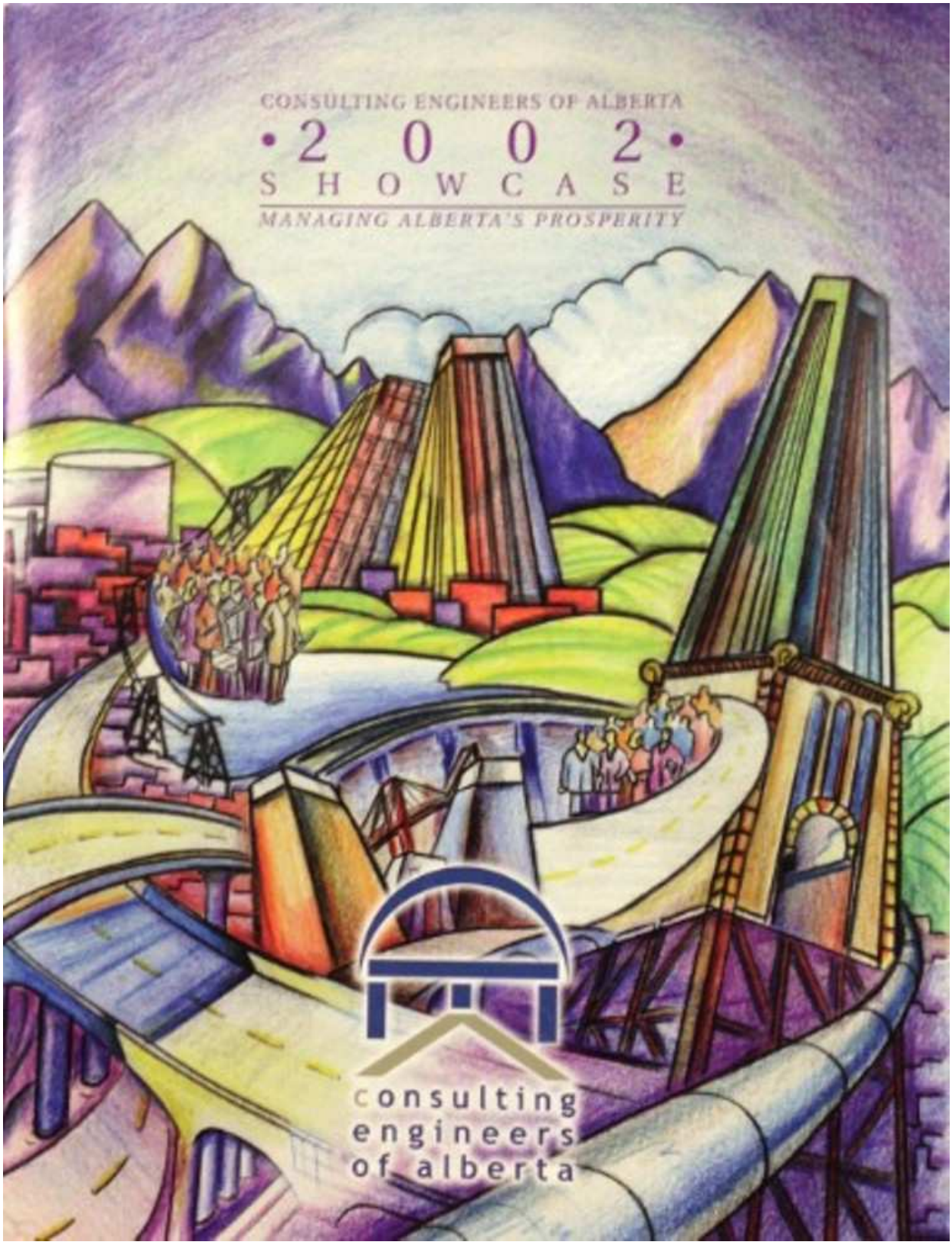
CONSULTING ENGINEERS OF ALBERTA
•2002•
SHOWCASE
MANAGING ALBERTA'S PROSPERITY
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Alberta Consultants Making Contributions

Worldwide

Dr Paul Hardisty, the Komex Director in charge of the project, demonstrates a model of the proposed Jordan Valley Integrated Waste Management Project to Jean Chretien, Prime Minister of Canada. Also pictured are Ali Allabadi (Jordanian Project Manager-left), Canadian Ambassador to Jordan, Michael Molloy, and the Prime Minister's wife, Aline.]

Travel the world, and you're never quite sure when you'll meet an Alberta consulting engineer. Alberta engineering firms are active from the sultry jungles of the Amazon to the frosty reaches of Siberia.

