Ambulatory Care Block, Tseung Kwan O Hospital

**Background & Introduction**

Tseung Kwan O Hospital, a secondary-care hospital providing acute and general hospital service was opened in 1999. It is committed to provide top quality services to the growing populations in Sai Kung and Tseung Kwan O districts in general.

**Dr. TOM Kam-Tim – Hospital Chief Executive**

The new Ambulatory Care Block was opened in March 2012. It offers 70 beds in specialist outpatient consultation rooms. There are new services provided, such as a magnetic resonance imaging center and haemodialysis center. After the expansion of the hospital main block, 170 extra beds will be provided to meet patient growth in the near future, especially in ICU, obstetrics, pediatrics, psychiatrics and geriatrics services.

The Tseung Kwan O Hospital New Ambulatory Care Block project was launched in 2009. It was designed and constructed with a tight schedule. With efforts from all stakeholders, the project was completed in five years. We are proud to be associated with this project.

**Dr CHANG Tai-Sing Dickson – Project Coordinator**

In 2008, funds were approved from the Finance Committee. Construction commenced in 2009 and was completed in 2012. In the same year, the hospital started serving the publics.

The Ambulatory Care Block provides a total of 70 consultation rooms, including a Day Psychiatric Centre, a Geriatric Centre, a Medical Centre, and an Ambulatory Surgical Centre. The Hospital also operates a Chinese Medicine Clinic in partnership with the Haven of Hope Christian Service and the Chinese University of Hong Kong. The facilities will be largely enhanced in terms of both quality and spatial standard and the service and attendance capacity will also be increased.

**Vision and Collaboration**

The design process of the entire building is complex and rigorous. Immediately
after contract commencement, various meetings and workshops were held to discuss and integrate requirements from all different users and stakeholders. About 150 technical meetings were held within the 12 months crucial time frame for design finalization.

Dr CHANG Tai-Sing Dickson – Project Coordinator
During the design process, we shared our personal experience to integrate some new design concepts into the project under the guidance from Architectural Services Department. With everyone’s concerted effort, the AIP stage was completed in 3 months. As a result, all detailed design, foundation, superstructure construction and fitting-out works were completed in the following three years. The fast-tracking and simultaneous commencements of design development and construction works are primary reasons that the hospital can be completed in a short period of time.

To ensure quality control, off-site mock up rooms were constructed in Kwun Tong factory building enabling users to better understand the design intention and proposed materials to be used. Their comments made at this stage provide valuable feedback to the Design team to improve their design.

Miss CHIU Kwok-Yee Ada – Hospital Administrator
Building a medical building is not easy. From large installation systems like security, air conditioning and power supply services, to small details like the location of a power outlet and paper towel dispenser inside the hospital, they are well co-ordinated by the team.

Both Tseung Kwan O Hospital and the Project Team were fully committed to the creation of a harmonious community and a green environment. Regular community participations were therefore organised to raise green awareness. A site visit was also held by The Hong Kong Construction Association Young Member Society to promote construction safety.

Construction, Quality Control and Neighbourhood Caring
Safety is of paramount important to this project and therefore daily safety exercise and safety seminars were held to raise workers’ awareness. In order to reduce the impact of the construction activities to the neighbourhood, various measures were adopted to minimize possible nuisance caused, such as dust, vibration and noise. Quieter and “vibration-free”
construction plants were selected. Noise impact to sensitive recipients where regularly monitored through noise meters placed at strategic locations.

To reduce construction waste, the project maximized the use of off-site pre-fabricated units. They were used for the link-bridge and staircases. The components of the link-bridge were fabricated in Zhuhai and then directly installed on site.

In addition, to achieve the green building standards, the contractor collaborated with Hong Kong Polytechnic University. Scrap timber materials were re-processed to use as agricultural fertilizers. Some of them were used in the project.

To further enhance quality control, a sample floor was constructed to enable the users to review and make final comments on workmanship before the commencement of full swing fitting-out works. All the final comments made will be consolidated for design refinement prior to the bulk purchases of materials. Architectural Services Department is endeavour to ensure the best product is achieved through extensive consultation and full collaboration with users.

ITAP approval was needed before commencing relevant works. Inspection and testing procedures were performed and the tests were carried out to satisfy the designer and quality control personnel.

**Design Aspects and Users’Feedback**

Based on an Integrated Sustainable Design Approach, The landscape design applied “borrowed landscape” tactics. This brings the outdoor landscape indoor, and provide better rehabilitation environment for patients. The choice of pastel collars, graphics and pattern also enhance the creation of a healing environment for patients and their families.

