

A Healthcare Oasis on the Village Commons: Envisioning a Healthcare Campus as the Social Hub of an Entire Community

PROJECT
Woodlands Integrated Healthcare Campus
(Shortlisted Design Competition Entry)

ORGANIZATIONAL AFFILIATION
B+H in Association with Aedas Singapore

AUTHOR
David Stavros
Principal, Executive Vice-President, Asia,
Senior Director of Design, B.Arch., OAA, MRAIC

LOCATION
Singapore

SIZE
260,128 m²



Executive Summary

The Woodlands Integrated Healthcare Campus (WHIC), a shortlisted competition entry for the Singapore Ministry of Health, builds upon a history of healthcare design and represents an emerging school of thought around modern long-term care models and community integration. The design intent was to provide a continuum of care that would encompass clinics, a 1,400-bed acute care hospital, 600 sub-acute care hospital, and clustered 400 beds long-term care facilities.

Several metaphors guided our thinking process and influenced the final design for the WHIC, namely; the concepts of "Oasis" and "Agora" which focus on community integration; tropical forests with their varying foliage canopies; also, traditional South Asian villages known as "kampong", admired for their structures on stilts.

Like kampong houses, the community hospital wards were designed to be interconnected with bridges to the acute hospital, SOC, as well as LTC for an integrated continuum of care. The "Village Commons" slips under the hospital and connects the Woodlands Healthcare campus components. Lifted on stilts, the mass allows better air flow and creates a sheltered community gathering plaza. Like a village square, it is here where the community gathers and activities happen, thus promoting the role of community involvement in the healing process. The design of the facility itself embodies an innovative urban design concept with potentially widespread applications: a healthcare campus that functions as a gathering place for the community at large.

An Oasis and Community Hub

The site for this hospital could be described as a 'placeless place' – a highway and a major traffic artery intersect at one corner, and the many of the area's residents are blue-collar workers who live in scattered, mid-rise housing complexes. Although the population density is high, the area lacks a social hub.

Our vision was not simply to design a hospital campus, rather, it was to create an oasis. Our interpretation of the word "oasis" goes beyond the notions of refuge and security. It evokes a vibrant and active community, a social magnet for the residents living in this part of Singapore.

The people-centric cluster of care villages at the heart of the design proposal is organized to create a fully integrated healthcare-oriented community. The design narrative is rooted in adaptability, flexibility and accessibility that emphasizes the role of family relationships, social activities and healthy lifestyles.



