Welcome Our New Editorial Advisors

As announced in the last Editorial Message, to promote research and writing and to attract quality papers, the Editorial Board launches the Journal’s “Best Paper Award”. The Journal’s panel of advisors will carry out the final vetting on those papers recommended by the Editorial Board. As the papers submitted to the Journal cover a wide range of topics, we would like to increase our advisory panel size to cover diverse background and expertise. We are pleased to have the honour of three distinguished guests joining our editorial advisory panel. Our three guests are actively involved in the education and practice relating to property development and construction. They are Professor K W CHAU, Dean of Faculty of Architecture, Hong Kong University; Professor J M KO, Dean of Faculty of Construction and Land Use, The Hong Kong Polytechnic University; and Mr Dennis LEVETT, founder of the successful QS firm, Levett and Bailey. Their involvement will not only enrich the advisory panel but also contribute towards promoting education and research in construction and architecture. On behalf of the Editorial Board, we extend a warm welcome to our three friends, and to our current serving advisory members, a big thank you for their continuous supports.

For this issue, the Editorial Board is indeed fortunate to have received many informative and interesting articles on a variety of topics. Firstly, thanks to Professor Alex Lui for his long-term support to the Journal, who again has contributed an interesting article to this edition-titled “Small Italian Town Sketches”. We also have a very refreshing book recommendation from Mr. Chung Wah Nam, our ‘old China Hand’ (old just in terms of his fully experienced content /expertise on Chinese subjects), who introduces to us this great work titled《敦煌石窟全集》之《敦煌卷》with his witty comments.

Transport development and town planning always have great influence on the future development opportunities and possibilities. In this edition, we have two inspiring articles on these important subjects from Mr. Alfred Yeung and Mr. Tong Chun Wan, entitled ‘Property Development and Railway: A Marriage of Convenience?’ and ‘Hong Kong 2030: Planning Vision and Strategy’ respectively.

In our continuous efforts to encourage more fellow architects in submitting articles to this Journal, Mr. Edwin Chan (our Chief Editor) has set a very good example here by putting his words into action and submitted a detailed ‘Study of the D & B Tender Selection System’ under the Professional Practice Section. Other features include an interview with Jordi Bardia by Ms Janet Yu, who opened up the design philosophy and principles in some works of this famous Spanish architect. For many of us who are attracted to the exciting new projects in Macau (apart from the great Macanese food, culture and heritage), the very informative article from F.V. Pinheiro on The Macau Tower may inspire us to make another ‘study trip’ to Macau. On the other issues, we also have many equally inspiring and interesting articles that are not to be missed. So why don’t we simply relax and start to enjoy this edition of the HKIA Journal?

Chris LIU
For the Editorial Board
From The President

Australia Excursion

Taking time off to visit architects and architecture of foreign places has always been a delightful experience for me. Not only can one learn a lot about different cultures but also one gets to know how others resolve their problems. Best of all, you can go with your colleagues for the same reason and have opportunities to discuss, to discover exciting innovations and spending time together to enjoy life.

HKIA members were well received at our official visit to the RAIA. We learnt about their history, their activities and in particular the development of their premises - a winning design competition of a converted heritage building connected to a modern addition. We were confirmed on their long list with CAI and we made arrangements to formalise our recognition with their list of accredited schools.

Tale of three cities

Our first stop was Melbourne. Afterwards we travelled by bus to Canberra before going to Sydney. All three cities have their own characteristics. Melbourne has the gold and the blue stone; Sydney has the harbour and the sandstone. These two important commercial centres are such historic rivals that in the end the Australians have to choose Canberra, a new city with equal distance between Melbourne and Sydney as their capital. We all wonder whether this is a good decision since there is relatively little activities happening in Canberra. Apparently, even the Prime Minister does not live there.

Melbourne

We stayed in the Duxton Hotel which is a beautiful Victorian building converted to a hotel. Around the area there are impressive old structures and most of them have modern interiors converted for new functions. We visited the observation deck of the tallest tower and had a bird's eye view of the city. John Buckton spent an afternoon with us showing DCM's offices and presented their work. He took us again the next morning to see the Melbourne Museum. The Museum is a competition winner and has a variety of interesting spaces linked up by a glazed spine to the central court of native forest. John explained the design problem of museum fatigue and how he had attempted to reduce the visitors by a variety of volumes, levels and the contrast of light. We also visited DCM's Melbourne Convention Centre, a most flexible and efficient building making its presence at the junction of the river.

