

# Going South

## Canadian consulting engineers try life in Arizona

Three years ago Tony Rice, P. Eng. and Tricia Cook, P. Eng. a married couple from Vancouver, took the plunge and moved to Phoenix, Arizona. Tony, a geotechnical engineer with Ontario-based Golder Associates, was originally considering transferring to positions in either Houston and Phoenix, but Phoenix felt right so they decided to go there. Tony moved in April 1999, while Tricia conducted her job search from Vancouver so that their sons Adam and Sean (now 13 and 11) could finish the school year. She lined up a job with Stantec, the Edmonton-based mega-firm that is also the largest consulting engineering firm in Phoenix. She moved last August.

Tony is the geotechnical design manager for the largest highway design-build contract ever awarded in Arizona. The \$184 million dollar improvement involves widening 13 miles of freeway, sinking a dozen 60-foot deep drilled shafts, and building 265,000 square feet of soil nail walls. The job is worth about \$1.2 million in geotechnical engineering fees. It is also giving Tony some fresh engineering experiences. "At this site a very deep groundwater table doesn't complicate the geotechnical work. We are able to drill 10-foot diameter shafts without casing and without caving. We are also able to use vertical zero-clearance excavations for the retaining walls because there is little chance of sloughing. This is different from anything I've worked on in Canada."

Tricia, a civil engineer, is also discovering differences from Canada. She has noticed that more energy is put into wastewater quality issues in Arizona, for example. Because of water scarcity the goal is to reuse treated wastewater as much as possible. "Tertiary treatment is commonplace and the treated wastewater is used to irrigate edible crops, fill ornamental ponds, water golf courses and provide process water for industrial facilities." The political issues surrounding wastewater also offer challenges. "Allocation"



arrangements for Colorado River water between various cities, towns and Native American tribes can be as complex as the infrastructure design.

With 15 years' employment at Golder, Tony did not have an immediate requirement to get his professional engineer (PE) licence. For Tricia, however, with no history at Stantec, it was important to receive her PE quickly in order to establish herself as a project manager. She didn't find that licensing issues were the barrier some

engineers fear. Many professionals are able to work temporarily in the U.S. without too much red tape because of the North American Free Trade Agreement (NAFTA). "Because of the reciprocity agreement, I got my PE without writing the eight hour exam," Tricia explains. "I had to fill in a lengthy application and provide references that were carefully screened by the board."

"Every state is different," Tony adds. He needs to write the exam to get the PE licence in New Mexico and is now studying for it. He continues: "There are a lot of financial benefits to working in Arizona; the value of the dollar, lower taxes, a lower cost of living, tax deductible mortgage payments, and a comparable quality of life."

Fortunately, no-one in the family has been sick so they find it hard to say how the health system compares to Canada's.

"We love it here," says Tricia, "the recreational activities, the weather, (except for those four months that get really hot), watching our sons play soccer without standing in the rain. We live in a wonderful planned community that backs onto a 10,000-acre desert wilderness. Our kids fit in easily and their school is in one of the best state school districts."

Tony and Tricia say they are planning to return to their home in Vancouver eventually.

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