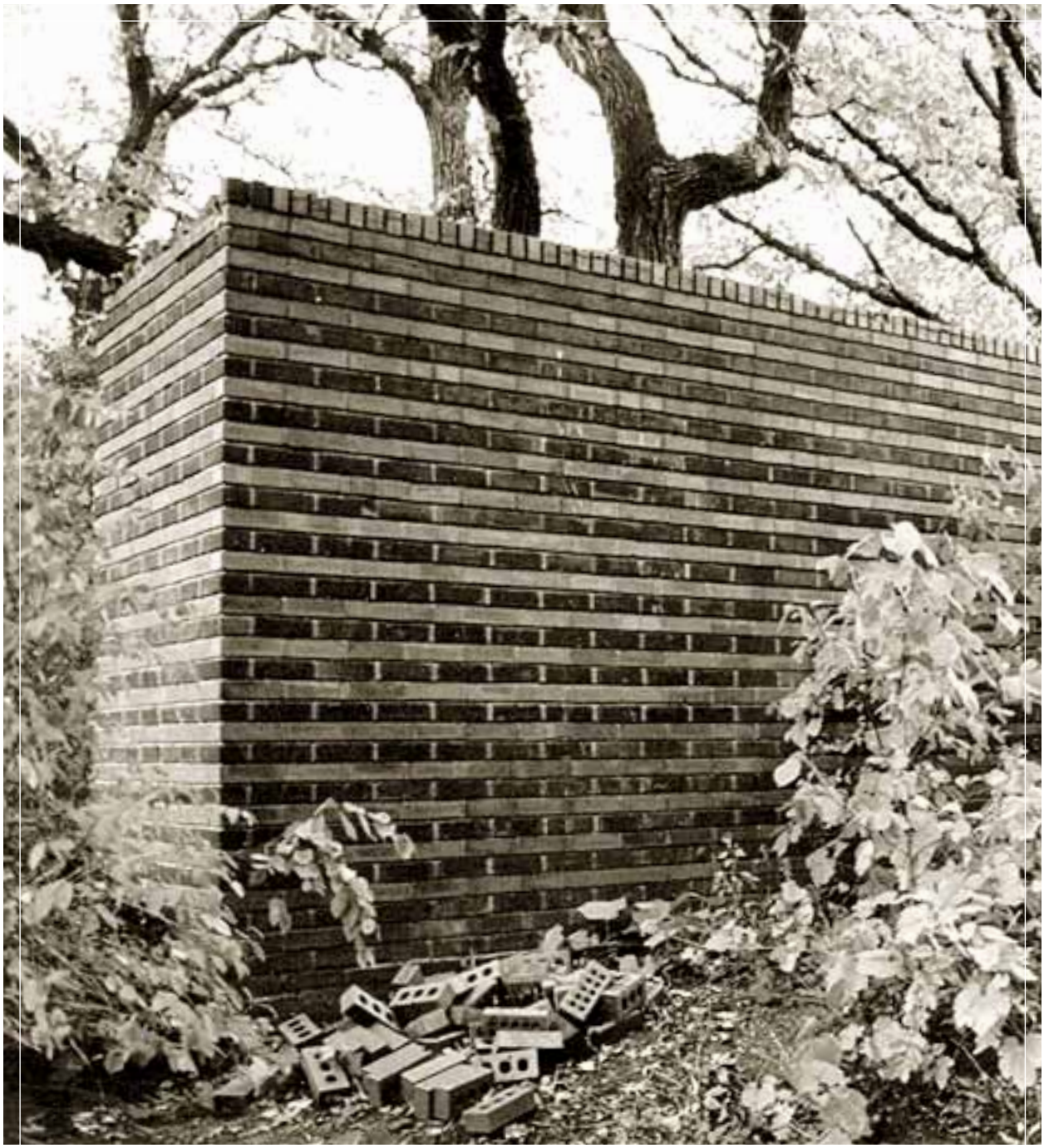
THE GARDEN WALL



WILLEY HOUSE RESTORATION JOURNAL VOLUME 1 ■ ISSUE 1 ■ SPRING/SUMMER 2002 ■ ■ ■

THE STATE OF THE HOUSE SPRING 2002

Restoration of mechanical systems and sealing up the envelope.

During the seven or eight years of abandonment the Malcolm Willey house had been repeatedly broken into. The primary entrance, screwed shut, was unusable due to a break in that shattered the jamb. One of the guest room french doors was missing after another forced entry and some of the window glass was absent or broken for the same reason.