Canberra

Founded in the early 20th century as the new national capital, Canberra developed from the design of Walter Burley Griffin’s international winning proposal in 1913. We visited a number of competition winning projects including the National Gallery, the Parliament House and the newly-completed National Museum. All are very different and spectacular in their own ways. The Parliament House has the unforgettable avant garde curving wall dividing the canopy into four sections encasing the two Houses of Parliament, the Houses of Representatives and the Senate. The reconstructed landfill together with its geometry is in many ways the focus of the Griffin plan intended for this Capital Hill. The trendy National Museum has the concept of an ideal knot reflecting the story of Australia, which is not one, but many tangled together. The centrepiece of the Museum becomes an open space named the Garden of Drums, representing a new cultural arena of hope. The placement of the museum in a peninsular projecting into the artificial lake contributes to the completion of the development plan for this capital city.

Sydney

After our visit to the RAIA, we met a number of Australian architects for dinner and Harry Seidler accompanied us to walk around the city and explained how the city had developed. Next morning, our visit to his office became one of the highlights of the excursion. Harry presented his work and gave us time to stay in his beautiful two-storey guest apartment possessing the most spectacular view of the harbour. The harbour cruise and visits to the Darling Harbour, the USGrace campus and finally the Sydney Opera House were most enjoyable tours to learn about the city. To complete our excursion, we learnt how Renzo Piano related his design of the Opera House to the Sydney Opera House and how the details of this exciting glass tower were constructed.

Finally, I wish to take this opportunity to thank all the Australian architects and friends that have made it possible for us to learn so much and have such an enjoyable visit to their country. Credit must also go to Josie Dee and her committee for their hard work in making the arrangements of the excursion and in particular allowing us to have such spirited discussions about architecture during the bus trips in between these three cities. I highly recommend other HKIA members and friends to take time to join the excursion visits in future.

Professor Patrick Lau, S.B.S.
HKIA President
### Diary & Events

#### January 2002
- 8/1 Board of Internal Affairs Meeting
- 9/1 Board of Educational Affairs Meeting
- 18/1 Board of Practices Meeting
- 24/1 Board of External Affairs Meeting
- 25/1 Architects Registration Board Meeting
- 28/1 Board of Local Affairs Meeting
- 30/1 Council Meeting

#### February 2002
- 26/2 Board of Internal Affairs Meeting
- 27/2 Board of Educational Affairs Meeting

#### March 2002
- 6/3 Council Meeting
- 8/3 Architects Registration Board Meeting
- 13/3 1st Quarterly General Meeting
- 14/3 Board of External Affairs Meeting
- 19/3 Board of Local Affairs Meeting
- 22/3 Board of Practices Meeting

#### April 2002
- 9/4 Board of Internal Affairs
- 10/4 Board of Educational Affairs
- 23/4 Council Meeting
- 26/4 Architects Registration Board

#### May 2002
- 2/5 Board of External Affairs Meeting
- 8/5 Board of Local Affairs Meeting
- 10/5 Board of Practices Meeting
- 22/5 Board of Educational Affairs Meeting
- 28/5 Board of Internal Affairs Meeting

#### June 2002
- 5/6 Council Meeting
- 7/6 Architects Registration Board Meeting
- 13/6 Board of External Affairs Meeting
- 17/6 Board of Local Affairs Meeting
- 19/6 2nd Quarterly General Meeting
- 28/6 Board of Practices Meeting

#### July 2002
- 3/7 Board of Educational Affairs Meeting
- 16/7 Board of Internal Affairs Meeting
- 17/7 Council Meeting
- 26/7 Architects Registration Board Meeting

#### August 2002
- 1/8 Board of External Affairs Meeting
- 5/8 Board of Local Affairs Meeting
- 9/8 Board of Practices Meeting
- 21/8 Board of Educational Affairs Meeting

#### September 2002
- 3/9 Board of Internal Affairs Meeting
- 4/9 Council Meeting
- 6/9 Architects Registration Board Meeting
- 11/9 3rd Quarterly General Meeting
- 12/9 Board of External Affairs Meeting
- 13/9 Board of Practices Meeting
- 16/9 Board of Local Affairs Meeting

#### October 2002
- 9/10 Board of Educational Affairs Meeting
- 15/10 Board of Internal Affairs Meeting
- 18/10 Board of Practices Meeting
- 23/10 Council Meeting
- 25/10 Architects Registration Board Meeting
- 28/10 Board of Local Affairs Meeting
- 31/10 Board of External Affairs Meeting

#### November 2002
- 20/11 Board of Educational Affairs Meeting
- 29/11 Board of Practices Meeting

#### December 2002
- 3/12 Board of Internal Affairs Meeting
- 6/12 Architects Registration Board Meeting
- 9/12 Board of Local Affairs Meeting
- 11/12 Council Meeting
- 12/12 Board of External Affairs Meeting
- 18/12 Annual General Meeting
Service Apartment 2-20A
Minden Avenue & 4-8
Blenheim Avenue, Kowloon

Project Name / Address:
Service Apartment 2-20A
Minden Avenue & 4-8
Blenheim Avenue, Kowloon

Construction Cost:
266 million approx.

