

Flight kitchen facility to be built in just 13 months (September 2000)

By Patricia Williams
Staff Writer
Daily Commercial News

MISSISSAUGA, Ont. - For Cara Operations Ltd., time was of the essence in building a new \$60-million flight kitchen at Toronto's Lester B. Pearson International Airport.

The food services company had only 13 months to construct the 268,000-square-foot building.

It will replace an existing facility, located smack in the middle of an area slated for redevelopment under a 10-year, \$4.4-billion program at Canada's busiest airport.

Cara decided to go the design-build route. "We needed to fast-track the process," says Martin Ng, a professional engineer who is director of engineering and business analysis at Cara.

"We had a deadline to vacate our existing premises. At the end of the day, we also had to have a new flight kitchen in operation. "We also wanted single-point accountability." Cara is no stranger to construction. It recently completed an \$11-million plant in St. John's, Nfld., that will produce 3,800 meals a day for patients in seven different health-care locations. But the Toronto flight kitchen is its first major project to be done on a design-build basis. The design-build contractor is Kenaidan Contracting Ltd. Its team includes Dunlop Architects Inc.

Construction got under way in January on the project which includes office and product-development space in addition to food-processing facilities-storage, cooking, dishwashing and tray assembly lines. To be commissioned next February, the facility will have the capacity to produce more than 50,000 meals a day for airline passengers.

"Doing a complicated facility like this in 13 months is extremely aggressive," Ng said.

The design-build contract was awarded last December. Cara chose Kenaidan from a shortlisted group of four design-builders that had been invited to respond to a request for proposals. Initially, the qualifications of about a dozen contractors had been evaluated.

"We went through a detailed analysis (of the bids)," Ng said. "The Kenaidan team provided the best value for Cara as well as the low bid. They had the design capability and they also demonstrated that they could work together as a strong team. And they had experience with aggressively scheduled projects."

While the detailed design was done after the project was awarded, the bidders had to include in their submissions how they proposed to design the building's superstructure.

"One of the key criteria in the request for proposals was innovative design in the superstructure to allow the fast-tracking process," Ng said.

The request for proposals contained a blend of performance and prescriptive specifications. Performance specifications covered such items as choice of precast wall systems, roofing systems and the overall superstructure.

"It was left to the total discretion of the design-build contractors whether to go all concrete, all steel, or a combination of a steel and concrete superstructure," Ng said. "All we provided was the floor loading."

Cara opted for prescriptive specifications when it came to key elements in the food-processing area such as floor drains, internal curbs and epoxy floors. Ng said it is critical to create "a super clean environment" to minimize bacteria growth. Thus, there are no sharp corners which trap dirt.

"We know what works and what doesn't work in a food-processing environment," said Ng, whose firm retained an outside architect to help it prepare the request for proposal document.

The Kenaidan contract accounts for about 60 per cent of the total cost of the project. Cara awarded a separate design-build contract to Black & McDonald Ltd. for a central computerized refrigeration plant. The company is installing the food-processing equipment itself.

"I'm pretty happy with the process," Ng said. "We've passed the midway point (in construction). I'm glad that we went that methodology."

Ng, who gave a presentation on design-build in the private sector at a recent **Canadian Design-Build Institute** seminar in Winnipeg, said one of the benefits of this project delivery method is that it minimizes conflicts between designers and contractors.

"It also makes our life easier as an owner." Prior to joining Cara 2 1/2 years ago, Ng had been involved in other design-build projects including a \$25-million automated bakery in Calgary and a \$15-million pasta plant in Vancouver.

One of Canada's largest food services companies, Cara also operates a chain of restaurants.

Those projects entail a "cookie-cutter approach" to design and construction, Ng said.

"It's the larger and more complicated projects that become more of a challenge for us," Ng said.

The new Toronto flight kitchen will be one of the most advanced in the world. Cara's airport services division has a long-term contract to provide catering services for Air Canada, one of its largest customers.