



Waitakere Hospital

UPDATE

- a new
Eco Hospital
for our community

Waitakere Hospital – a new Eco Hospital for our community

Construction of the new Waitakere Hospital is now well underway. The hospital will provide services to all of West Auckland right up to the Kaipara Harbour.

The Waitemata District Health Board and Waitakere City Council have been working in partnership with the community to ensure that the hospital fits in with Waitakere City's Eco City vision. Waitakere City Council's aim is to look after people's health, social and economic needs while ensuring environmental integrity.

This newsletter brings you an update on the progress we have made. **What is so special about this hospital?**

Through a team approach involving national and international specialists, hospital and council staff, and the local community, the best options for the new hospital were explored. Achievements to date include:

Responsible Stormwater Management

How we did it:

Eco Water Solution's (the Council's water department) engineers worked with the hospital design engineers to design an extensive on-site stormwater treatment system.

Funding was provided by Infrastructure Auckland and Eco Water Solutions to help with the stormwater measures.

What we achieved:

Stormwater from the hospital and Lincoln Road will flow into a landscaped stormwater pond before flowing into Henderson Creek. Stormwater from the new car parks and some of the existing car parks will flow into swales and raingardens before entering Henderson Creek. All this is designed to cleanse the water from sediments and pollutants and to prevent flooding further downstream. Roof water from the building will be used for toilet flushing. This will reduce the amount of stormwater on the site and save precious drinking water being flushed down the toilet.

The environmentally sensitive stormwater system will be attractively landscaped, providing pleasant outdoor walking and seating areas for patients, staff and the community to enjoy.

Water Saving Fittings

Again Eco Water Solution's engineers worked alongside design engineers to establish the best options.

Wherever practical, water saving devices will be installed.

These include:

- Low flow taps
- Dual flush toilets
- Low flow showers

In some areas higher flows are required for medical reasons.

Energy Efficiency

Experts from the Energy Efficiency and Conservation Authority (EECA) and from Auckland University helped evaluate different options. EECA provided funding to audit the initial design and have suggested alterations that result in better energy efficiency.

Natural ventilation through opening windows and plenty of natural light is expected to provide a healthy indoor environment increasing the well-being of patients and staff.

The orientation of the building was adjusted to improve natural ventilation and to reduce the risk of overheating. High levels of insulation further avoid over-heating in summer and save on heating costs in winter. Extensive use of natural light is supplemented by state-of-the-art light fittings, which can be adjusted to provide just the right level of lighting depending on how much natural light is available. Shading and special glass will be provided on the northern windows of the wards to avoid overheating. Natural ventilation is used as much as possible. This has meant splitting the building into air conditioned zones (such as operating theatres) and naturally ventilated zones (such as older adult wards and public areas). The intention is to create healthy and low energy environments closely in tune with the outdoor environment. Re-circulation of some air and use of outside air for cooling in the air-conditioned zone further reduces energy use. Solar hot water heating will be provided to the Cultural Health area. High efficiency motors and low pressure loss systems are used throughout the water and air handling systems reducing energy use further. A computerised building management system will control all the systems in the new building, ensuring efficient operation at all times.

Environmentally Preferable Materials

A process has been set up to determine criteria for material selection.

The intention is to choose the least environmentally damaging material practicable for each application, without compromising durability and quality. Criteria are likely to include the use of NZ plantation timber and the use of low odour paints.
A non-ozone depleting refrigerant (HFC 407C) will be used in the air-conditioning system.

Incorporating Arts

An arts co-ordinator has been appointed to guide the development of an overall hospital theme.

The overall theme for the hospital will reflect the local community and filter right through the entire project. Arts will be integrated throughout the building and be reflected in items such as signage colour schemes and the naming of wards.

Arts integration will create pleasant spaces that can have therapeutic benefits.

It is likely that the Waitakere Hospital Foundation, once it is established in 2002, will assist with raising funds for arts projects.

Native Plants

A commitment has been made to mainly use native species for landscaping purposes.

Native species will reflect the natural character of Waitakere City and provide habitats for native birds and other animals. Community planting projects will let locals participate in the creation of pleasant outdoor spaces for staff and patients to enjoy.

Native species are hardy, because they have adapted to local conditions, this means less maintenance & watering.

An Ongoing Environmental Commitment

A cleaner production programme has been started at the existing hospital. This will be extended into the new areas.

Waste issues have been investigated. Some of the options that are currently being investigated are diverting food waste to piggeries or composting it on-site for use in gardens; and recycling paper, glass and other packaging. A programme co-ordinator has provided input into the new design to ensure adequate space for recycling facilities. Educating staff to operate an energy-efficient and sustainable hospital will maximise the cost and energy saving benefits.

Community Involvement

Community reference groups have been set up.

Relationships were also formed with community groups and community leaders.

We have ensured that the hospital meets local needs, including those of people with disabilities and people from different ethnic and social backgrounds. Some of our initiatives include:
The development of a Pacific garden, where patients and the community can grow vegetables.
The design of a barrier free hospital thanks to the involvement of the disability sector during the planning stage.
We are also in the process of establishing a Hospital Foundation that will raise funds for health initiatives.

Sound financial judgement and common sense were applied throughout the design process. The aim is to create an inspirational building that promotes wellness and will serve the community for many years to come. This is why flexibility, durability and maximum benefit for the money spent were guiding principles throughout the process.

Where to next?

Site works for the new hospital got under way in December 2001, with the complete redevelopment due to be finished in mid / late 2004.

While there is still some design work to be completed, hospital project staff are turning their attention more towards how the hospital will integrate with the community and GPs; and how many staff will be required to run the new hospital.

As with the design of the new hospital, the community and users of the hospital will be actively involved.

Timeline:

December 2001	- site works began
Mid 2002	- site works completed, construction of new acute block begins
Late 2003	- acute block completed, work begins on redeveloping Hughes Block
Mid / Late 2004	- new hospital opens



At the "Start Of Development" Ceremony – December 2001

L to R: Hon Ruth Dyson, Associate Minister of Health; Hon Laila Harre, Minister of Youth Affairs; Rt Hon Helen Clark, Prime Minister; Kay McKelvie, Waitemata District Health Board Chair and Waitakere City Mayor, Bob Harvey.

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