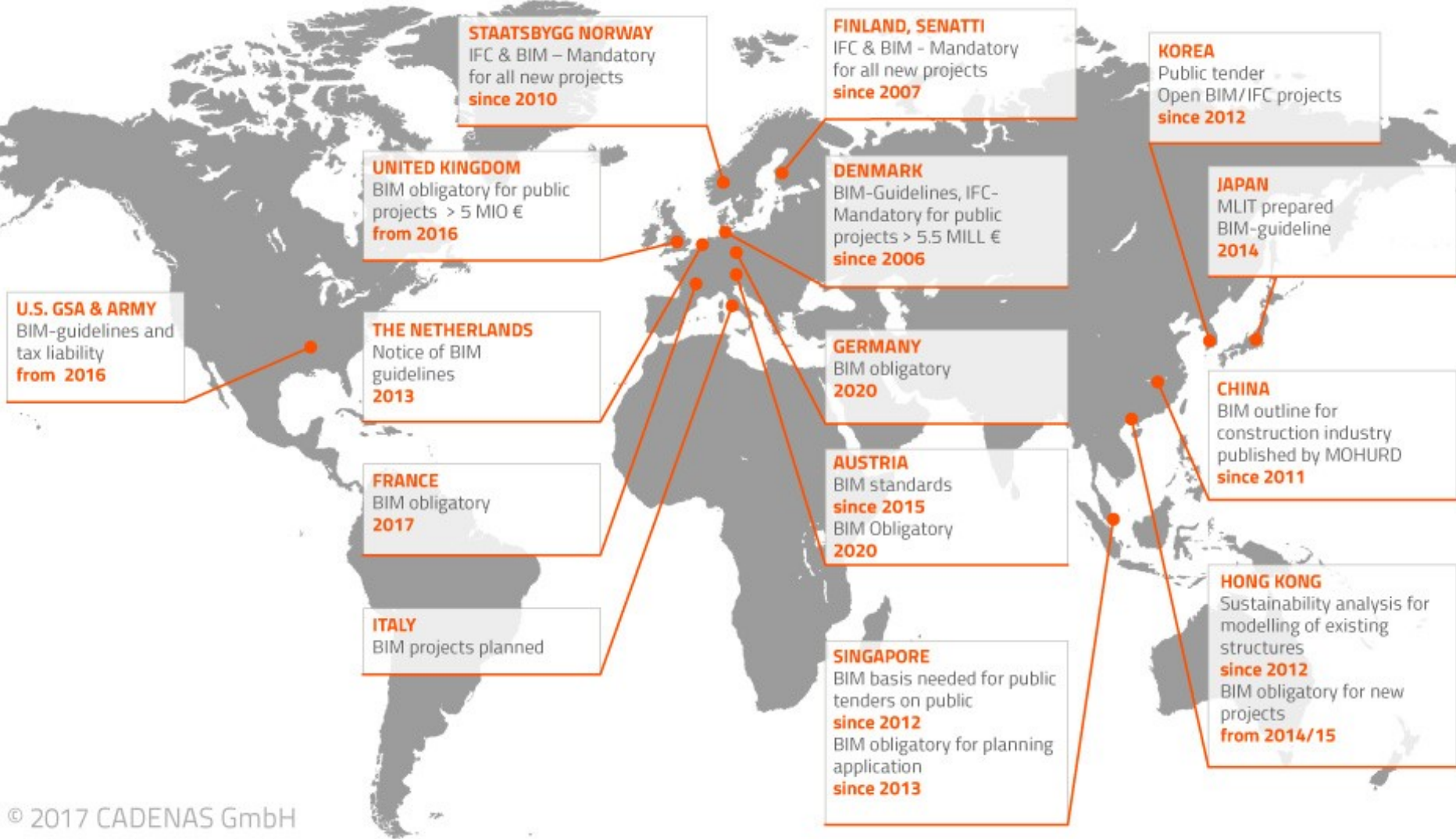




BIM Overview



3D設計技術建構

建築新世代

當中國播道會高打老道山福音堂計畫裝修之時，身為香港註冊建築師的會友馮樹堅，便決定利用新一代的3D建築設計軟件，以最短時間和經濟成本，助會堂完成裝修工程。

馮樹堅於澳洲新南威爾斯大學畢業，有逾十年的2D設計軟件應用經驗。由於是次教會裝修屬義務性質，欠缺往來人力支援，馮氏唯有另想辦法，最後決定採用Autodesk Architectural Desktop及Building Mechanical。

3D設計軟件和2D設計軟件的最大分別，是前者處理的乃「物件」，軟件會為物件添上應有的特性，適即是牆、窗便是窗，處理起來較具智能。

3D設計的優點

利用2D設計軟件，工作無疑較人手快捷，但仍須每幅設計圖逐張繪畫。在3D設計軟件中，建築師只要設計好整個模型，就能自動完成各種所需的2D設計圖。「今次教會裝修所用的100張圖表，就是在完成模型後自動產生出來的。」

此外，又因往日繪圖紙上的各種點、線，如今都在3D模型下添加上現實的物理特性。過去一些在工程中才



發現的「走線」問題，如今在設計時已能提早預見更正，有效節省事後補救的時間。

「3D設計軟件還可以幫建築師預備各種建築構件的規格表及文件。過去我們要自行逐項填寫，隨時花上兩、三天時間，如今設計好後軟件即能自動製作，半個鐘頭便可完成。」

應用效果

在3D設計軟件協助下，馮樹堅在工餘和一位全職的建築系畢業生合作，僅花了約4個月時間便完成教會21萬方呎會堂的裝修工程，不到原訂日期的一半。每方呎的裝修成本，也由一般個案的每平方呎\$450-\$500，下降至\$370左右，而工程品質卻沒打折扣。

「利用3D軟件，我還可以在裝修中輕易地加入一些曲線剖面造型。」現時一些Cyber設計，會採用一組剖面，合成一個獨立體態的曲線模型。馮樹堅便採用這種現代手法，設計新會堂中間的

十字架（見圖）。如今完成立體模型後，電腦不用半小時即可自行繪製各剖面平面圖。

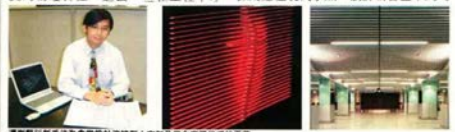
學習曲線

當然，3D設計由於概念和2D迥然不同，馮樹堅在採用前，先已有其他3D設計軟件的應用經驗，但仍學習了兩天，然後運用通達。

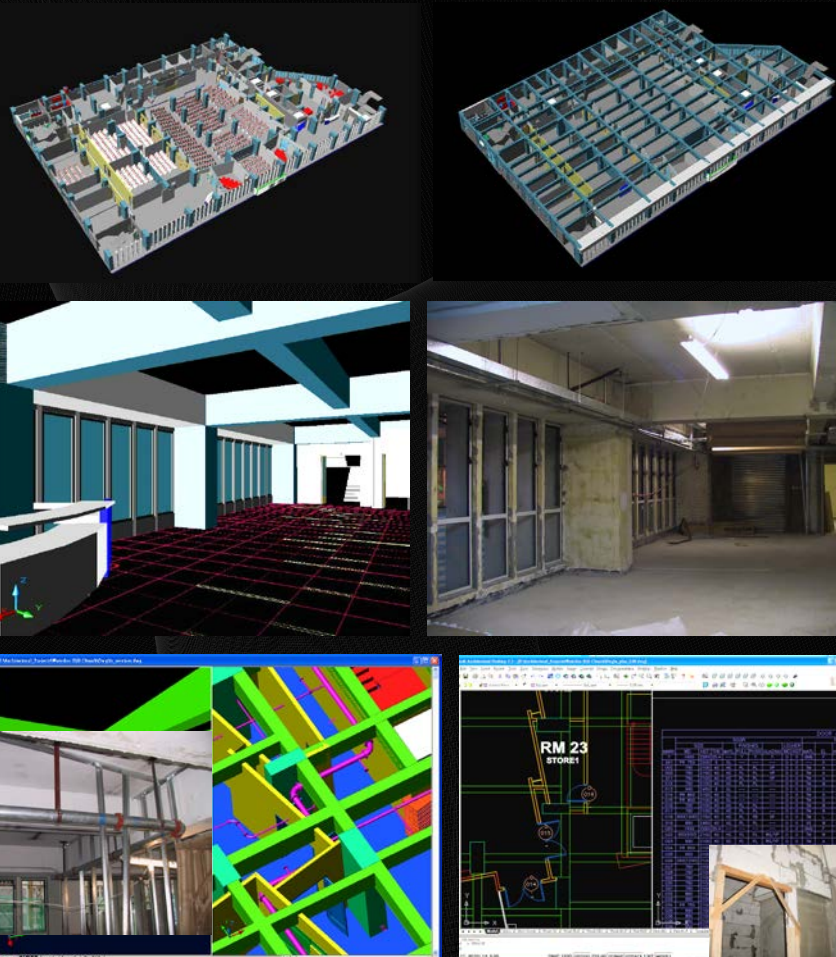
「最大的差別是整個物件的設計概念已不一樣。」傳統2D軟件處理的僅是點和線，繪圖員的工作較為作業性，照指示去辦即可，遇到問題再慢慢修改。3D軟件處理卻是「物件」，模型製作牽一髮動全身，要求應用者有清晰的設計認知，了解每一項構件的屬性、功能、佈置，而非單純的點和線。

其次，由於3D軟件處理的是物件，電腦會建立數據庫，記下各項物件的各種屬性，因此，應用軟件時每項指令牽涉的再非簡單的位置和長短，而是會影響到整個數據庫，所以操作時不似2D軟件的簡單直接。

最後，馮氏採用的3D設計軟件僅能自動產生2D繪圖，而不可透過修改2D繪圖自動改正3D模型，需另外選購軟件才能增添此功能。由於處理2D繪圖始終較3D模型簡單，如能雙向轉變，則更為理想。



馮樹堅以新手法為會堂設計複雜十字架及室內窗戶代添的天花。







Hong Kong BIM Delegates - 6/2005 Beijing BIM Trip



イエイリ建設ITラボ

甦れ!日本の建築

3次元で建設生産プロセスを改革しよう!