Completion Date:
June 2002

Project Size:
Domestic GFA = 16,100 sqm
Non Dom GFA = 2,900 sqm

Design:
AEC Design Ltd /
創智建築師有限公司

Developer:
Henderson Land Development Co., Ltd.
恆基兆業地產有限公司

Main Contractor:
Heng Lai Construction Co., Ltd.
恆麗建築有限公司

1:150 Typical Floor Plan
Project Description

Situated at an elongated class C site facing waterfront at Minden Avenue, TST, the design comprises a 40-storey residential block in linear form of total 16,086 sqm and a retail podium with a basement floor, carpark floors and clubhouse floor of total 8,320 sqm.

The podium is cladded with granite in transformed classical language contrasting with stainless steel wire mesh advertisement screen in modern architectural expression. Being situated at TST facing waterfront, a roof feature is designed to enhance the silhouette of the building and the identity of the premises.

40層高的高級服務式住宅大廈，面向維多利亞海港，總面積約為16,086平方米。當中設有跑街及地庫商場、停車場及會所等相關設施，面積約為8,320平方米。

平臺用高級花岗石覆蓋，以革新的古典色彩與極具現代化的不銹鋼網廣告板形成強烈對比，頂部裝飾面向海港用作加強大廈的輪廓及獨特性。
Renovation for Silverrecord Cinema

Project 項目:
Silvercord Cinema / 新港戲院

Location 地點:
30 Canton Road, Tsimshatsui

Area 面積:
900 sqm / 平方米

Design 設計:
AGC Design Ltd / 創智建築師有限公司

Client 客戶:
Mini Cinema Ltd

Main Contractor 總承建商:
Parks Engineering Ltd

Audio/Video Equipment 影音器材:
Strong Westrex Company, Asia

Cinema Seating 戲院坐椅:
Selmax Ltd

Plasma Display 等離子顯示屏:
Pro United Technology & Engineering Ltd
Project Description

In order to create a brand-new refreshing image to the previously uninviting cinema foyer and as well to celebrate the new cinema operator, prefabricated aluminium corrugated panel of special designed profile in white color is used to clad onto the existing dark and dull granite wall against a new white floor, thus creating a light and bright, dynamic and mobile expression. The external signage is also modified to provide a 2-storey entrance porch which is visually coherent to the adjoining shopping arcade transparent entrance, resulting in a unified space yet creating a stand-out identity for the cinema entrance. The two cinema houses are renovated with better comfort.

院方要求装修使用了特殊铝质板，带有一种超时代感，设计时刻意设计的铝质板表面圆弧形带出动感及流线性。

全白的铝质面板配合白色地面令整个大堂光亮起来，给人焕然一新之感，两层高的院方入口不仅延伸了商场入口的适性，亦保留了院方本身的独特特色。

院内设施如投影幕、音响及座椅皆全新，提升视听享受及舒适感。
Design & Build Tender Selection System for Government Projects in Hong Kong

Edwin H W CHAN, Y Y MOK and Julie MO

INTRODUCTION

In Hong Kong, most construction projects have been procured on a lump sum fixed price contract. It is generally referred to as "the traditional system" whereby the client appoints an architect/engineer to produce the design, select the contractor and supervise the work through to completion. The contractor is selected on basis of competition or negotiation. Separation of the design and construction process in the traditional system is one of the major culprits creating the many problems in construction projects [Chan & Chan 2000]. The inadequacy of the traditional procurement system prompts the call for change in project procurement methods. Fast-track procurements like Design & Build (D&B), Construction Management, and Management Contracting emerge. Fast track procurement system refers to overlapping of design and construction by early involvement of contractor in the design process [Kwakye, 1990]. This method enables the contractors to contribute on aspects of constructability at design stage. which may improve the time and cost performance of the project. These new arrangements claimed to facilitate shorter project periods, making earlier occupation possible and allowing the clients to obtain an earlier return on their investment. Among the new procurement methods, Design and Build (D&B) is the most popular one adopted in the construction industry. With the various advantages over the traditional method, D&B is also gaining popularity in Hong Kong. The main advantage to the client with the D&B arrangement is the single-point responsibility. The contractor will be solely liable, whether it is the design or the construction at fault.

"It is a very costly and wasteful tendering exercise for the unsuccessful tenders as design proposals have to be submitted. With design proposal involved in tenders, the selection process becomes much more complex and difficult."

There may be many benefits for the clients to use D&B. It is a very costly and wasteful tendering exercise for the unsuccessful tenders as design proposals have to be submitted. With design proposal involved in tenders, the selection process becomes much more complex and difficult. In addition, aesthetic judgment is usually criticized as subjective. Therefore, it is extremely important for the client's expectations to be fully communicated and verified with the contractors through a systematic, repeatable and transparent method of tender evaluation. Without such system, best value for money will not be ensured and innovation may not be encouraged (Lamont 1999). The amount of money involved in contracts awarded for construction D&B projects is normally huge. Bribery and corruption may happen if it is lacking a fair and transparent tender selection system. Moreover, the accountability of government works department requires having an objective system to help them explain their decisions to the public. This study evaluates the tender selection system in the Architectural Services Department (ArchSD) as one of the major government works departments to see whether the system can achieve the above-mentioned objectives.

