

Third berth ready for business

BY JESSICA KERR
jkerr@delta-optimist.com

After years of planning and months of construction, its time has come — Deltaport's new third berth is complete and will be up and running later this month.

The project, which was initiated in 2002-2003, is a joint effort between the port authority — Port Metro Vancouver (PMV) — and TSI Terminal Systems Inc., the company that takes care of the daily operations at Deltaport.

TSI is part of GCT Global Container Terminals Inc., which also operates container terminals in the Port of New York and New Jersey.

After years of designing and planning the expansion at Roberts Bank, and getting all the necessary approvals, construction started in 2008 and progressed throughout 2009.

The expansion will increase the capacity of Deltaport by up to 600,000 20-foot equivalent units (TEUs) to an estimated 1.9 million TEUs with the addition of the extra berth and 20 hectares (49.4 acres) of additional container storage.

The expansion will take the entire port authority's capacity to 3.7 million TEUs.

Truck and vehicle movements in and out of Deltaport are expected to increase from 3,900 to 5,000 daily.

Darrell Desjardin, director of environmental programs for PMV, has been working on the expansion project since the beginning.

"It started back in 2002 and 2003 when we were actually seeing an increase in container volumes to the west coast," Desjardin said.

"We actually did a container forecast study" looking at both expansion and productivity improvements.

Out of that study came the truck reservation system, which has helped increase the port's productivity, he said, along with the idea to expand the port's capacity and add an additional berth.

Deltaport is no stranger to expansion.

The port saw its first expansion open in 1997 (that project was started in '93). A second expansion was completed in 2000.

"Each time we expanded we said 'Well, it's going to take five to seven years to get to capacity,'" Desjardin said. "And, of course, it was actually at capacity within a year. So it's one of those things — build it and they will come.

"That actually was the focus of the Deltaport third berth expansion... expand-



PHOTO BY CHUNG CHOW

Tim Glasheen, Simon Daniels and Darrell Desjardin all worked on the Deltaport third berth expansion project. The third berth is now complete and should be operational later this month.

ing the container capacity because what was actually limiting throughput through the terminal was the berth space along the dock."

With the opening of the third berth, Deltaport will now be able to accommodate three of the largest container vessels at once, Desjardin said.

In addition to the extra space, the third berth also boasts some impressive new equipment. Last year, Deltaport received three new cranes that will be used in the third berth.

The three 80 Long Tonne Quad gantry cranes arrived on ships from China in the summer. The new cranes, which have 20 extra tonnes of capacity over the next largest crane at Deltaport, are able to hoist two 40-foot containers, or four 20-foot containers, at once.

"It's a bigger structure. Obviously [it has the] ability to carry much more weight... We can handle the biggest ships in terms of reaching out to the farthest container bays," said Simon Daniels, director of engineering and maintenance with TSI.

The port is the first in North and South America to use this type of crane. Daniels said there are a few in use at ports in China and Dubai.

Daniels was also the project engineer with the consultant hired to work on the design of the expansion. Once that part of the project was complete, he moved into his current position with TSI, which meant he was overseeing the construction of the project he helped design.

"It's kind of interesting to see your design being built under your watch," he said with a laugh.

He said that while there were a few changes to the initial design as the project progressed, the final product is close to how it was envisioned and drawn up in 2006-'07.

When the consultant, Omni Engineering, was hired by TSI there was already a conceptual plan in place of what the project would look like, Daniels said.

The consultant helped "flush out the details" of exactly what equipment was needed and the infrastructure that had to be in place to operate the terminal.

After the initial plan for the proposed expansion was put together, the port authority conducted more than a year of public consultation before making the official application for the expansion in early in 2005.

As with any major development, the expansion at Deltaport has its opponents and the project has been met with criticism and controversy along the way.

Delta council and residents, including Against Port Expansion (APE), a group formed specifically to oppose the third berth project and the proposed terminal 2 expansion, have voiced concerns about what the expanding port at Roberts Bank will mean to the community.

Primary among the concerns is an increase in truck and train traffic to the port, the effects on the surrounding ecosystem and air quality in the area.

However, a report on the project from the Canadian Environmental Assessment Agency, which was released in the summer of 2006, included several recommendations to mitigate many of the environmental and social concerns.

The expansion project involved creating land where there was none before.

With the productivity of the fish habitat in that area and the fact that Roberts Bank is on the Pacific Flyway, there were a number of environmental issues that had to be addressed, Desjardin said.

The provincial government gave the project the go ahead in the fall of 2006 and the federal government gave its stamp of approval a few weeks later.

At the time the project was approved, Mayor Lois Jackson said the efforts of local residents made a significant difference to the outcome of the expansion, including better environmental mitigation measures and the introduction of a community committee to ensure proper monitoring of the environmental impacts.

"The Corporation of Delta did everything possible to bring the community's concerns forward," she said at the time. "The people here are passionate about the future of Delta and what this will bear. The future generations will have to judge whether this was a good decision."

As part of its approvals for the project, PMV was required to carry out habitat compensation and mitigation project totaling about 20 hectares.

Those projects include: development of salt marsh and intertidal salt marsh habitat, sub-tidal rock reefs, sandbar stabilization, and intertidal habitat within the caissons that make up the third berth structure.

As well as off-site habitat improvement, which includes seven hectares within the Fraser River Estuary funded by PMV and created in partnership with Ducks Unlimited and the Pacific Salmon Foundation.

Also, the construction schedule was subject to restrictions around the inhabitants of the local waters.

"We couldn't actually build all the time," said Tim Glasheen, director of engineering and maintenance with the port authority.

The construction had to be worked around the schedules of the various inhabitants of the waters off Roberts Bank, including killer whales and Dungeness crabs.

While there are a few minor details left to complete before the new third berth is ready for business, PMV chief executive officer Robin Silvester said last month that as of Dec. 1, 2009 the B.C. Environmental Assessment Office confirmed that the third berth is in compliance with its environmental certificate and can now proceed to commence operations.

A grand opening is scheduled for sometime later this month.