【開催日時】

2007年9月28日(金) 10:00~17:30

【会場】

東京コンファレンスセンター・品川/大ホール

【主催】

日経アーキテクチャ/ケンプラッツ/イエイリ建設ITラボ

【特別協賛】

Autodesk®



【協賛】

アークデータ研究所/キヤノンマーケティングジャパン/サイバネットシステム/

フォーラムエイト/ジオプラン/GSA/

環境シミュレーション/太塚商会/ソフトウェアセンター

【事例2 海外建築設計事務所の視点】

アエダスにおけるBIM - 意匠から構造、設備設計

香港アエダス社

シニア・アソシエート

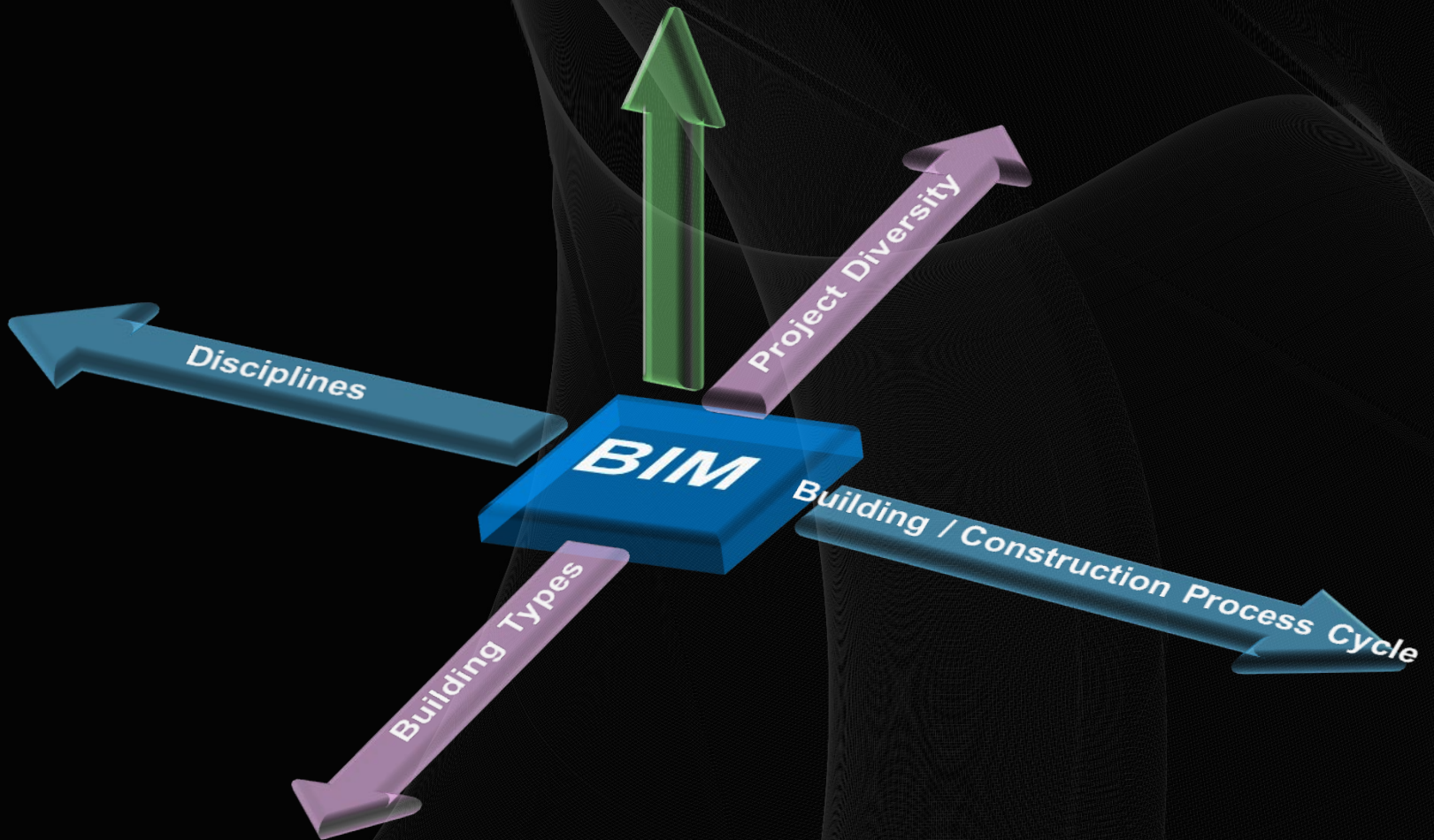
BIM部長

デービッド・ファン 氏



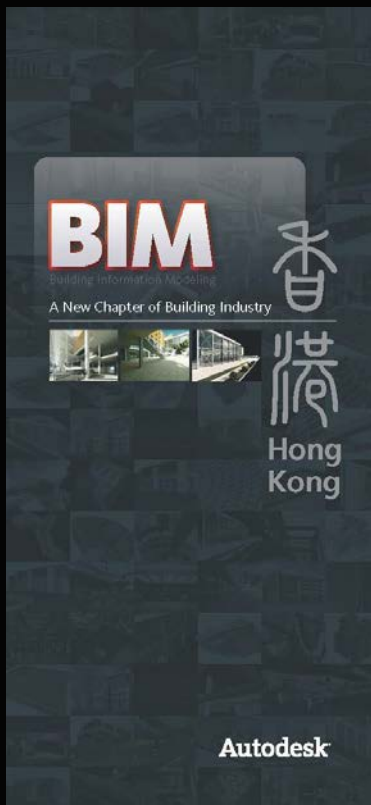
■ Singapore Delegates BCA visit to HK – 8/2011

Professions/ Policies



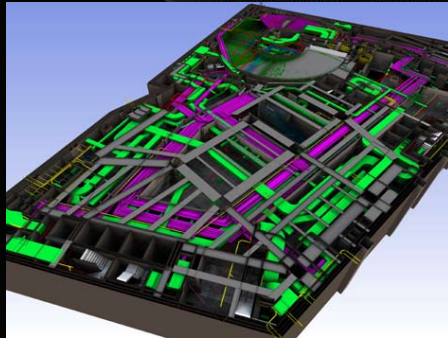


BIM Project Type

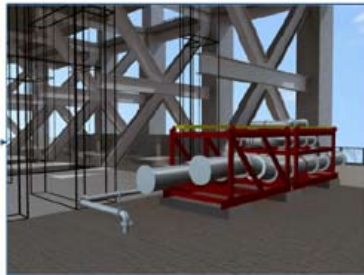


Complicated Geometry: Dubai Ocean Height One
(Courtesy: Aedas and Mr Andrew Broomberg)

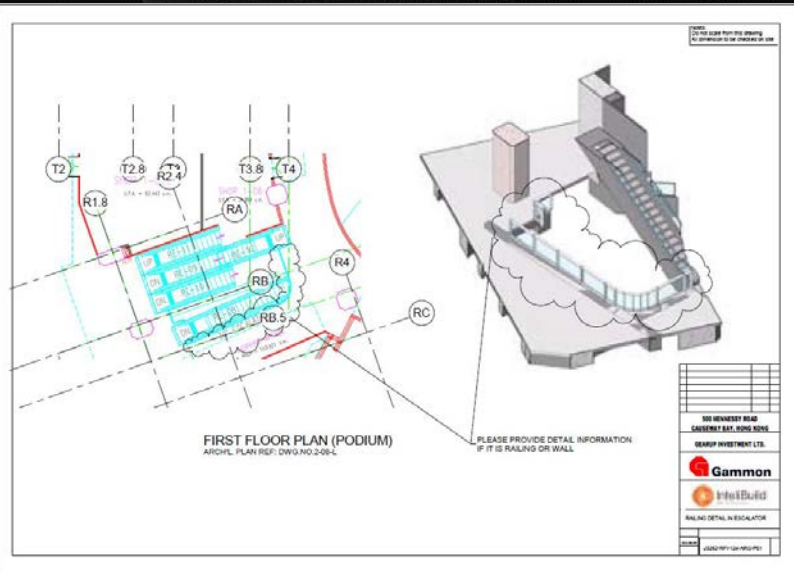
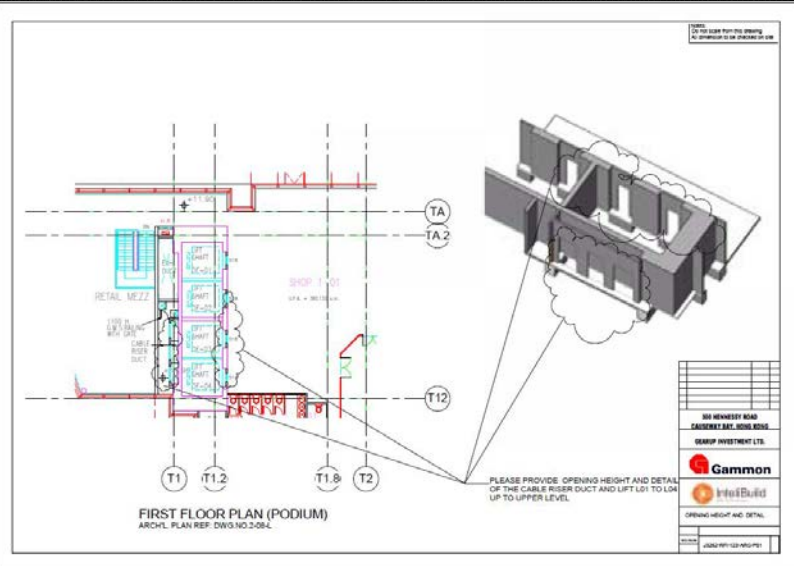
* Winner of Autodesk BIM Awards 2007 - Hong Kong, Macau and Taiwan



Pipe Module Installation

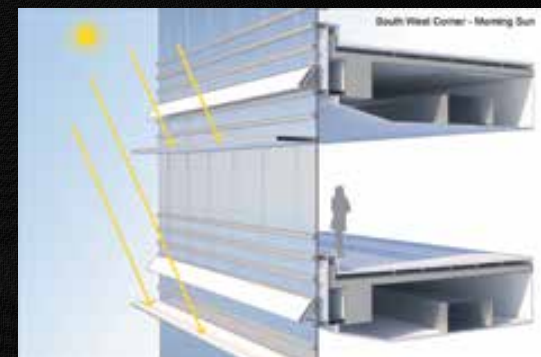
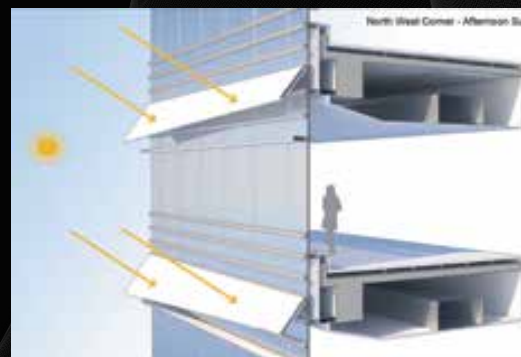
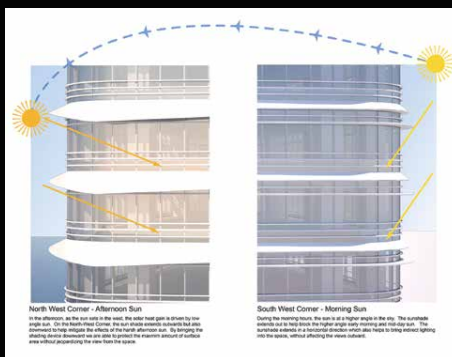


Pipe Rack Units



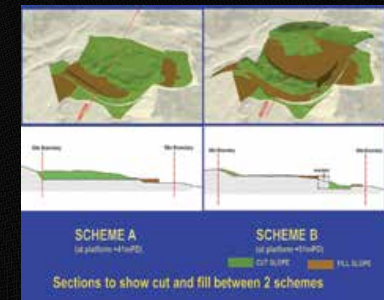
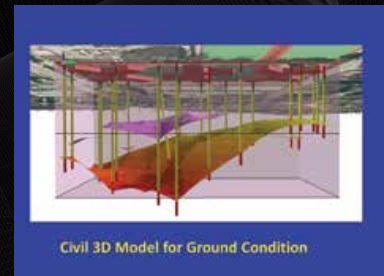
Redevelopment of Hennessy Centre

* Winner of Autodesk BIM Awards 2010 - Hong Kong, Macau and Taiwan



Proposed Office Development at 14-30 King Wah Road

* Winner of Autodesk BIM Awards 2014 - Hong Kong, Macau and Taiwan



Bridging the Gaps with our Core Values – Successful Transformation of Revit Model to Enable Civil 3D/GIS/Revit Integration and Lighting Simulation & Rendering

* Winner of Autodesk BIM Awards 2014 - Hong Kong, Macau and Taiwan





Fig. 08 The window wall being modeled by the detail level to maintain/guard panel design, ensuring Architect and Facade design consistency to ensure the visual impact on site.

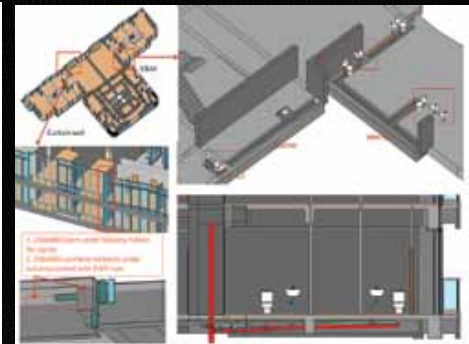


Fig. 07 Design coordination of structural & drainage system within curtain glass and outside window wall facade of main entrance

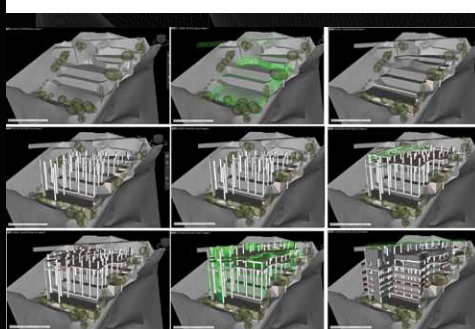


Fig. 05 Captured views of Navisworks4D simulation to visualize the construction process of the formation work and basement structure.