Water had been migrating into the house for years, rotting the structure and creating a potentially hazardous environment. One of our first concerns was airing out the house to begin drying the interior. The smell of mildew hung thick in the air. Upholstery and publications in particular, remaining in the house reeked of mildew. Ultimately, every surface was cleaned with bleach water and ventilated to moving air. Minor mold spots were found but tests show no serious infestation so far. Good news but obviously we'd never get the house dry until all the leaks were plugged. It would be arrogant to assume that they have all been identified at this point, but thanks to a wetter than normal summer we tracked many of their sources. The chimney, the skylights, some roof locations, the planter boxes, the bedroom, study and living room thresholds.

Removing a skylight for restoration.

Following is a photo essay on spring and summer restoration accomplishments at the Willey House.

FUEL OIL TANK

It could have been ignored but would have come back to haunt us sooner or later. The original fuel oil tank was buried deep in a slope next to the drive way. The tank was found to hold oil, a good sign because it meant no leaks, cracks or rust perforation. After the remaining oil was pumped out the 1000 gallon tank was exhumed, sawed into manageable pieces and hauled away. Now the brick drive can be set without fear that it will by necessity be torn up later.

REMOVAL OF SKYLIGHTS

The original skylights were constructed from galvanized steel. Over time they rusted in places where water collected. Channels in the flat sheet metal roofing between the skylights have typically dammed up with acorns, leaves and branches, Water pooled there and rose high enough to seep through the skylights. The glass panes had been tarred repeatedly to seal them against leakage. Several panes were broken and one was missing. The skylights had been designed with a 1/2" interior channel and drainage tubes for condensation to run down and escape. While refitting the new units we discovered that the skylights had been out of level by over 3/4" which caused the collected condensate to run back toward the interior. Rotting and staining interior wood trim in the process.

TRELLIS SHEET METAL

The sheet metal roofing was in reasonable condition however it was soldered to the skylights and needed to be replaced at the same time as the skylight units. The trellis sheet metal cladding also needed to be removed in order to add structural support to the wooden eight foot cantilevered trellis.

One of the trellis wooden sandwich beams was badly checked another was broken. Steel supports were designed to work as a "w-shaped" saddle that added significant rigidity to the trellis and replaced the wooden blocking that held the exterior trim pieces in place. The cypress trim pieces on the trellis are extensions of the fascia.

Wooden blocking under plywood sheets fit into the channels of the steel supports to create the trough for the integrated gutter system originally designed by Wright for the trellis but never executed.

PLINTH

The vertical dividers between the banks of French doors carry the horizontal beam that acts as a fulcrum for the cantilevered trellis above. The original 2 x 6 supports rested directly on the concrete mat and were set in mortar between the terrace bricks for stability. Seven decades of rain water ran down between the bricks and wicked its way up the fir 2 x 6s rotting them away well above floor level. The weight of the trellis was transferred over time to the door jambs and exterior mullions which fortunately were constructed of 2 3/4" thick cypress. It is by the grace of cypress that this house remains standing. The old 2 x 6s were upgraded to 2 x 8 and rather than plant them between bricks, steel plinths were designed to utilize a wider base of support on the concrete mat and lift the wooden supports off the ground. The terrace bricks were set around the plinths as they hold the bottom of the new 2 x 8s above floor level and diminish the potential of any further wicking action.

MASTER BEDROOM THRESHOLD

The threshold has leaked water for many years. The height of the most recent terrace (there have been three) exacerbated this problem by encouraging water to pool in front of the doors. The cement bricks below the threshold were deteriorated and the ends of every floor joist which met the threshold were rotted. The old wood was cut away and joists repaired.

GUEST BEDROOM THRESHOLD

The guest bedroom threshold allowed water to pass in and under the floor. Floor joists and some cypress flooring required replacement.

RADIATORS CRACKED AND RUSTY

The heating system was shut down without being fully drained. As a consequence more than half of the radiators in the house were cracked and need to be replaced. These two radiators shown above were just a little rusty so they have been sandblasted and repainted.

DETERIORATED GARDEN WALL

The rowlock course along the top of the wall is in particularly bad condition, cracked, spawled and broken. A severe crack through the center of the wall needs to be repaired and the grout joints tuck pointed.

CREDITS

Home Owners: Steve Sikora
Lynette Erickson-Sikora
Restoration/Supervision: Stafford Norris III
Apprentice: Joshua Norris
Website/Journal Design: Design Guys
John Moes/Design
Kelly Munson/Design and Programming

CONTACTS

Website: thewilleyhouse.com
E-mail: info@thewilleyhouse.com