During what has been a period of prosperity and opportunity in Alberta, one might expect consultants to stay home. Certainly some firms have done just that but Alberta engineering continues to make its mark internationally while generating domestic economic benefits. (See separate article page 18.) Interestingly, three-quarters of Alberta's approximately $150 million worth of annual engineering exports is done by firms with fewer than 25 employees.

Experience gained with permafrost in Canada is proving useful for Ferguson Simek Clark (Alberta) Ltd. (FSC) in Chukotka, the Russian region across the Bering Sea from Alaska. FSC cracked the Siberian market in the early-to-mid-1990s with projects that included an international air terminal in Yakutsk. Now FSC is back in Russia for construction of an arena and a hangar in Anadyr, the Chukotka capital. Elsewhere in that region, FSC is building a fish processing plant, two schools and a daycare centre. FSC Principal Garry Karst, P.Eng., points out that many components for the $20 million worth of projects are sourced in Canada, further boosting our economy.

Certainly permafrost is not a problem in Jordan where Komex International Ltd. has been a prime consultant on an integrated waste management initiative. Supported by the Canadian International Development Agency (CIDA), the project entails treatment of sewage to produce sludge and irrigation water that are greening parts of a parched, ancient land.

Along another historic waterway, China's Yangtze, a real-time decision-support system developed by Golder Associates Ltd. in Calgary is averting potential flood damage and savings lives in the Sihu Basin of Hubei Province. When first put to the test last year, the $1-million software package averted an estimated $40 million in flood damage without adding any new structures to the existing river system.

Alberta firms have learned the value of hitting the ground early and of building lasting trust and

Groundwater Resources: Komex hydro-geological and geophysical expertise was able to fully explore the extent of deep aquifer groundwater resources in the Hadramout region of Yemen. This exploration and water management plan has had a profoundly positive effect on the availablilty of drinking and agricultural water in the region. (CIDA-funded project)

enduring relationships with overseas clients. Associated Engineering over the last decade has secured a series of contracts to inspect, rehabilitate and redesign bridges along Vietnam's main north-south highway. These contracts included structures damaged during the Vietnam War. Associate's senior structural engineer, Bala Balakrishnan, P.Eng., explains that the firm established links before the United States and its engineering firms normalized relations with Vietnam.

Sometimes the Alberta connection proves useful in securing assignments. Calgary's Hydroconsult EN3 Services Ltd. is providing services for the 450,0000 bbd OCP Pipeline that will carry crude from Ecuador's Amazon region,15,000 feet over the Andes and to the Pacific Ocean. Hydroconsult President Wim Veldman, P.Eng., acknowledges it may have been helpful that his firm already had worked for Alberta Energy Company Ltd., OCP's largest shareholder. But certainly good connections aren't enough. Award-winning design construction and operational work on Argentina's GasAtacama Pipeline, the world's highest operational gas pipeline, and other experience also stood Hydroconsult in good stead. Veldman recently was in Peru to review river crossings for the Camisea, another pipeline project from the Amazon.

The Alberta Taciuk Process (ATP), a patented dry, thermal process for extracting oil from natural oilsands and oil shales, is being used in Queensland, Australia. The ATP is an Alberta-owned technology developed by the UMATAC Industrial Processes division of UMA. UMATAC has worked on the Australian oil shale project since the 1980s and its staff has provided ongoing consulting services in Queensland since 1996 for a 4,500 bbd semi-commercial demonstration-scale plant. Australian-based Southern Pacific Petroleum, the owner, is considering a full-scale 80,000 bbd plant.

Alberta firms recognize that one job well done usually leads to another. Morrison Hershfield Limited worked under CIDA and World Bank auspices to upgrade water systems in Guyana. That led to an invitation to conduct a wastewater study covering six Eastern Caribbean island nations. With financing through the Caribbean Development Bank, Morrison Hershfield's Alberta team is currently overseeing design, tendering and construction to upgrade and expand a diesel generating station on Nevis, in Saint Kitts and Nevis. Explains Morrison Hershfield's Manager of Municipal Services Doug McRae, P.Eng.: "We will keep these international contacts going; they've worked very well for all of us."

Selling our engineering services overseas pays off in many ways. Obviously there's the chance to earn export dollars and to open doors to further sales of Alberta products and services. While international clients benefit from Alberta expertise, our engineers, including recent graduates, broaden their professional horizons by working in sometimes exotic settings. There are many winners at home and abroad when Alberta engineers go international.

FSC is back in Russia for construction of an arena and a hangar in Anadyr, the Chukotka capital.