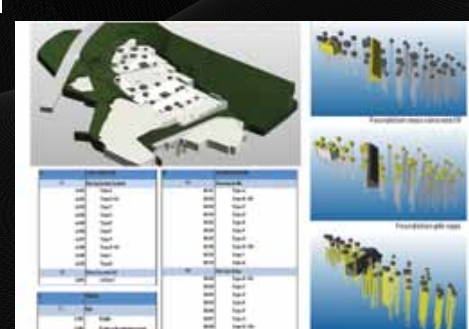


Fig. 21 Revit BIM model for quantity take-off of foundation work and main concrete base/E, and associated schedule of quantity



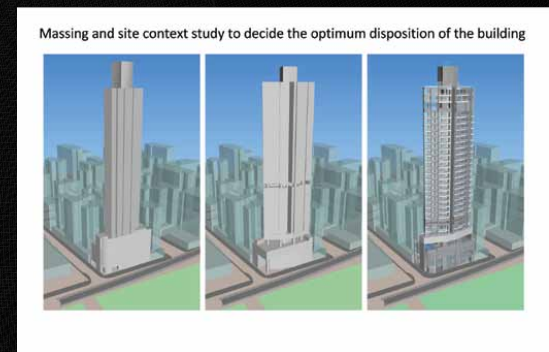
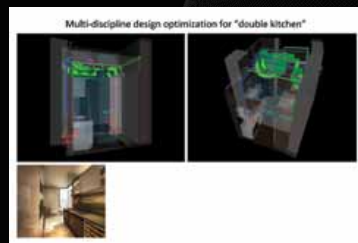
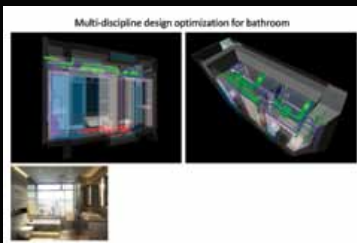
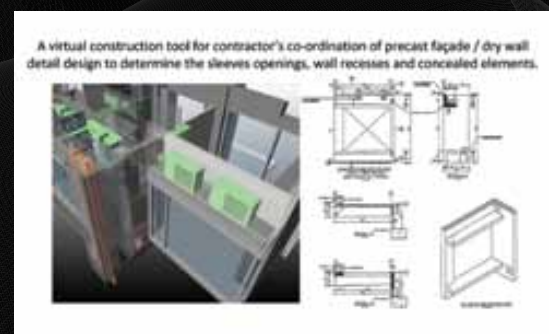
Fig. 22 Revit BIM model for quantity take-off of window wall system, and associated schedule of quantity.



Fig. 20 Revit BIM model for quantity take-off of window wall system, and associated schedule of quantity.

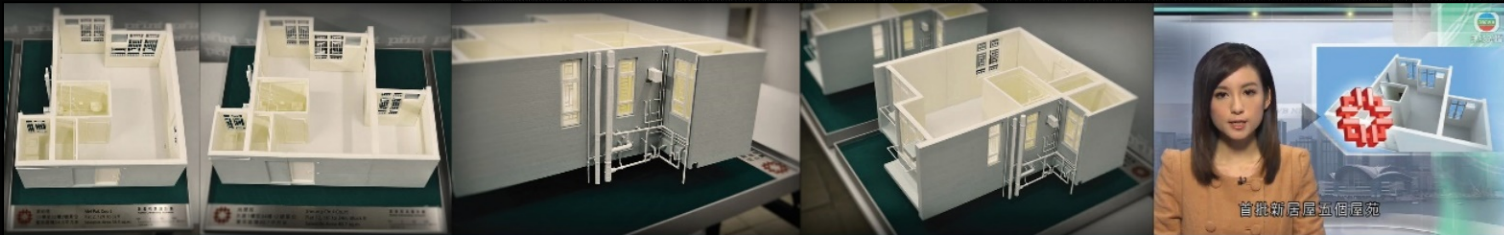
The University Heights Redevelopment

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High Park Grand

* Winner of Autodesk BIM Awards 2013 - Hong Kong, Macau and Taiwan



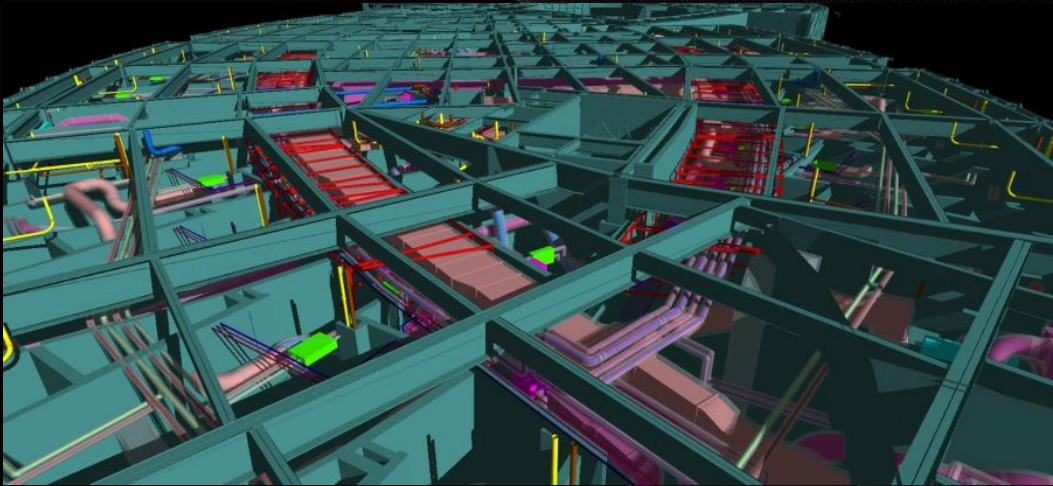
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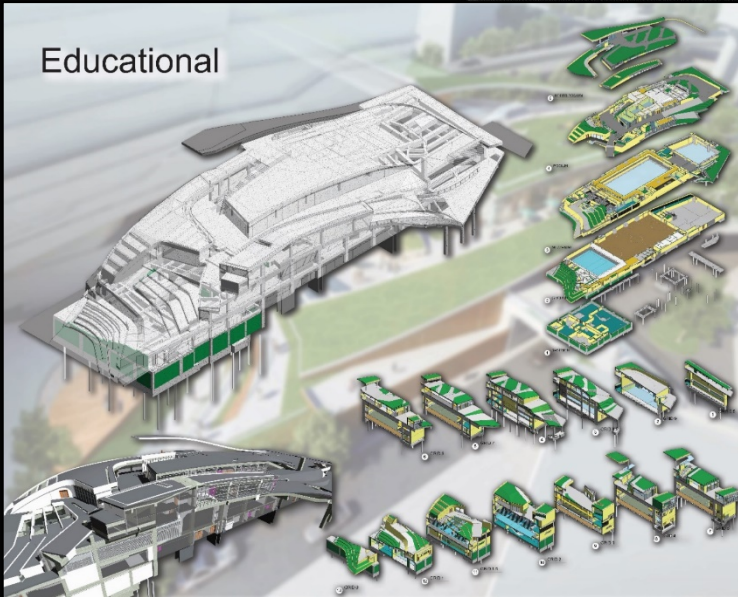
Masterplanning & Residential

