

# Building with massive pine timbers

## \$1 million Lake Hills home one of only three timber frame homes in Indiana

BY LU ANN FRANKLIN

Massive timbers cut from huge Canadian white pine trees lay on the ground in groups, brought to the scenic, sloping lot in two flatbed trucks.

At the end of each timber, a number indicates that piece of wood's place in a million-dollar home being built in the upscale Lake Hills subdivision in St. John.

A crane with a 120-foot boom lifts individual timbers to workmen who fit the pieces together like a jigsaw puzzle to create this unique home. As the structure rises, the wood forms both the structure and support for this home, and the interior beauty of arches and open beams that will grace this dream home commissioned by a local couple.

"We wanted to build a log home, but that was not practical for this area (of brick estate-style homes in Lake Hills)," said the owner. "Then we started looking at timber frame homes. There are only two others in Indiana, both in Crown Point."

The couple called on a friend — Rich Cook of Cook Builders — to be the general contractor, and selected Pine Ridge, a Canadian company, to design the house and install the timber framework.

"I can trust Rich completely," the owner said. "We investigated a half dozen timber framers and we like the quality of Pine Ridge's homes."

Pine Ridge Timberframe specializes in the design and construction of timber frame homes under the direction of owner/president Mike Mader. Established in London,

Ontario, in 1990, the company has designed and built a wide range of timber frame structures, from small garden gazebos to large residential and commercial projects.

Mader and other his craftsmen travel around the world building these homes for clients. Just before arriving in St. John to assemble this timber frame home, Pine Ridge crews were in Nova Scotia. Earlier this year, they assembled a timber frame home in Japan.

"Each member of our team has come from different walks of life and, as such, contributes his or her own unique vision to each of our projects," Mader said.

Timber framing is different than post-and-beam construction, he noted.

Timber framing generally uses larger-dimensioned timber material than post and beam construction. Post and beam homes usually have less intricate joinery than a timber frame and rely heavily on metal fasteners to secure everything together. Post and beam construction is more piece by piece, while timber framing is assembled bent by bent — a bent being a series of posts, tie beams and rafters pegged together to form one unit, which is lifted into place by a crane, Mader said.

Timber framing is the art of joining massive timbers into a sup-



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porting structural framework without the use of metal fasteners. The posts and beams are connected one to the other with a "mortise" (the hole) and "tenon" (the tongue) joint. An oak peg is then driven through the two pieces, fastening them together. To further strengthen the frame, knee braces are inserted on the diagonal between the posts and the beams, forming a structurally efficient triangle.

Once anchored together in this fashion, the joints cannot move, and the resulting frame provides

the strength and stability that has for centuries made timber framing the strongest form of construction using natural materials.

As with all Pine Ridge Timberframe projects, this one began with Mader and Steve Sims, one of the firm's architects, visiting the Lake Hills site prior to design phase. They did this to view the site and design the home to take advantage of the lot's scenic views of a lake and mature trees in the home's orientation.

Although Pine Ridge will work with oak and some exotic woods, Cook said the choice of Canadian Eastern White Pine is preferred because it is a more stable wood.

The home's entire structure rests on 23 massive white pine logs that stand upright in the basement and will form a part of the rustic décor the owners plan for their recreation room.

Once the timbers were in place, Pine Ridge craftsmen began installing the tongue-and-groove wooden ceiling that creates the "rustic elegance" the owners want. At this point the Canadian crews went on to their next project and Cook's construction crews took over to envelope the home in structural insulated panels, called

OSB (oriented strand board).

The exterior will be faced with brick, stone and stucco to be in harmony with the other houses in this portion of the Lake Hills subdivision.

"From the outside, it will look like other stick-built houses in this subdivision. It's not until you get inside that you'll see the timber frame structure," the owner said.

Other interior designs will complement the timber frame, he noted. An open wooden staircase will rise from the main level to two bedrooms on the second floor. A wooden bridge on the second level will overlook the first floor while providing access to the upstairs bedrooms. And a two-sided stone fireplace will provide both warmth and a cozy atmosphere.

Construction is expected to be completed in mid-winter, Cook said.

Lake Hills is the ideal spot to build this type of home, Cook added. Once a golf course, the subdivision features rolling terrain and stands of mature trees as well as the lake that is part of the area's name.

"We love this lot and this home," the owner-husband said.

"This is definitely our dream home."

For more information about Cook Builders, call Rich Cook at (219) . The U.S. information center for Pine Ridge Timberframe is located at 317 W. Superior St., Munising, MI 49862. The toll-free number is (800) 998-6818. The company's Canadian headquarters are located at 1198 Gainsborough Road, London, Ontario, Canada N6H 5K8.