The Ambulatory Care Block aims to be a green hospital that is well connected to its surrounding open spaces and green areas. Extensive planting including vertical greening is provided on ground floor to maximize green coverage. In order to further enhance the green environment, multiple Green Pocket spaces are introduced at various locations and at different levels.

The building façade is composed of various high quality glazed wall systems integrated with sun shading devices. Low emissivity glass was used to minimize solar heat gain and therefore reducing the demand on central cooling load. It also allows a high level of sunlight penetration which helps to reduce the use of artificial lighting.
Dr. TSANG Kin-Keung – Consultant (Medicine)
I am Dr Tsang from the Department of Medicine, I feel comfortable with the look of the building. The design allows a lot of natural light penetrates into the building and I can see the landscape outside, this makes both doctors and patients feel more comfortable and relaxed.

The designer maximises the use of natural daylight to create a pleasant and lively environment for staff and patients. Well lit interiors will benefit the placement of internal plants as well as enhancing worker’s performance.

Ms. TAM Siu Ping – Property Attendant
The staff lounge is located on the seventh floor of the building. Facilities are well planned and contemporary, which provide a high quality resting environment after heavy workload and night shift duty. These help to boost employee’s morale.

The courtyard atrium on the sixth floor characterize the design theme of the Ambulatory care Block. It performs as a networking space that encourages social interactions among different users. The courtyard also serves as an environmental feature that can be naturally ventilated with pivoting glazed doors and the motorized windows high above the courtyard. The internal environment can therefore be attenuated in different seasons to achieve maximum comfort.

Miss CHEUNG Ka-Wing Bonnie – Registered Nurse (Specialist Out-Patient department)
The Ambulatory Care Block has extra consultation rooms and examination rooms. Each room has new treatment equipment to improve the quality of services. In the sense of space, the waiting area of the specialist outpatient clinics has become larger.

The key objective on wayfinding strategy for this project is to create a user-friendly and people-oriented public hospital that focuses on patient rehabilitation and Public Convenience for those seeking out patient service. In the early stages of design, Architectural Services Department has commissioned a consultant design company to evaluate on paths and routing design. Identifiable marks, patterns and colours, to highlight various floors and
departments.
The signage system provides easy way finding for the public. Furthermore, comprehensive barrier free facilities are provided for the disabled, such as ramps, tactile guide path, audio and braille map and induction loop.

Mr. HUI Wai Alvis – Chinese Medicine Pharmacist
The new lobby of the Chinese medicine department is more convenient for patients, and the corridor is wider to provide convenient access for disabled people. Consultation rooms are larger as well. All in all, the new block is more user friendly than the old one.

Mr. Au Yeung Siu-Wah - Patient
On the first visit to the new hospital block, I have discovered that the signage is well designed. Visitors do not feel anxious and disoriented. Signage is clear and easy to understand.

A new bridge and a covered walkway, provides a seamless and direct connection between the old and new blocks for hospital staff and visitors. Designated NEATS loading bay give patients and Non-emergency vehicles a discreet and direct entrance to the new block.

For energy reduction, solar hot water panels and photovoltaic panels are installed to generate renewable energy

Mr. LO Sai-Yu William – Snior Hospital Manager (Administrative Services)
The building is environmentally friendly. For example, solar photovoltaic panels are installed on the rooftop. Also, the power consumption of the central air conditioning system is reduced by 20%-30%.

In order to increase public awareness regarding these green features, a green energy display monitor is installed at the main entrance, to shows the total green energy generated.
The Tseung Kwan O Hospital Ambulatory Care Block is awarded with Platinum rating for HK-BEAM certification, and winner of the 2012 Asian Townscape Awards. There are rewarding and encouraging results for the project team.

Reasons of Success & Forward Looking
Dr CHANG Tai-Sing Dickson – Project Coordinator

After three years of construction, we have built an environmentally friendly new building. It integrates into the surroundings. We are very pleased with the new building, which not only looks beautiful, but functioning well and conveniently. It provides a comfortable environment for patients and users at the same time, reducing the distress of the traditional hospital stigma. Those positive feedbacks are encouraging. In the future, we aim to do better.

Tseung Kwan O Hospital Ambulatory Care Block has been officially put into operation for quite some time. A pleasant medical environment is created with high-quality facilities, which is more convenient for the medical team, patients and their families. We are pleased to see the contribution of everyone’s efforts is being well received.

Dr. TOM Kam-Tim – Hospital Chief Executive

Looking forward to the future, we will continuous improving the services of the Tseung Kwan O Hospital, to achieve holistic health care, and improve the medical services of Tseung Kwan O and the Sai Kung District