TERMS OF COMFORT AND PRACTICALITY.



THE TRANSITION INSIDE THE HOME IS HARD TO CLEARLY MARK. THE NEW FLOORS, FOR EXAMPLE, HAVE BEEN PAINSTAKINGLY TIED IN TO ERASE HARD LINES OF DIVISION. THE FIRST FLOOR, WITH ITS REMOVED WALLS, ENCOURAGES AN ORGANIC FLOW THROUGH THE HOME THAT NATURALLY OPEN UP INTO THE HIGH-CEILINGED BULTHAUP KITCHEN.

While the original home was dark, like other homes of its period, the addition allowed Andrews and his team to let in an abundance of natural light. "We wanted to create transparency through the house—everything under the ribbon becomes glass," said Andrews. The enormous amount of glass achieves the desired openness, a connection between indoor and outdoor, and that natural light. But it also helps to keep the addition from overwhelming the original home and accentuates the feeling that the addition is an echo. "At

night, the addition becomes a glowing lantern in the back of the home," Andrews said. Arch11 put in a tigerwood deck around the expansion and the homeowners took on all landscaping. The welcoming effect at night is soft and understated but surprising by its very existence.

The finished home is spacious, but true to their original wishes, the footprint of the home barely changed. "Ninety percent of the home still stands," said Andrews. Just roughly 500 square

feet were added, most of that in the master bedroom and the kitchen. Yet the efficiency of the space and the openness transforms the home.

Walking from the front of the home to the back, time travels as you walk through the house, beginning in 1890 and emerging into the backyard through the modern addition. As to the reactions, the homeowner said, "People slow down as they drive by to look at it, and sometimes they even drive back through the alley for a better look."



ARCH11 AND THE HOMEOWNERS WANTED THE BATHROOMS TO FULFILL MANY OF THE SAME REQUIREMENTS OF NEW HOMES WITH EFFICIENT AND MAXIMUM WATER AND ENERGY CONSERVATION. THE CLEAN LOOK THAT DEFINES MUCH OF MODERN DESIGN IS PRESENT, BUT IT DOESN'T JUST LOOK CLEANER, IT IS CLEANER. "WE MADE SURE

THAT EVERYTHING THAT COULD BE REMOVED FROM THE FLOOR WAS LIFTED," THE HOMEOWNER EXPLAINED. WITH THE TOILET OFF THE FLOOR AND OTHER FIXTURES LEAVING A MINIMAL FOOTPRINT, CLEANING IS EASIER, AND THERE IS LESS CONCERN THAT A SPOT HAS BEEN MISSED ANYWHERE.