Masterplanning & Residential

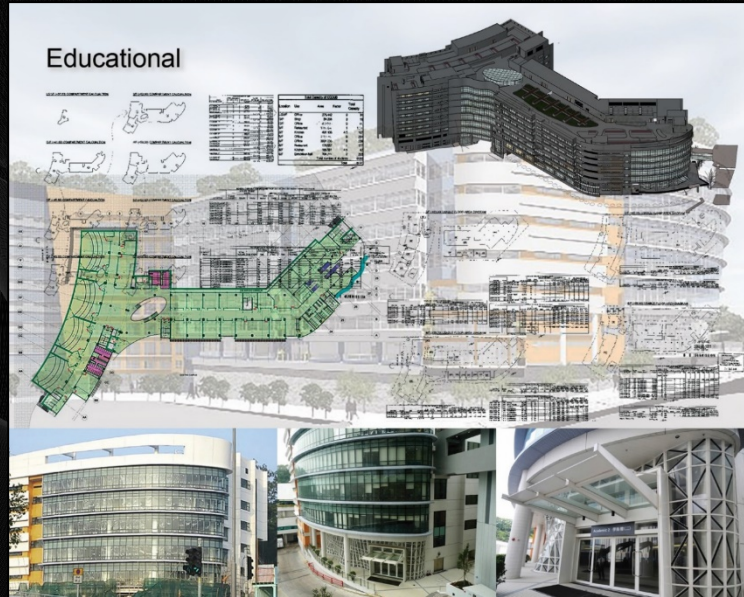




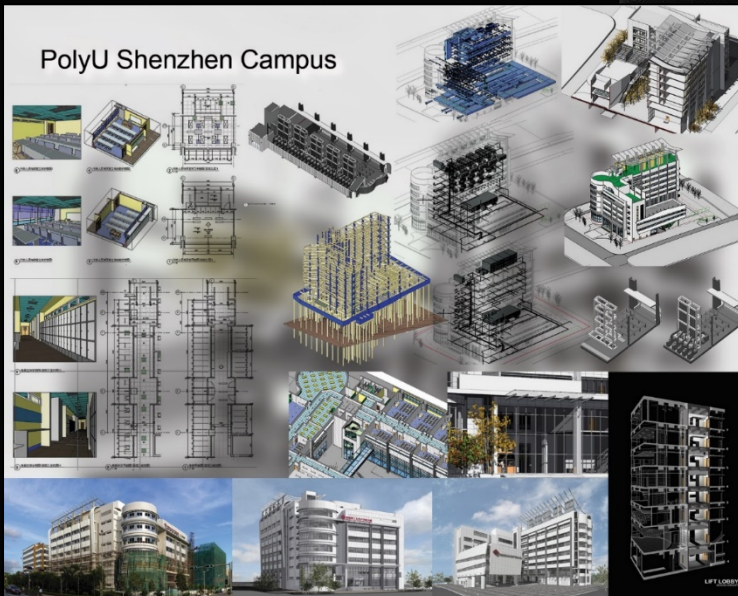
Educational



Educational



PolyU Shenzhen Campus



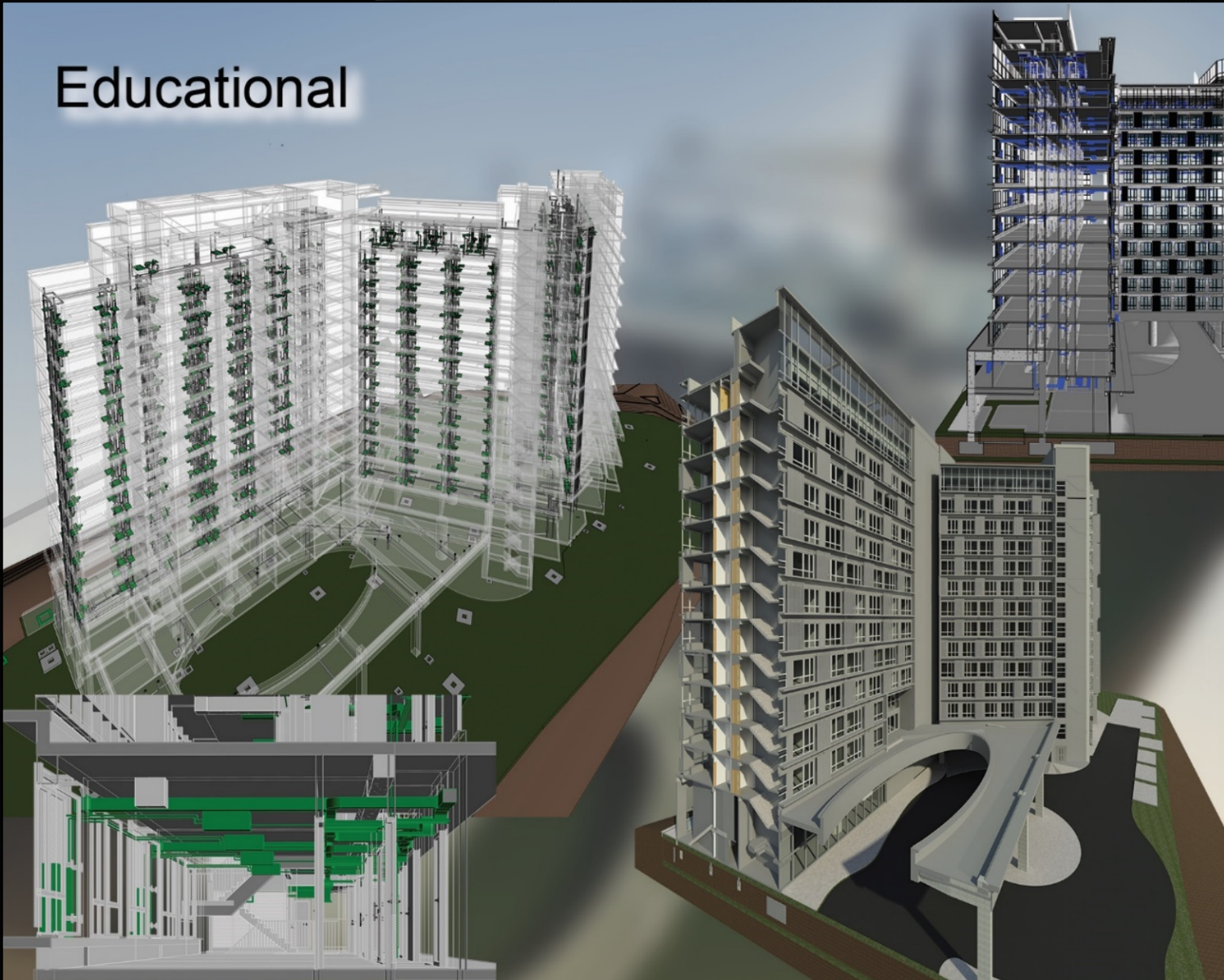
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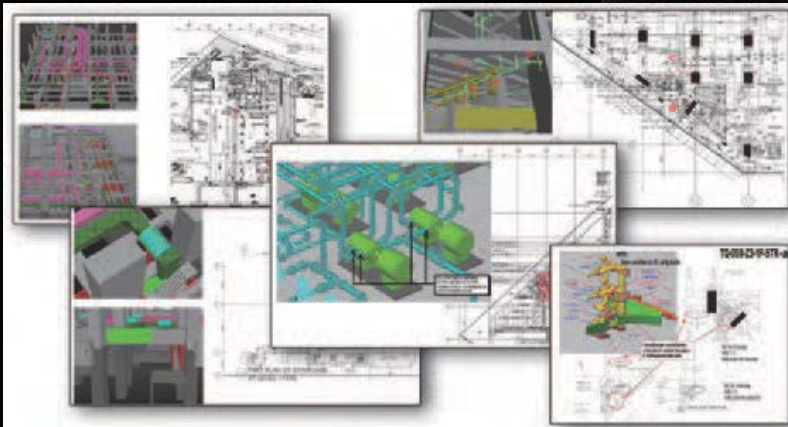
* Winner of Autodesk BIM Awards 2007 - Hong Kong, Macau and Taiwan

The PolyU Campus in the Shenzhen Virtual University Science Park

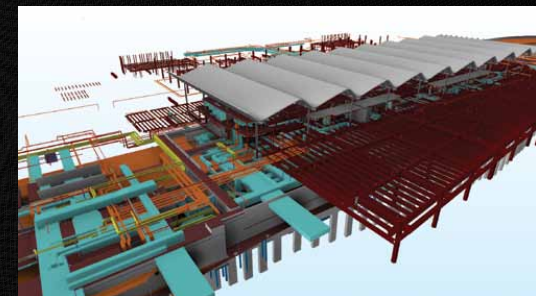
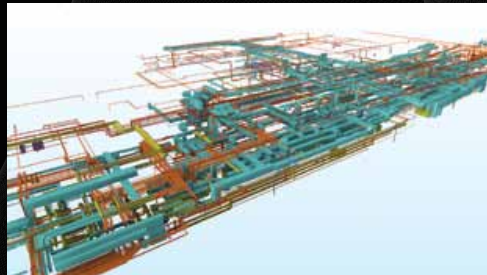
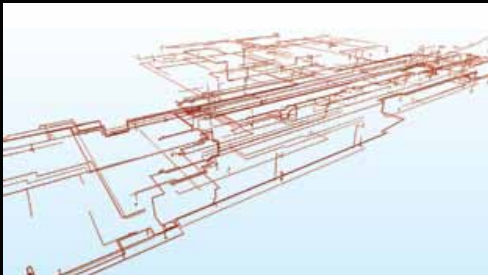
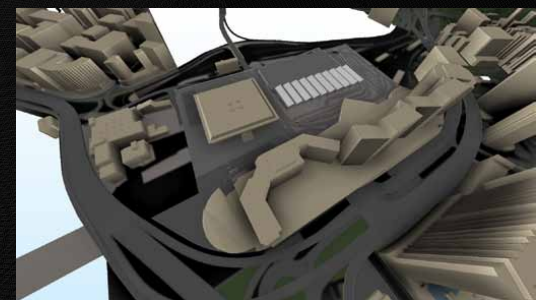
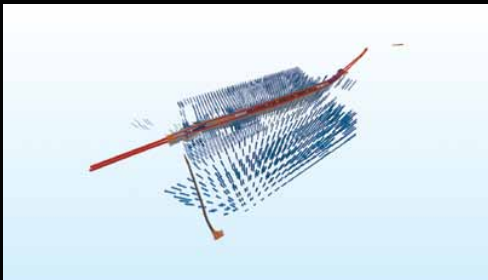
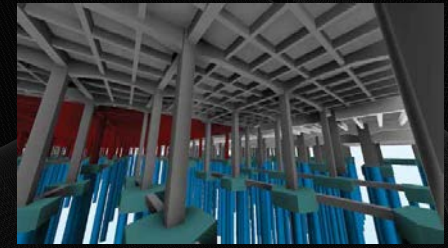
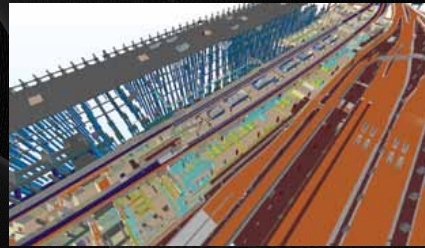
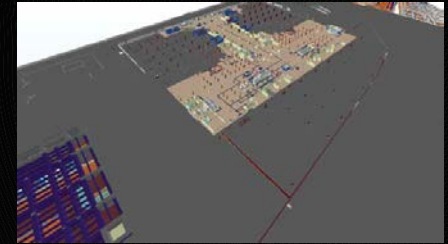
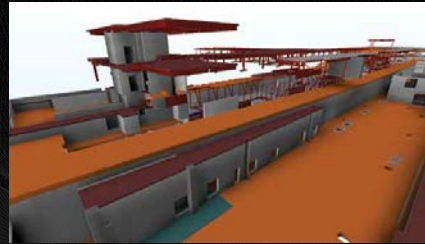
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Educational





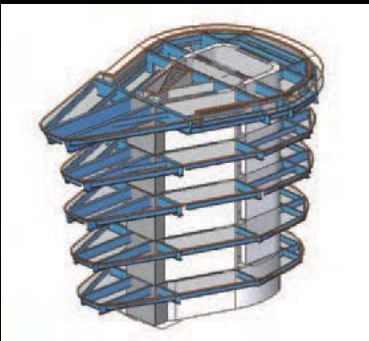
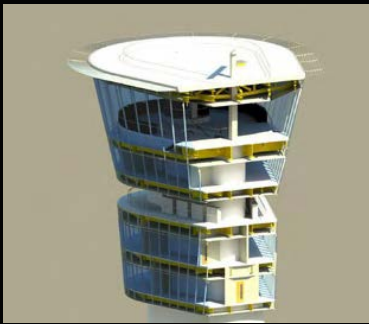
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Hung Hom Station & Approach Tunnels

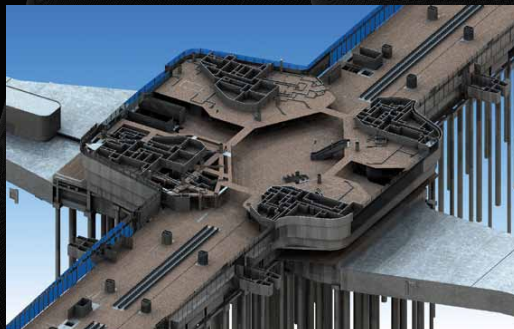
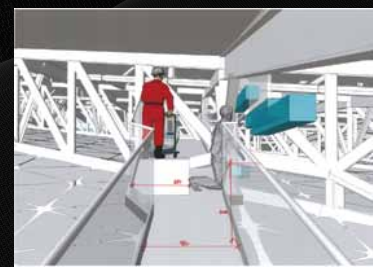
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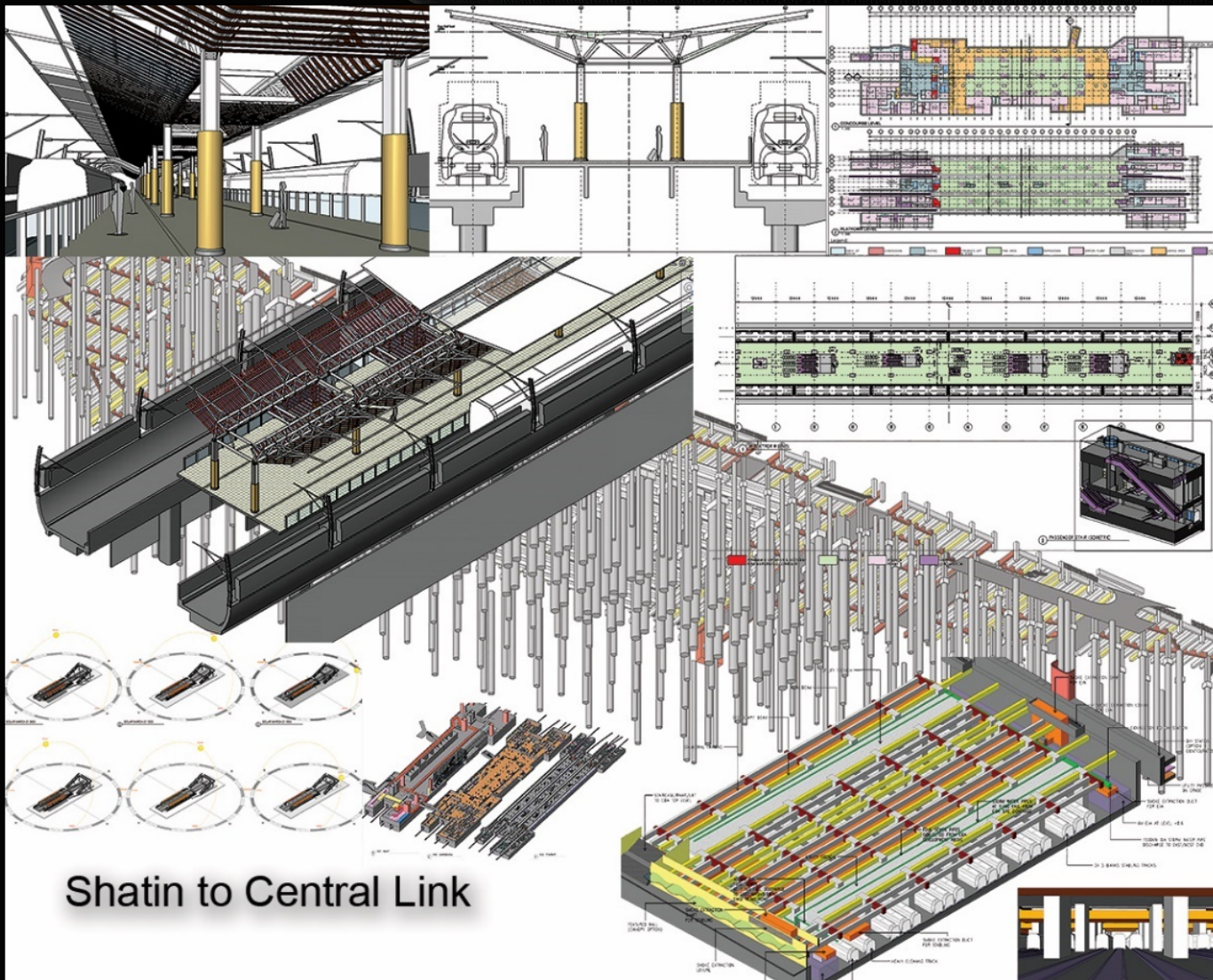
the Chhatrapati Shivaji International Airport Air Traffic Control Tower & Technical Block
– for the new airport in Mumbai, India

