



CASE STUDY: Pegasus Town - Fibre to the home

Pegasus Town is a major residential development being built north of Christchurch. With some 2,000 residential and commercial lots, it will be New Zealand's largest new town, and home for 5,000 people. The development aims to be a technology leader.

UNDERGROUND

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PROJECT SCOPE

Network operator TelstraClear is developing the town's telecommunications network. Connetics was selected to install the telecommunications reticulation for the initial stages of the development, including the first major fibre-to-the-home (FTTH) network in the Christchurch area.

The network uses microducting and blown fibre technologies. This means that empty ducting is installed in service trenches during initial construction. The fibre-optic cable can be blown through the ducting later, using compressed air, when the network is ready to be connected.

This reduces initial costs and allows development of the network on demand.

OUR RESPONSE

Connetics applied proven principles - combining forward planning, on-site expertise and strong back-office systems. A dedicated team remained on site throughout, supplemented by additional staff for microducting.

By March 2008 Connetics had laid approximately 22 kilometres of microducting. Ducting is installed progressively, with 100mm ducts carrying multiple fibre optic feeder cables laid from main underground chambers to streetside cabinets, then 40mm ducts to carry microducting from these cabinets to intermediate chambers. Multiple 4mm microducts are then branched off to individual properties. Connetics is also overlaying the



FTTH network with a coax and copper network capable of handling both broadband and normal voice services.

CHALLENGES

The JETnet microducting technology, manufactured by Dutch company Draka Comteq, is relatively new in New Zealand. The scale of the project also presented challenges. With thousands of kilometres of cabling, keeping track of cable identification and location is a major task. Work on the large, complex site has also required careful coordination.

SOLUTIONS

Connetics has readily adapted to the new microducting and blown fibre technologies through investing in training and equipment. Staff training was carried out by JETnet staff

from Holland. We also purchased additional specialised equipment.

Connetics designed a full record keeping programme which tracks the installation of the ducting, ensuring that fibre can be installed quickly and accurately as required.

RESULTS

Connetics' network experience made for a seamless introduction of new technology in a complex, large-scale development. It has successfully completed the FTTH reticulation for the first three stages of Pegasus Town to tight deadlines.

Connetics has now been confirmed to continue the installation through the next phase of the project.

"Connetics have met and handled all aspects of this large and fast-moving installation in a timely, professional manner. They have shown a high level of skill and expertise, not only to install the network but also to work in with other utility providers and contractors on site. Connetics' ability to be proactive and to solve potential problems before they arise gives us the confidence to continue working with them through future stages."

Richard Schoeman
Project Manager, TelstraClear