

Erasito introduces mudcrete

engineer from Beca International (Kane Satterthwaite) at the wharf during the construction phase, says Erasito.

BEING awarded the tender to carry out the overall seismic rehabilitation work for the Kings Wharf in Suva in 2002 is one of Erasito Consultants largest contracts for the Fiji engineering company which was established almost eight years ago.

The \$29 million project, funded through a loan from the Asian Development Bank and the Australia and New Zealand Bank, involves the rehabilitation of the existing facilities.

The company's contract for the engineering work involved geo-technical engineering, survey, diving (inspection of piles and retaining wall) structural analysis and design, port planning and electrical designs.

The design and investigation work at the wharf started last January. Construction is expected to be completed next July.

For Erasito Consultants, this big project meant better exposure and more experience for their staff.

"We have new and young Fiji engineers who are acquiring new design skills," points out company managing director Terence Erasito.

At the moment, he says Fiji does not have the expertise, skills and experience to undertake a project of this nature on its own.

Therefore, Erasito Consultants carried out the geo-technical investigative work and construction drawings in association with Beca International of New Zealand.

"With the specialists - Beca International, together with our local engineers and support staff, we complement one another in terms of resources and are in a position to undertake large engineering projects."

Engineering staff dived to the seabed to inspect the toe of the existing sheet pile wall. The company is providing a full time engineer (Anthony Halapua) to assist the resident

Erasito Consultants recently formed a new company with Beca International - Erasito Beca Consultants Limited.

"We now have direct access to a large resource of engineers, engineering skills and specialist skills," says an enthusiastic Erasito.

Best of all, his staff has the opportunity to obtain specialist engineering training and upskilling that would otherwise be hard to get unless they went overseas.

The Kings Wharf project construction work tender has been awarded to Fletcher Construction while a smaller contract involving lighting and power supply is being undertaken by Raghwan Construction.

Erasito says the wharf is 60 years old. The concrete has deteriorated and requires upgrading.

An interesting aspect of the wharf is that the piles are not fully embedded in rock. The wharf structure will thus not be able to sustain a design earthquake.

The Maritime and Ports Authority of Fiji are undertaking this project to ensure that in the event of an earthquake, there will be a "lifeline" which will support shipping vessels.

Also, for the first time, new technology will be used to create a 14.5 wide cement modified soil wall behind the existing steel sheet pile wall.

The contractor will use special equipment that will be brought to Fiji from Europe to drill a 30-40m deep by 14.5m wide section (by 135m in length) of the Kings Wharf and will be mixing cement at a high pressure with the earth to create what is known as "mudcrete".

A total of 10,000 tonnes of cement will be used in the construction of this wall, says Erasito.

This technology was used in the construction of the Auckland viaduct where the Americas Cup was held.

Other work at the wharf will involve the construction of a new bridge deck, new pile caps, new capping beam over the existing sheet pile wall, relocation of the Fiji Electricity Authority sub-station, new 35m high lighting towers and a new gate house security building.

The company's other projects include: the \$10m Natadola Water Supply Augmentation; the \$6.5m Vuda-Kashmir reservoir and pipeline; the \$6.5m Vaturu Nagado raw water pipeline upgrade; the \$3m Navutu Pump Station and Rising Main upgrade; the Nadi Airport Runway extension; plus several projects overseas.

Like others in the industry, Erasito also feels Fiji is experiencing a construction boom. The company's workload has gone up 150 per cent since March last year. "This is a reflection of the economy indicating that Fiji has bounced back to the pre-2000 period."

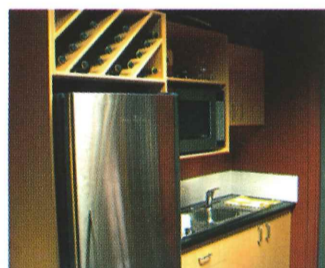
A lot of work being done is a result of the Government's recognition of the need to upgrade its infrastructure in order to attract offshore and local investment.

The population is growing and hence the demand for housing and essential services like water, communications, electricity, roads is taxing existing infrastructure, he added.

Erasito is certain Fiji will see a huge increase in the development of infrastructure (roads, water sewerage and electricity).

With the growing population, housing is also in big demand. No doubt, Erasito Consultants, will be vying for some of these projects in the months to come.

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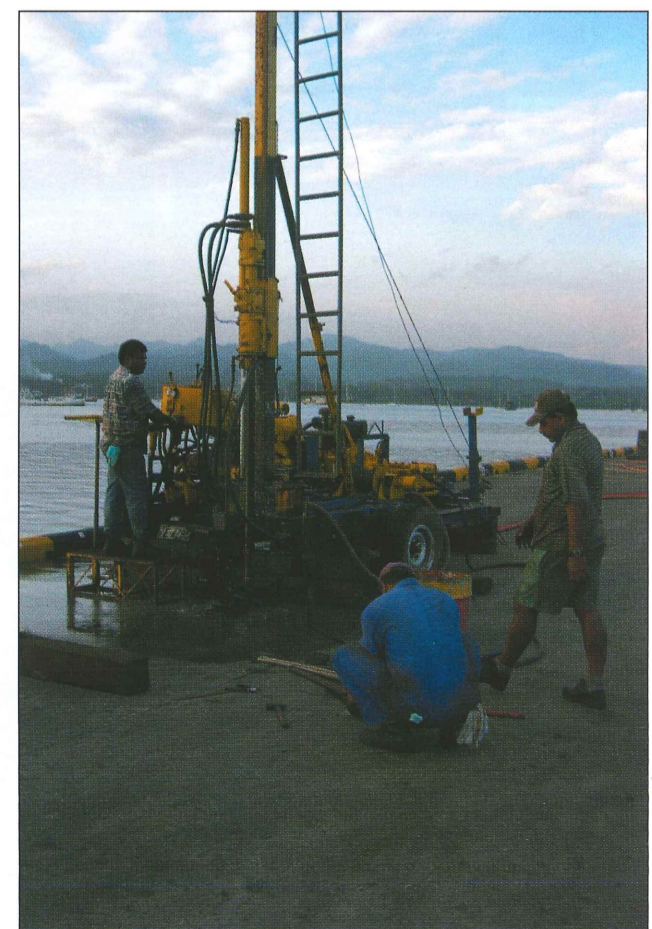
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King's Wharf ... seismic rehabilitation work