* Winner of Autodesk BIM Awards 2009 - Hong Kong, Macau and Taiwan



Midfield Development Design Consultancy Services

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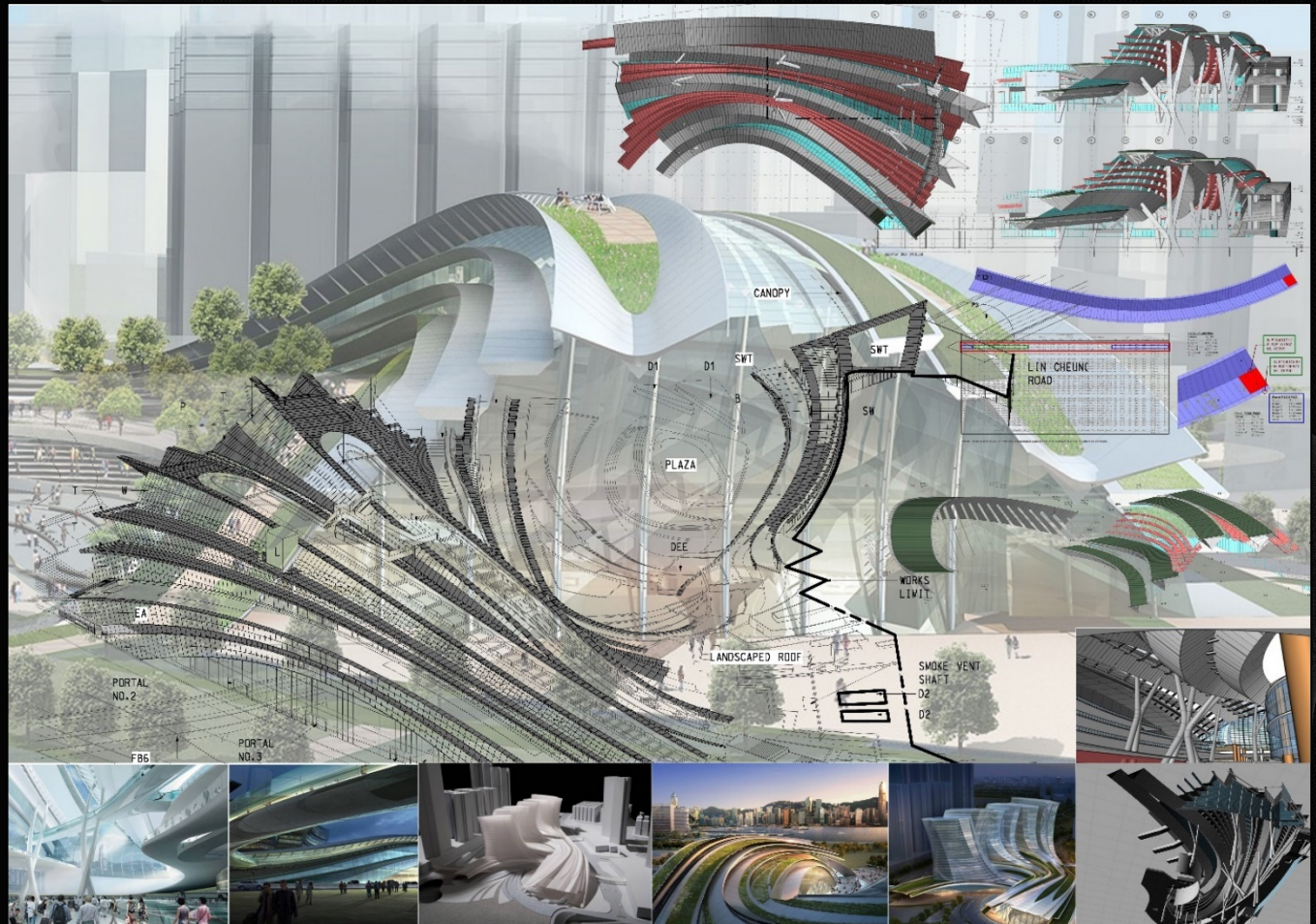
Lead the Way
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Better by Design

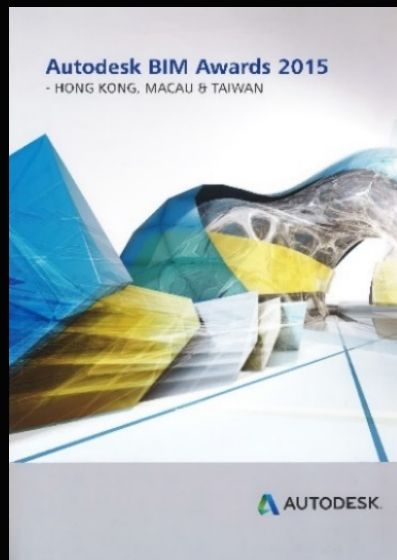
Autodesk Hong Kong
BIM Awards 2010



Express Rail Link – West Kowloon Terminus

- * Winner of Autodesk BIM Awards 2010 - Hong Kong, Macau and Taiwan
- * Winner of Autodesk BIM Awards 2012 - Hong Kong, Macau and Taiwan





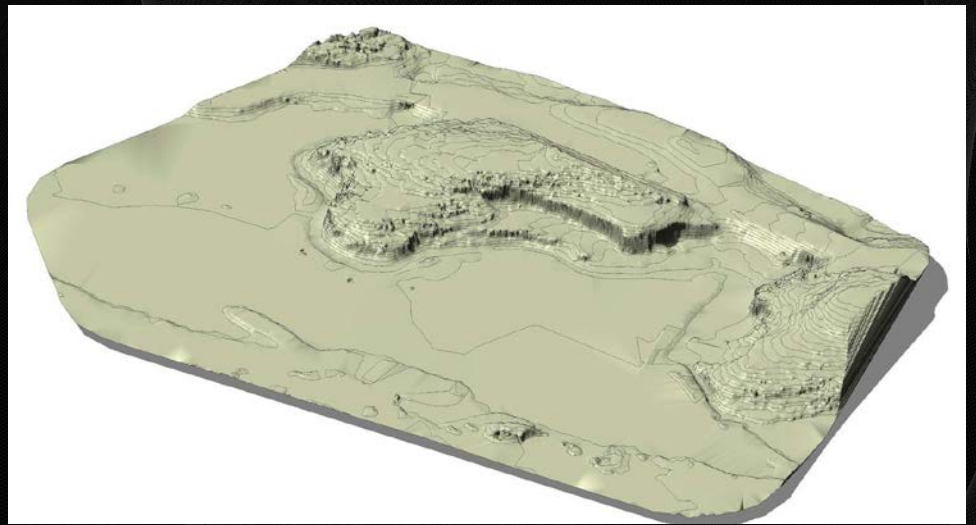
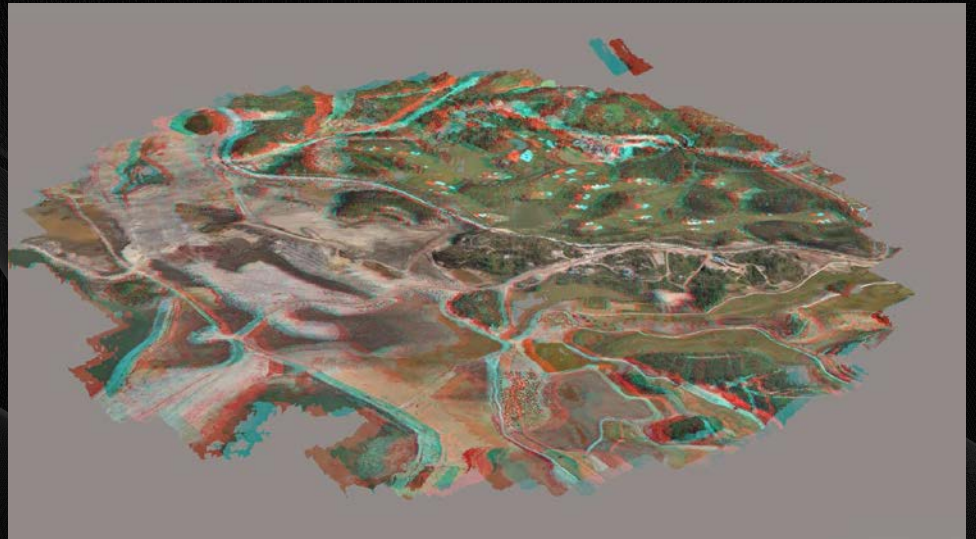
Heritage Consultancy - Victoria Peak Fire Station

- * Winner of buildingSMART Hong Kong International BIM Award 2015
- * Winner of Autodesk BIM Awards 2015 - Hong Kong, Macau and Taiwan

