

## Heating, Ventilation and Air Conditioning (HVAC) in the new District Hospital

Users of the many spaces in the new District Hospital want to feel a reasonable degree of comfort while inside in the midst of a frosty Wairarapa winter morning or a hot sunny summer afternoon. Each area of the hospital has unique air-conditioning requirements and varying degrees of heat loads. This has been factored in at the design phase.

**Theatres** and recovery areas have fully ducted air-conditioned systems that provide heated/cooled and humidified/dehumidified highly-filtered fresh air. Temperatures will generally be set between 18° and 24°C as required. Controlled zones mean each theatre can be set at different temperature levels for individual requirements.

**Acute services (ED/AAU/HDU)** also have a high level of air-conditioning. Ducted units are mounted externally and use economical heat pump refrigeration technology to ensure effective heating and cooling. These systems supply a large number of ceiling air supply outlets, for good air distribution and accurate zone control. This is important because north-facing rooms will have different requirements from inner rooms.

**Imaging** also uses heat pump refrigeration technology with full comfort air conditioning and fresh air supply systems. This area's system is designed to cope with any likely internal heat loads e.g. from constantly running equipment.

**Ward areas AT&R and Allied Health** have unique requirements. All bedrooms have high opening windows for natural ventilation and external shading to cut down heat gains. Centre areas within wards have ducted heated and cooled air provided (air-conditioning) to dispel heat build-up and supply full fresh air. There is a higher than normal ceiling stud height in the bedrooms directing air flows through and out the exhaust systems in the ensuite toilets. At ceiling level, heated panels controlled by room sensors provide heating. The busy nurse station areas are air-conditioned with air supply diffusers located over the



*Aerial view showing the footprint of the new hospital taking shape as concrete is poured*

desks and write-up areas.

All isolation rooms are separately air-conditioned with the rooms being maintained under a slight negative pressure. The extracted air will be filtered to a high level.

**OPD** has full air conditioning using six separate in-ceiling ducted variable refrigerant systems, enabling individual areas to achieve quite exacting comfort control, as the need requires.

**Pharmacy and WaiAro Lab** will utilise the same type of air-conditioning systems as OPD to ensure good comfort control and air quality for the occupants through summer and winter.

Areas like the **Café, public corridors and front entrance** will also have air conditioning units in the ceiling.

In addition there are other systems around the new Hospital that make up the entire heating, ventilation and air conditioning (HVAC) installation.

It is difficult to fully explain this in one page, but be assured that the systems are relatively extensive, use energy-saving technology and are tried and tested. The system in our new hospital will be a huge improvement on our current patchwork provision. For more information, contact Peter Clayton

## Project update

- ◆ The Change Management Plan is nearing completion, and Karen Orsborn briefed the Board on progress on Tuesday this week.
- ◆ The feedback on the Workforce Consultation Documents is still being analysed
- ◆ John Bissett will be meeting with User Groups on the 16<sup>th</sup> and 17<sup>th</sup> of March to work through benchmarking.
- ◆ Peter Clayton is taking latest 'footprint' diagrams around the areas over the next week. These include most of the changes worked through with the User Groups, particularly the location of structural services in the concrete flooring, like plumbing.
- ◆ Further Hospital Leadership positions will be announced next week (afterhours co-ordinators, Unit managers).
- ◆ A further meeting will be held next week to discuss body-hold facilities. More on this soon.

## User groups

The role, function and composition of User Groups has been reviewed, and aligned with the changing needs of the Site Development Project.

"We have almost completed the restructuring of these groups, with great input from the staff involved," says Karen Orsborn. "The User Group leaders are now starting to come to the Change Coordination meeting each Tuesday, to help with the sharing and flow of information. User Groups will be the forum where issues like changing work practices, facility issues and timing of events will be debated and resolved."

"We'll have a regular programme of meetings, so contact with building or process consultants can be on a more planned basis, recognising the time commitment to patients that most User Group members have. We're planning a training session for User Group Leaders to get together in early March."

**Any questions about the redevelopment project? Contact Ilana Burt, project manager, on extension 5891.**

## Medical Surgical Team leader appointed

Congratulations to Susan Reeves, CNL of Ward 2, whose appointment at Team Leader is the first of the new hospital leadership positions to be announced. "I see this position as a challenging extension of my former roles," says Susan. "This next year will be really busy, as we work through changing processes and roles, and then migrate into the new District Hospital."

## Other Issues.....

- ◆ Now that the footprint is nearing its final shape, attention is turning to the 'other' services that are not housed in the new district hospital building.  
"We first need to set up a process to clearly identify the needs of each service and match it to the spaces available, or find other alternatives," says Jenny Prentice, Organisation Development Manager. "There is a growing swell of interest in this, and it's timely to take this up now, with the input of the User Groups. Please bear with us while we sort the process out first, before we leap into hasty space allocation solutions that create more problems than they solve."  
InSite will keep you posted!  
The issue of fleet vehicle parking was raised, and Peter Clayton will report back to the next meeting. If you have ideas about this, please contact him on ext. 5521.
- ◆ There appears to be growing concern about the future location, storage, retention, and work processes around records and archives. This was identified as another project area that will require multi-disciplinary input, and possibly outside expertise to help solve.
- ◆ Now an OOPS from last week's InSite! It seems OUR staff are off visiting other digital radiology sites, and visitors are not coming here. The RFPs for new equipment are not yet issued, as reported in the last InSite.