DESIGN AND BUILD IN HONG KONG

Variants of D&B procurement system

In a design and build system, the client enters into a single contract with a design-build contractor who both designs and constructs the building. The D & B contractor may employ architects/engineers, either as staff members or as contracting design firms of the D&B contractor. D&B procurement system is expected to have major impact on the practice of design professionals, such as architects and engineers. The Hong Kong Institute of Architects (HKIA) has carried out a study on the topic (HKIA 1998). D&B procurement system has been used internationally for many years. Review of literature, including the HKIA Report of the Design and Build Task Force (1998) has identified the different forms of Design and Build Contracts as follows:

- Traditional Design and Build:
  The contractor is responsible for complete design and construction of the project.
• Enhanced Design and Build or Develop and Construct:
   The contractor is responsible for design development, working details and construction of the project according to an initial design provided by the client and his design team.

• Novated Design and Build or Novation Contract:
   The contractor is responsible for design development, working details and construction of project, according to a design provided by the client following the transfer of the design team consultants from the client to the contractor.

• Design and Manage:
   The contractor gets a fee for managing all aspects of planning, design and supervising the sub-contractors of the project, the contractor has design responsibility.

• Design, manage and Construct:
   It is similar to "design and manage" except that the contractor is involved in constructing some of the works.

• Package Deal including Turnkey:
   The contractor provides standard buildings or system buildings that are adapted to suit the client's space and functional requirements.

   In Hong Kong, the commonly used forms for building projects are traditional D&B, enhanced D&B, and novated D&B.

Current situation
   D&B is still in a developing stage in Hong Kong and is not as significant as in other countries. The construction market is still far from mature to take on the system in full swing. The system has been solely adopted in public funding projects. In civil engineering sector, D&B has been used since 1980s. Eastern Harbour Tunnel, Tate's Cairn Tunnel, Container Terminal 9 and Kwun Tong Bypass Phases II and III are some of the completed examples. Rowlinson & Walker, (1995) note that because of the Airport Core Programmes, "Hong Kong probably leads the world in D&B for infrastructure projects." Some Airport Core projects including Expressway Route No.3, Western Rail Tunnel, Kap Shui Mun Bridge, Ting Kau Bridge and Sheung Shui Slaughterhouse have been delivered using D&B procurement methods.

   "The system has been solely adopted in public funding projects. In civil engineering sector, D&B has been used since 1980s. In the building sector, adoption of the D&B system has been very slow."

   In the building sector, adoption of the D&B system has been very slow. Government works departments being the fare runners in using D&B have played a vital role in promoting the use of D&B. ArchSD, Hospital Authority (HA) and Housing Department (HD) have delivered many of their projects with the D&B system.

   In the ArchSD, some projects are given only short construction time to complete. The D&B method is first introduced as a good solution. The Hospital Authority requiring urgently a number of new hospitals with large number of complex equipment and installation, D&B is a good choice for it. For Housing Department, under the Private Sector Participation Scheme (PSPS), the private developers are invited to participate and to form a joint venture scheme with HD. The latter acts as a project monitor and the former is required to build HOUs equivalent flats conforming to certain specifications. Apart from the financing initiatives, the arrangement has a great resemblance with D&B procurement method. The Conditions of Sale of land specify the developer's duties and the Technical Schedule lay down the standards and specifications of workmanship. The performance of flat is scrutinized by the appointed Monitoring Surveyor in accordance with the Technical Schedule (Ho, Chau & Leung, 1996b). Since the successful PSPS tenderer is responsible for the design, management and construction of the project, the PSPS contract can be viewed as D&B procurement.

Potential use of Design and Build in Hong Kong
   In the traditional procurement system, many lines of responsibility generate complicated contractual systems linking the "technical design" and the "construction activities" among the numerous contracting parties (Leung 1995). The clients usually enter separate contracts with the designers and the contractors, and as a result, the project suffers from many of the contractual disputes. If the intention is simply to avoid such complicated contractual links, D&B system is expected to prevail in the future. This does not mean that there will be no dispute in D&B contracts (Chan & Chan 2001).

   Attached to the D&B system, there are the charms of fast tracking, time and cost reduction, cost certainty, single responsibility, improved buildability, more choice of design and reduction of client's internal administrative staff. In times of recession such as the current economy, clients stand in a more advantageous position to ensure that there are willing contractors teaming up designers to put together a design and build tender package to look for work.