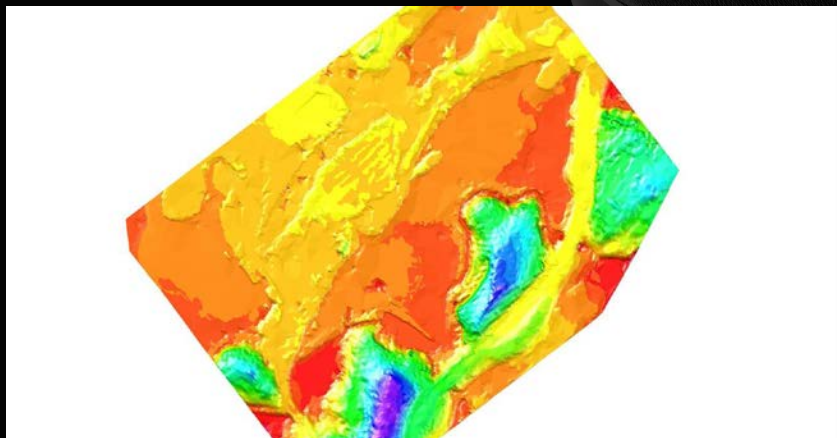


BIM Phases

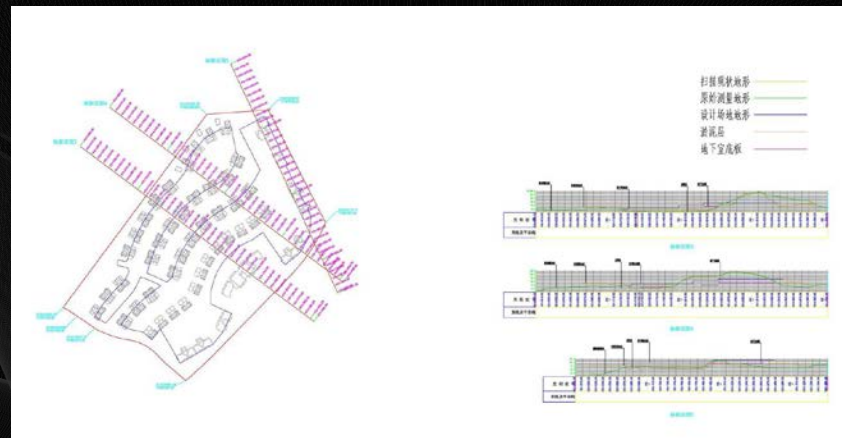




Photogrammetry



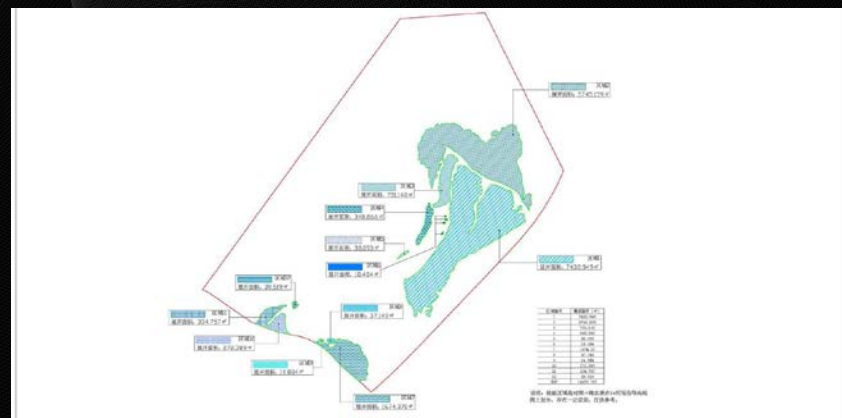
场地汇水分析



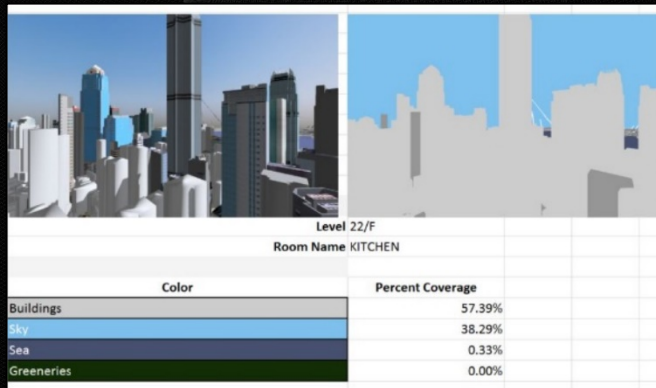
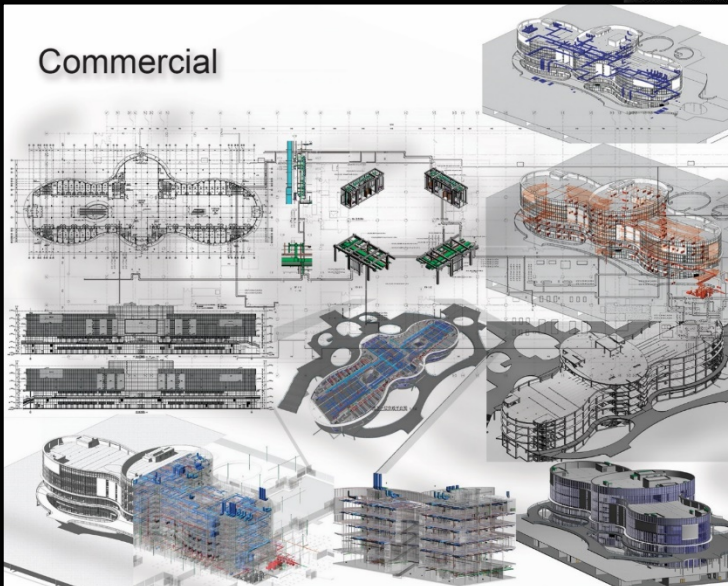
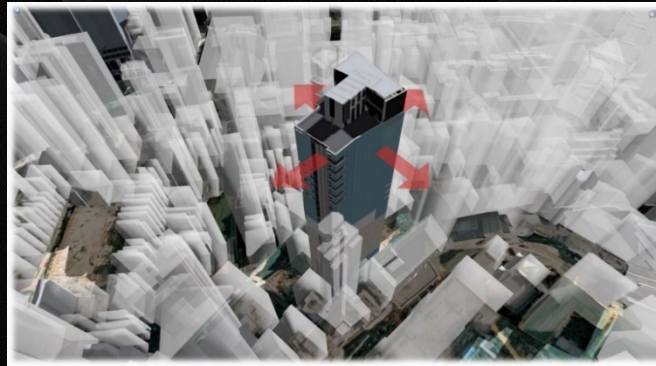
场地植被表面积统计



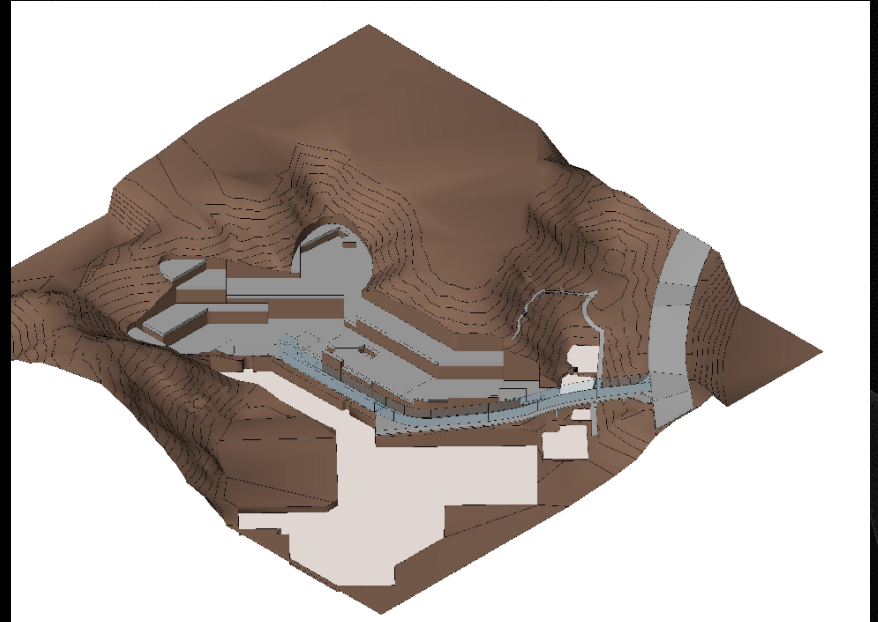
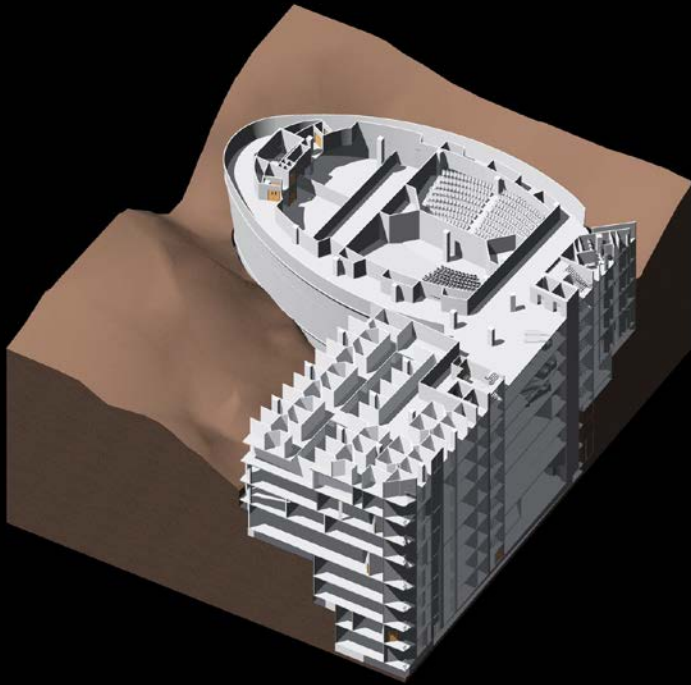
现状场地高程和设计高程对比