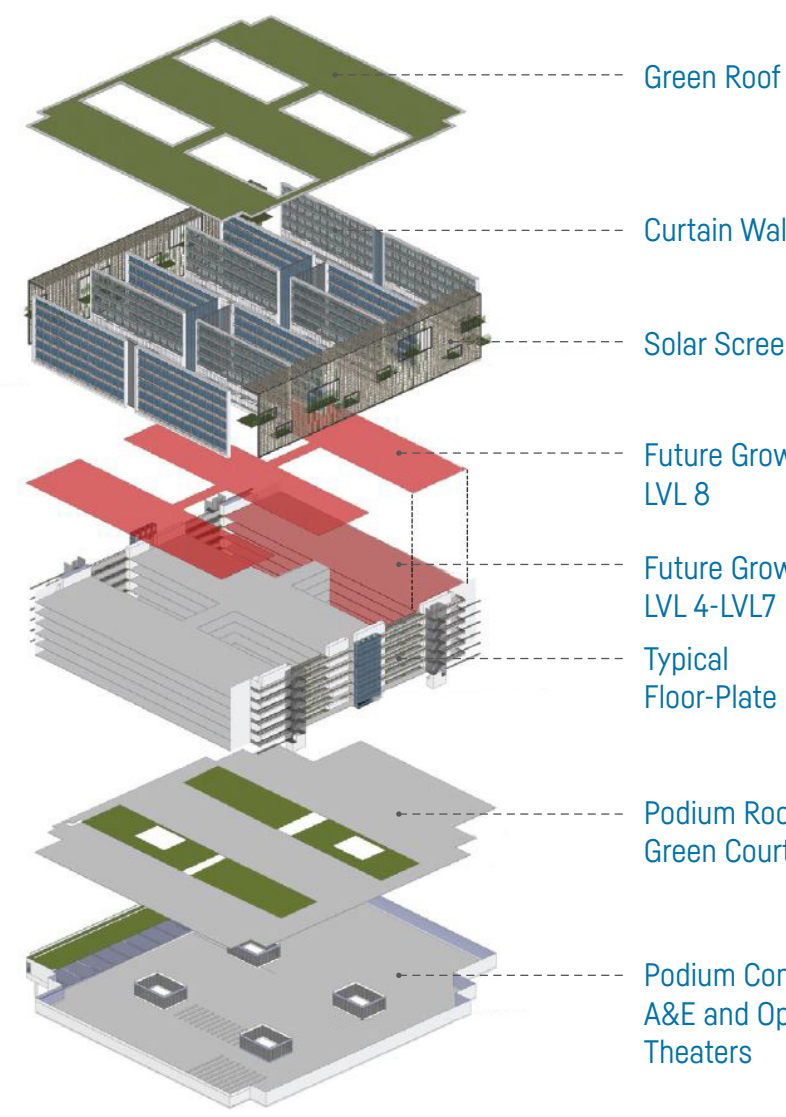
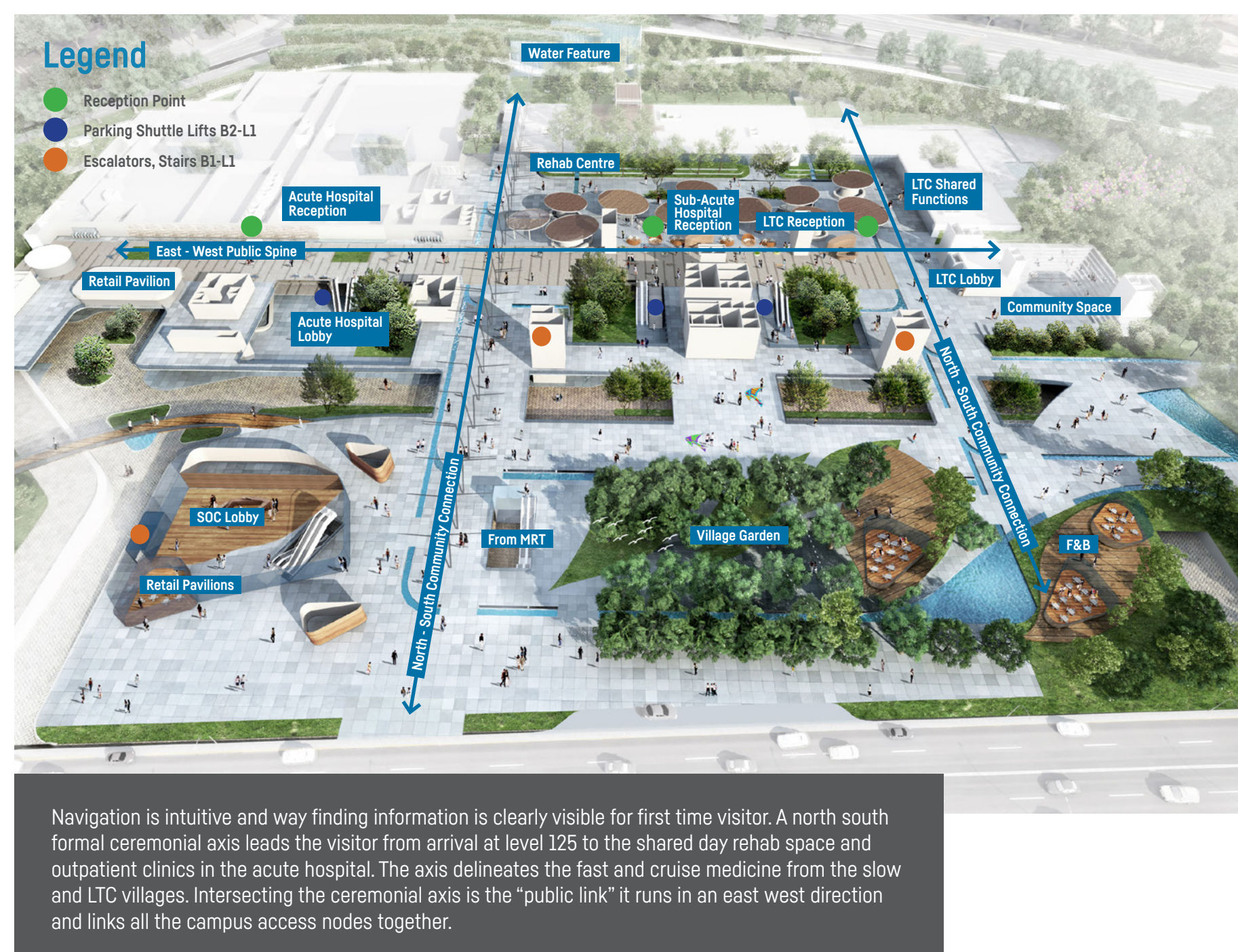
An Environment for Healing and Wellness

The environment of wellness is recognizable from the moment you arrive at the campus, celebrating the virtues of healthy mind, body, and spirit with an emphasis on integration and accessibility to services and professional care. An atmosphere of health and wellness where the patient come first, family support is nurtured and encouraged and community integration is paramount.

The community is invited to experience the site's natural environment through landscaped healing gardens, the civic plaza, Village Green and pedestrian paths that connect to the existing park in the east and west of the site. All vehicular traffic is directed to the lowest level of the site freeing the ground plane for pedestrians and community facilities only.

Natural light aids in the healing process. Light is integrated into the design through courtyards with planted gardens, bringing the exterior indoors in a sheltered environment. An abundance of trees pedestrian paths, peaceful gardens, courtyards, and planted roofs echo the geographical context of the site where the landscape was historically lush with plantations.

Patient areas are warm, welcoming and designed with natural materials that are comforting to patients and family members. Best practices for inpatient care are specifically designed for future community needs. Attention to clinical planning includes the consolidation of support spaces with staff and service lifts promoting LEAN and evidence-based design principles for state of the art facilities that support patient wellness, community integration and education and staff training.



Planning for Uncertainty and Design for Change

Our design proposal lays out a framework that is easily adaptable to address the ongoing future healthcare challenges while minimizing interruptions to ongoing hospital operations. The framework is composed of repetitive modules of 50m x 29m based on a structural grid of 8.4 x 8.4.

This module is used at both the Fast and Slow Medicine Villages. It facilitates combinations of varying types of rooms A, B1, C class and allows for convertibility from subsidized to non-subsidized patient rooms. This guarantees that all IP modalities are interchangeable and flexible for both Fast and Slow Medicine Villages. In addition, provisions for M&E shafts are embedded in the modules to facilitate future implementation of centralized or non-centralized Acute Care conversion should that be desired.

Each village has a built in additional area for future expansion for example; the Fast village have a total of 10 Modules that are designated as future. Likewise the Slow village will have 2 modules, while the SOC will have the top 8th floor available for future use.

The intention is for the facility to capitalize of the use of technology to maximize efficiency and clinical staff communications. Modern clinical equipment will all be networked, full wireless coverage through hand-held devices. Digital charting, diagnostics and orders will be handled through a single network.

