



Mixing Strength With Satisfaction

## TORONTO PEARSON INTERNATIONAL AIRPORT, ON

### PT GROUT

<b>PROJECT:</b>	New Terminal 1 Parking Garage Toronto, ON
<b>SPECIFIER:</b>	Carruthers & Wallace Limited Toronto, ON
<b>CONTRACTOR:</b>	Harris - BBR JV Stoney Creek, ON / Agincourt, ON
<b>PRODUCT:</b>	PT Grout
<b>QUANTITY:</b>	425 m <sup>3</sup> (15000 ft <sup>3</sup> )
<b>COMPLETION:</b>	Winter 2002

Toronto Pearson International Airport established in 1939, is Canada's busiest airport. It currently handles 30 million passengers annually and is expected to handle 50 million passengers a year, by the year 2020. In 1996, the Greater Toronto Airports Authority (GTAA), which manages, operates and maintains the airport, developed a plan that will allow Pearson Airport to keep pace with this rapidly growing travel demand. The Airport Development Program (ADP) is a 10-year, \$4.4 billion plan focused mainly on the replacement of Terminals 1 and 2 with a new single terminal and a 12600 space parking garage. The first phase of the 8-level parking garage, contains approximately 9000 spaces.

Carruthers & Wallace designed the parking structure, which required 100000 m<sup>3</sup> (130000 yd<sup>3</sup>) of concrete and 8000 tonnes of reinforcing steel to construct. The cast in place slab and beam design consisted of 1200 tonnes of bonded post-tensioning and 800 tonnes of unbonded post-tensioning.

EllisDon Construction Services Inc, the project's successful bidder sub-contracted the post-tension grouting to a joint venture consisting of Harris PT of Stoney Creek, ON and Canadian BBR Inc of Agincourt, ON. The joint venture submitted PT Grout to Carruthers & Wallace and it was approved for use on the bonded post-tensioning system. The Harris-BBR JV crews mixed and placed the PT Grout continuously during the 30-month construction period. Although the structure was heated throughout the winters, typical ambient temperatures ranged from -5 to 30°C (23 to 86°F). Despite a demanding construction schedule, the project was completed on time. The contractor was pleased with the quality and performance of the grout and when completed, the project represented the largest PT Grout project that KING has supplied to date.