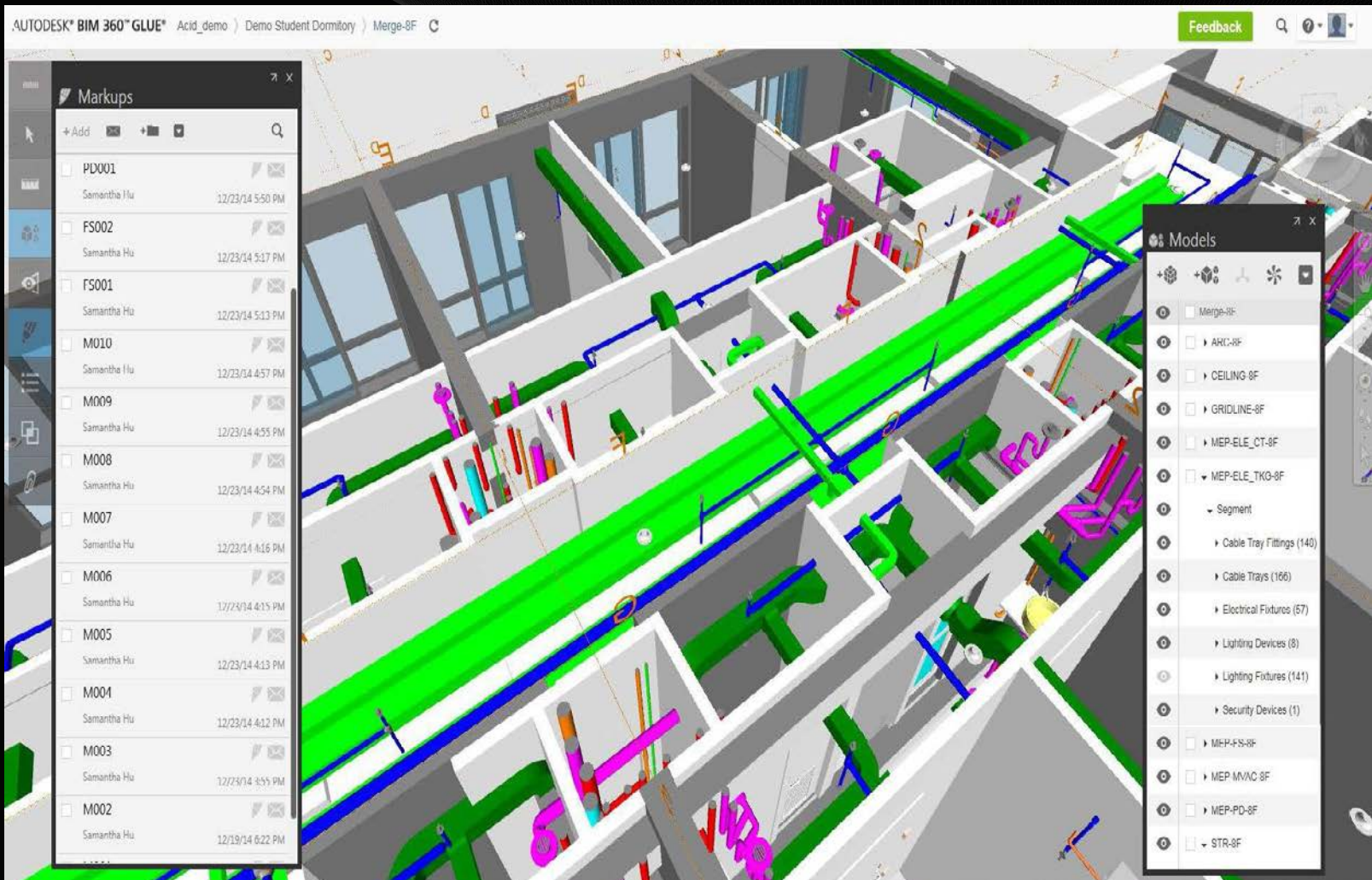


场地任意断面生成



View Analysis for Commercial Development



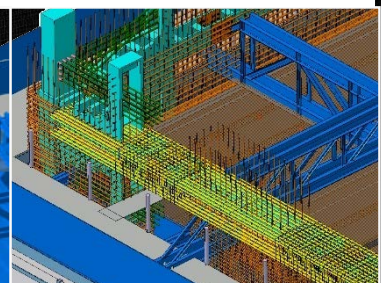
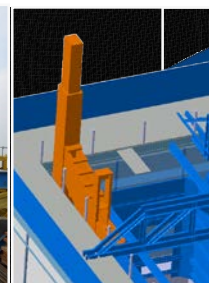
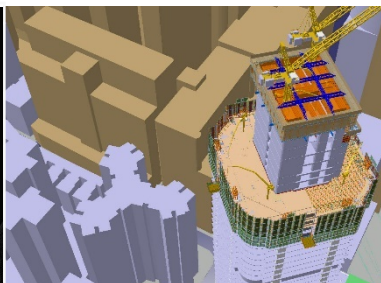
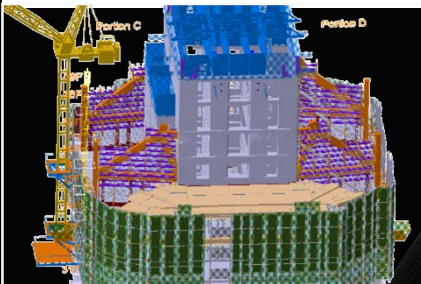
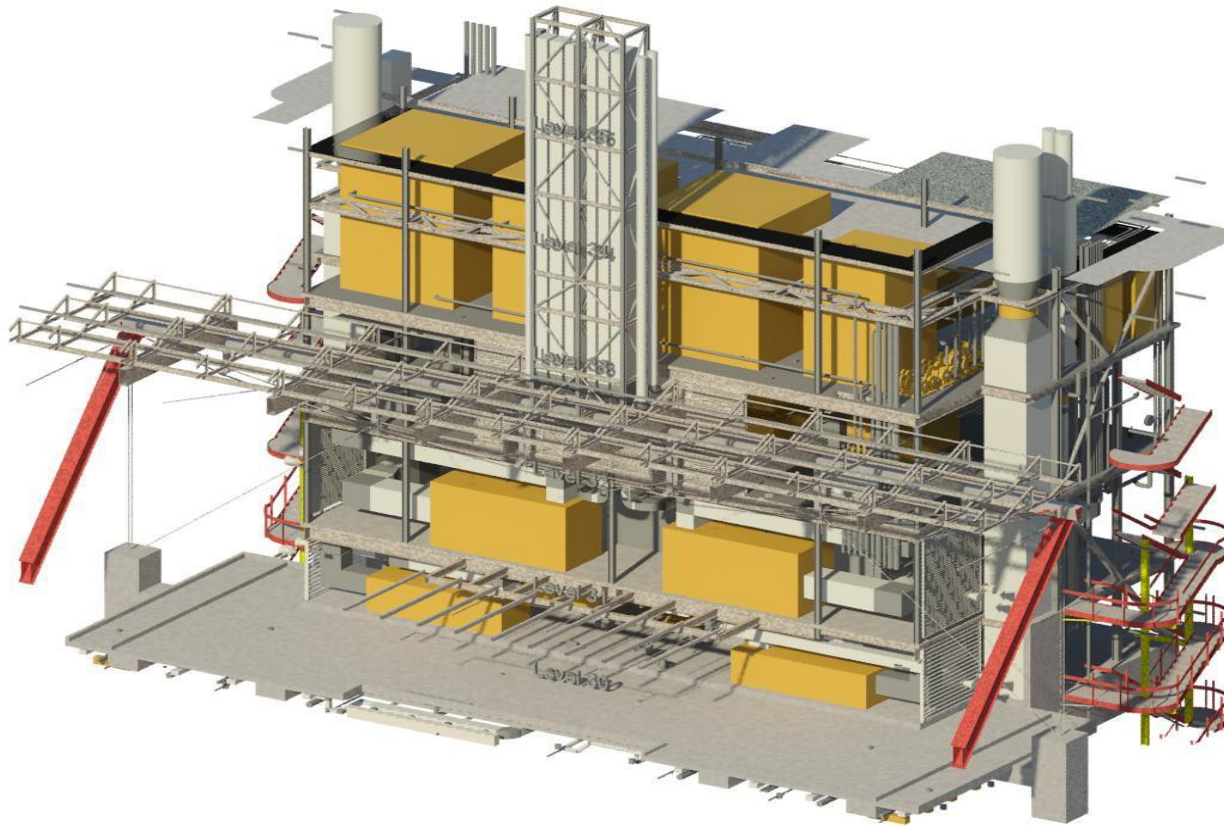


Design Development and Collaboration among all disciplines

16. BUILDING INFORMATION MODELING

16.01 Building Information Modeling (BIM)

- a. 3D Building Information Modelling (BIM) was used for the design of the Project. That BIM 3D Model developed in design stage will be provided to the Contractor for information and for reference only at the commencement of the Contract. The Contractor shall take over the BIM 3D Model provided, and may adopt that Model, or produce its own BIM 3D Model, for the purposes of construction coordination and production of combined services drawings, builders work drawings and facility management use, etc.. The Contractor shall update the BIM 3D model with a design log recording the changes every month and submit to the Project Manager for review.
- b. The Contractor shall use BIM processes and technologies as approved by the Project Manager on the Project.
- c. The Contractor shall update the 3D model in accordance with the BIM specification as attached Appendix A4. The Contractor may propose revisions to the specification although these shall only be adopted upon written approval of the Project Manager.
- d. The Contractor shall provide their own hardware, software and internet communication links to fully support the full deployment and application of the BIM process. The Contractor shall also provide 2 sets of suitable hardware and software for the Project Manager to review the BIM Models.



Mermaid FM-TXT 2-12-14 v2.nwd

Viewpoints

- 00-GENERAL VIEWS
 - 01-Exterior
 - 02-Queue
 - 03-Ridepath
 - 04-Catwalk
 - 05-BOH
 - 42-BOH Locker Room
 - 43-BOH Maintenance...
 - 44-BOH HPU 110
 - 45-BOH ER 112

System

System Assets

Spaces

Room Data Sheet

Work Order

Dashboard BIM Facility Work Order Search Quick Sync

MENU

Asset Type Document

Document Entity Edit Delete

Type: Preconstruction Submittals

Light Fixture Submittal Type

Lighting Type F418 2x4 Troffer.pdf - Adobe Reader

File Edit View Window Help

1 / 4 341% Tools Sign

2' x 4' DESIGNER AIR HANDLING

2, 3, or 4 Lamp
110 or 18
Prismatic Acrylic Lens

DESCRIPTION

2' x 4' Designer Air Handling is a high quality, energy efficient, and easy to install lighting fixture. It is designed for use in commercial and industrial applications. The fixture is made of high quality materials and is built to last. It is available in a variety of sizes and finishes to meet your needs. The fixture is easy to install and maintain. It is a great choice for your next lighting project.

COMPONENTS

2' x 4' Designer Air Handling is made up of several components. The main component is the air handling unit. This unit is responsible for circulating the air throughout the space. It is made of high quality materials and is built to last. The other components include the lighting fixture, the control system, and the mounting hardware. The lighting fixture is made of high quality materials and is built to last. The control system is made of high quality materials and is built to last. The mounting hardware is made of high quality materials and is built to last.

3D Model of a Mechanical System (Pipes, Valves, and Equipment)

PROPERTIES

Component

Name
Gate Valve

Description
Gate Valve

Asset Identifier
AE 5542

BARCODE
5428

Type

Name
Gate Valve

Description
500 mm

Manufacturer
NIBCO

Expected Life
n/a

ExtObject
NoValueType

Documents
Gate Valve Product Data


Dashboard Facility Search BIM Work Order

EcoDomus David Adkisson - General Hospital Logout



BIM Policies

Home	BIM	HKIBIM	BIM in HK	Hong Kong BIM Conference 2015	Certified Expert / Training	Tender Notice
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HKIBIM

The Hong Kong Institute of Building Information Modelling

香港建築信息模擬學會


Notice of the 8th Annual General Meeting for HKIBIM

Notice is hereby given that the 8th Annual General Meeting of HKIBIM for the year of 2016 which will be held on 23 February 2016(Tuesday).

- Date:
 - 23 Feb 2016 (Tuesday);
- Time
 - 6:00 p.m. ~ 8:00 p.m.
- Venue
 - Spotlight Recreational Club (博藝會), 4/F, Screen World, Whampoa Garden, Hung Hom, Hong Kong
 - [GeoInfo Map](#) (Showing the path from Hung Hom to Spotlight Recreational Club)
- Rundown:
 - 6:00 p.m. Registration
 - 6:00 p.m. New members reception
 - 7:00 p.m. Membership certificates presentation ceremony and Certified Expert presentation ceremony
 - 7:30 p.m. AGM
 - 8:00 p.m. Dinner gathering at Spotlight Recreational Club (博藝會) (HK\$200 for member, HK\$300 for non-member)
- AGM Agenda:
 - To adopt the agenda of the 8th Annual General Meeting for the year of 2016;
 - To adopt the minutes of 7th Annual General Meeting for the year of 2015;
 - Chairman's Report for the year of 2015 □ 2016;
 - Secretary's Report for the year of 2015 □ 2016;
 - Treasurer's Statement of Accounts for the year of 2015 □ 2016;
 - To receive and adopt the Statement of Accounts for the year of 2015 □ 2016;
 - A.O.B.;
 - AGM Concluded;
 - A Dinner Gathering will be arranged immediately after the AGM at Spotlight Recreational Club (博藝會) (HK\$200 for member, HK\$300 for non-member);
 - Please register for the AGM and Dinner gathering at <http://goo.gl/forms/Xved4R4krX> by 18 February 2016 (Thursday).

By order of the Board
 Dr Neo Chan
 Hon. Secretary
 15-Feb-2016

Search for:



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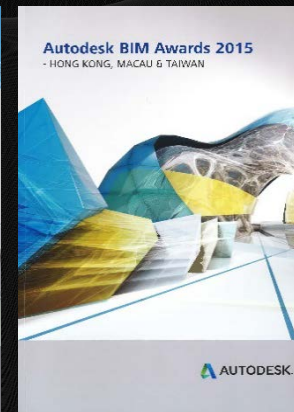
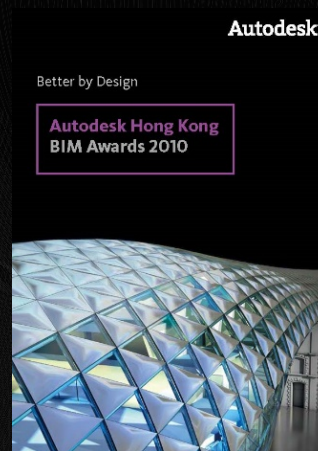
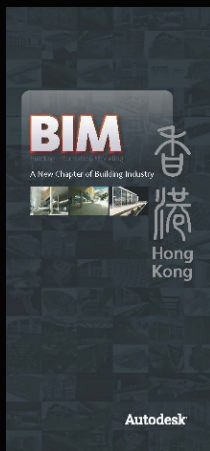
- [CIC's BIM Standards \(Phase One\) Oct-2015](#)
- [Hong Kong BIM Conference 2015](#)
- [Membership renewal 2015](#)
- [Membership renewal 2014](#)
- [Membership Application Form](#)
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CONSTRUCTION
INDUSTRY COUNCIL
建造業議會

CIC Building Information Modelling Standards Draft 6.2







建造業議會 全力推動BIM發展 畫出業界新標準

建築信息模擬 (BIM) 是建造業近年的熱門話題，該技術能全面管理建造項目在整個生命週期內的相關信息，提升生產效率及減低工地風險，並實現優化的監控施工過程。為推動本地建造業使用 BIM，及表揚為推動 BIM 而作出貢獻之人士，建造業議會於今年 3 月 11 日假環球貿易廣場的天際 100 香港觀景台舉辦建造業首屆「卓越建築信息模擬獎」(BIM Excellence Awards) 頒獎典禮。當晚建造業議會與建造業界代表分享過去一年的工作成果，以及得獎者們細說得獎感受與應用 BIM 的心得。

撰文 余美玉 | 攝影 謝銘深

作為一種建造業界的創新技術，建築信息模擬 (Building Information Modelling 或簡稱 BIM) 不單是一種二維繪圖工具，更是一種全新的管理工具，用以全面管理建造項目由籌備階段開始到建造階段，以至營運階段整個生命週期內的所有相關信息；BIM 亦開創新的工作方式，協助項目管理及執行，更有效監控

