



**KERRY PROPERTIES**

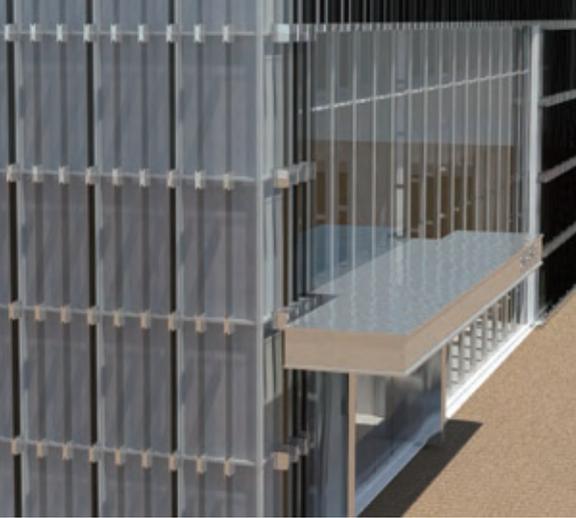
# Building in a Better Way

**Project:** 863-865 King's Road, Quarry Bay Project

**Location:** Quarry Bay

**Type:** Office

**Scheduled for completion:** 4th quarter 2010



“This is beyond what we could imagine with using traditional 2D drawings. BIM helps us to visualise projects, as we see things in 3D.”

Mr. Albert Yeung,  
Project Director of Kerry Properties Limited

Kerry Properties Limited decided to use BIM as a project management tool right from the outset of its commercial office development in Quarry Bay. Several reasons led to the decision, including the desire to develop an environmentally sound building, hoping to improve coordination and design quality, and ensuring timely construction and delivery. With an integrated and shared information base used by all project team members and consultants, BIM has been an invaluable tool in helping with the collaboration of design and planning.

### **Building in a better way**

BIM assisted the project team with coordination by precisely illustrating various building elements - both the internal arrangements and the external envelope - in three dimensions. This enabled the project team to resolve potential clashes in the design stage

rather than during actual construction, saving the project both time and money.

Using BIM as a tool contrasts with traditional ways of managing a complex building project. Typically, architects will create one set of drawings, structural engineers produce another set, and building services engineers work from





yet another set of drawings, and all parties must make manual cross-checks and comparisons resulting in a time-consuming process that is often fraught with mistakes. Utilizing an integrated and accurate BIM model allowed all teams to share the same database and to work in parallel in a multidisciplinary manner.

As an example, the project team opted to combine the structural, engineering and mechanical elements into common zones – rather than position them separately, as is typical. By making use of the BIM model, the team was able to neatly arrange elements such as electrical and mechanical routing, creating layouts that would be difficult or impossible to achieve with traditional 2D drawings.

### **Reflecting true ratios and perspectives**

The BIM model was built using a set of specifications for tolerances and spacing, with tolerances sometimes as low as 1mm. This is in stark contrast with the typically more lenient tolerances of traditional building designs.

Both the designers working on the project and the Kerry Properties management team have found the 3D BIM model extremely useful for assessing and reviewing the different design options. As one example, a view in the BIM model not only shows what a typical floor will look like from a static angle, but also allows the team to review the building floor from all angles.



“Our ultimate goal of using BIM is to deliver a good product to our customers, and bring value to them.”

Mr. Albert Yeung,  
Project Director of Kerry  
Properties Limited

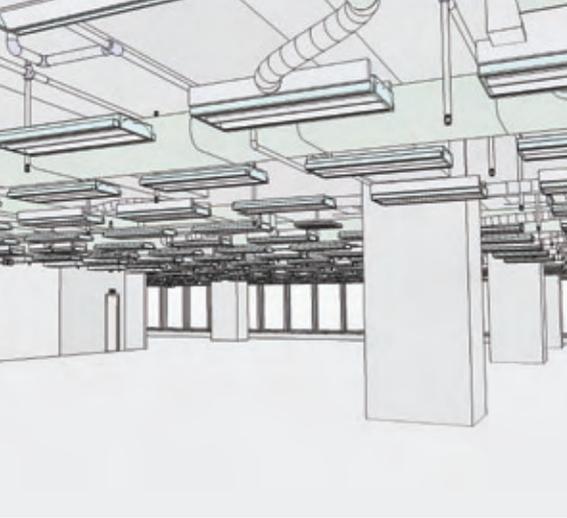
### **Optimizing lighting and roof feature design**

The project team decided to use exterior lights on the building fins, but also wanted to minimise light pollution. This required a lot of experimentation to determine the optimal brightness and colour which should be used. Rendering in the BIM model allowed the team to view how the lights will appear on the whole building, despite the low intensity of the specified glow.

The BIM model has also helped with optimising the design of the roof features. Here, there was a need to strike a balance between the structural needs of the design engineers and the aesthetic requirements of the architects. Using the BIM model, the design team

tested how tie wires would appear to someone on the roof. The initial design specified crossed wires, but the BIM model made it clear this not only blocked the line of sight, but was also unattractive when viewing the building from different angles; ultimately, using the model to review various options, a more aesthetically pleasing horizontal wire was selected for the design.

The BIM model also helped to show perspectives of features and highlighted the different feel created by selecting 250mm or 210mm wide members. Such small differences would not be apparent in physical models, but they have an important and noticeable effect on one's impressions of the actual building.



### **Delivering a good project**

Going forward, the project team expects to continue to reap the benefits of using BIM: the team will use the BIM model to help with construction scheduling and the base BIM model will also allow the marketing team to present and showcase the project to potential tenants.





# KERRY PROPERTIES



## About Kerry Properties Limited

Kerry Properties Limited (KPL) is a property development company with significant investments throughout Asia. The company is known for its premium developments in China and Hong Kong.

KPL began investing in and developing properties in the 1970s, and quickly established itself as a major player in residential developments during the 1980s. The Company was listed on the Main Board of The Stock Exchange of Hong Kong Limited in August 1996.

Today, KPL has earned an outstanding reputation in Hong Kong and China, where it has a portfolio of commercial, hospitality, residential and retail properties, as well as investments in go-downs and logistic centres. In China, the Company also has a number of mixed-use developments underway in Shanghai, Tianjin, Hangzhou and Shenyang. Its portfolio of premier residences includes developments such as Aigburth, Branksome Crest, Tavistock, Belgravia, 15 Homantin Hill, SOHO 38, Primrose Hill, Beijing Kerry Residence, Shanghai Kerry Residences, Shenzhen Kerry Plaza and Arcadia Court.

Apart from property development, KPL has a range of investments in infrastructure projects in Hong Kong and Mainland China as well as China-focused, Asia-based, global logistics subsidiary, Kerry Logistics, which focuses on delivery a seamless and integrated range of value-added logistics services.