建造程序，有助跨界別合作，內部協調，對外溝通，解決問題及風險管理。同時，BIM 可透過採集數據採集和整合流程提高生產力，使當前建造業的壓力得以舒緩。

業界開始了解 BIM 的各項優點，亦發現 BIM 已經是全球建造業的大勢所趨，相比其他國家的 BIM 發展

業界積極回應 貢獻值得表揚

是次評審團成員廣泛代表性，分別來自業界不同的專業範疇及職銜。在評審過程中，評審團成員見證了建造業的變革，在約 80 個高水平的提名中，不單為評審

項目，也見證了建造業發展 BIM 的歷程。評審團成員一致認為，BIM 的推廣與應用，是建造業發展 BIM 的里程碑。得獎者之一的金門建築有限公司蘇國亮工程師稱，在建造業議會及政府牽頭大力推動下，2014 年可說是建造業發展 BIM 的里程碑，也相信未來香港的 BIM 發展於亞洲區將最為突出，另一得獎者



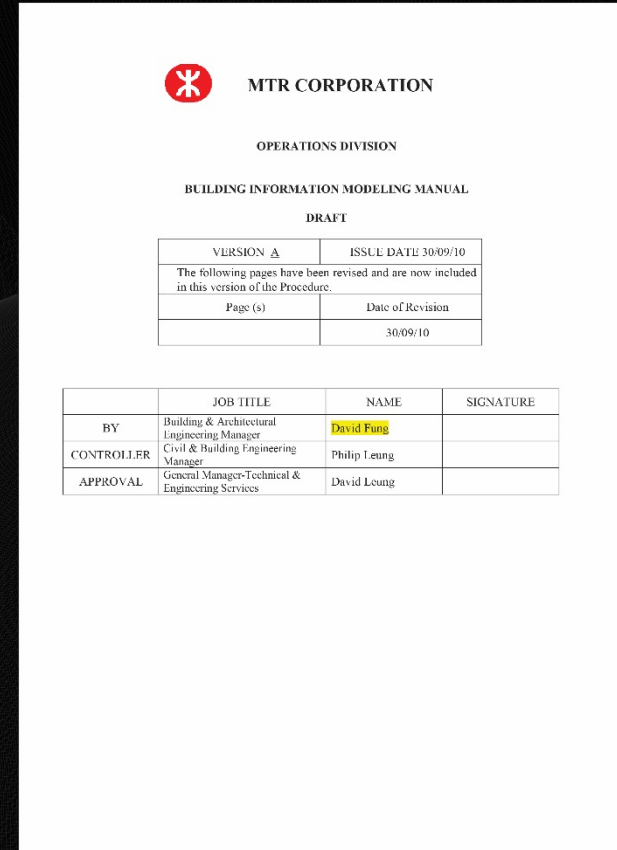
建造業議會執行總監陶博士 (右四) 與一眾年度青年 BIMer (Young Bimer of the Year) 合照。



ACID BIM Manual



HKIBIM BIM Manual



MTR BIM Manual

APPLICATION FORM



The Hong Kong Institute of
Building Information Modelling
香港建築信息模擬學會



Member of VTC Group
VTC 機構成員

IVE Engineering

Your Partner in Professional Development

20 Tsing Yi Road, Tsing Yi Island, N.T., Hong Kong Fax: 3475 0845 Email: EDT@vtc.edu.hk

Apply for (Put a ✓ in the box(es) of the course(s) you apply for)	Deadline by 15/9/2015 Exam Day 26/9/15 Put ✓ for selection	Deadline by 11/10/2015 Exam Day 24/10/15 Put ✓ for selection	Course Fee Separate crossed cheque for each course made payable to "Vocational Training Council"	
			(HK\$)	Cheque No.
1.1 CEI Basic (ArchiCAD)			600	
1.2 CEI Basic (Revit)			600	
2.1 CEII Architecture (ArchiCAD)			1,200	
2.2 CEII Architecture (Revit)			1,200	
2.3 CEII Structure (Revit)			1,200	
2.4 CEII MEP (Revit)			1,200	
2.5 CEII Revit Families			1,200	

Personal Particulars

Name: (should be the name shown on HKID/Passport)	(Name in English, family name first)	(Chinese name)
HKID/Passport No.:	()	Birthdate: (dd / mm / yy)
Correspondence Address:		Office Phone:
		Mobile Phone:
		Fax:
Email Address:		HKIBIM Membership No.:

Declaration

(*Delete where appropriate)

I wish to receive information from VTC (including course information from its member institutions): (Yes / No) *

I declare that the information provided in this form is, to my best knowledge, accurate and complete.
I agree to abide by the rules and regulations of IVE if I am admitted to the course.
I understand that the information provided in the form will be used by VTC in the admission process
and course administration.

Signature:

Date:

Notes:

- Whether a course will be offered depends on the enrolment and is subject to approval by VTC.
- The applicant will be informed of the timetable one week before the commencement of class.
- To facilitate communication, the applicant should provide in the Application Form a contact number of mobile phone which can receive SMS messages.

(June 2015)

EDT@vtc.edu.hk

HKIBIM accredited BIM Certified Expert Examination

(Course Code: 1525)



The Hong Kong Institute of
Building Information Modelling
香港建築信息模擬學會



Member of VTC Group
VTC 機構成員

Certified Expert Level I Examination

Available categories:

- 1.1. CEI Basic (ArchiCAD)
- 1.2. CEI Basic (Revit)

- 3 hours
- 26/9/2015 (Sat)
- HK\$600.00

Certified Expert Level II Examination

Available categories:

- 2.1. CEII Architecture (ArchiCAD)
- 2.2. CEII Architecture (Revit)
- 2.3. CEII Structure (Revit)
- 2.4. CEII MEP (Revit)
- 2.5. CEII Revit Families

- 3 hours
- 24/10/2015 (Sat)
- HK\$1,200.00



Examination Venue

- BIM Centre, IVE (Morrison Hill)
- 6 Oi Kwan Road, Wanchai, Hong Kong
- Or, other BIM Centre of VTC

Application

- Submit the duly completed Application Form with a crossed cheque for the course fee of each course to:
Engineering Discipline In-service Training
IVE (Tsing Yi)
Rm B322, 20 Tsing Yi Road, Tsing Yi Island

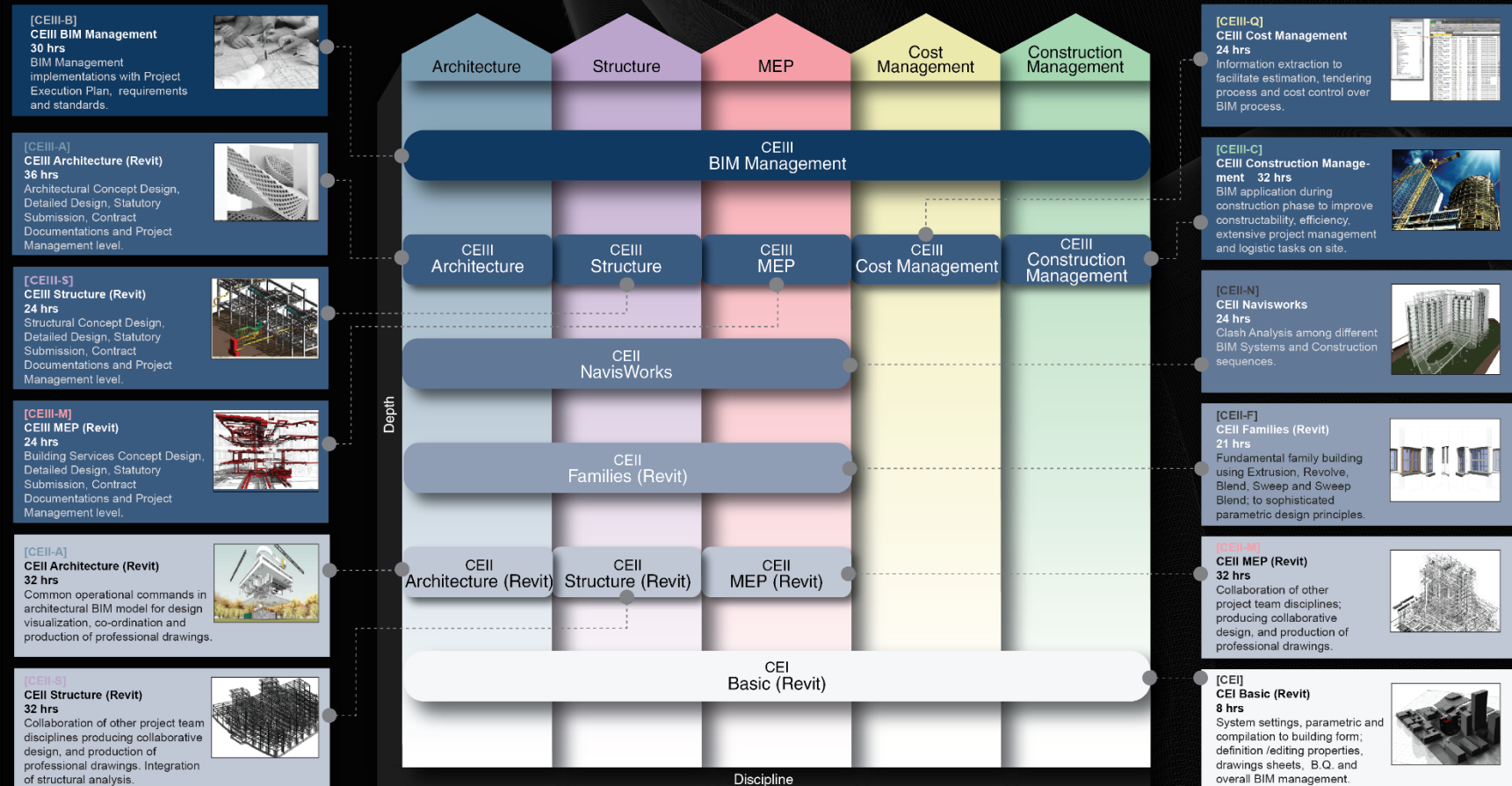
Enquiries

T 2435 9423 (Mon- Fri 9:00-12:30 am & 1:30-5:00 pm)
E EDT@vtc.edu.hk
W EDT@vtc.edu.hk

(June 2015)

EDT@vtc.edu.hk

BIM Education Road Map





The University of Hong Kong
Knowledge Exchange



HKUSPACE *Community*
College 香港大學附屬學院



香港中文大學
The Chinese University of Hong Kong



CUSCS
香港中文大學專業進修學院
School of Continuing and Professional Studies
The Chinese University of Hong Kong



珠海學院
CHU HAI COLLEGE
OF HIGHER EDUCATION



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學

School of Professional Education
and Executive Development
專業進修學院

SPEED



EDUCATION

A.C.I.D. offers professional training courses at all professional levels. Both at BIM Studio or on site.



CONSULTING

A.C.I.D. offers consulting services to all BIM related business from project inception, design, construction and operational phases to different organizations.

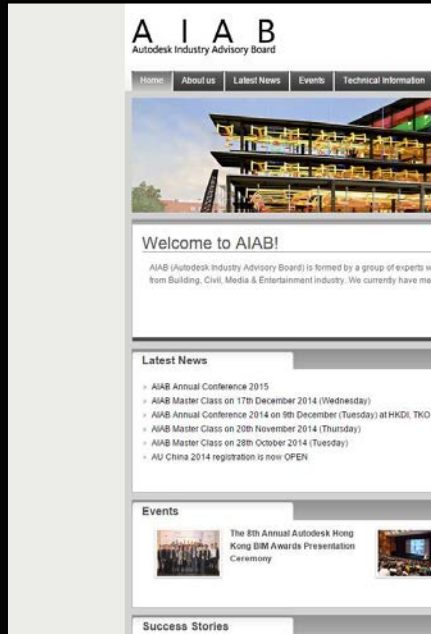
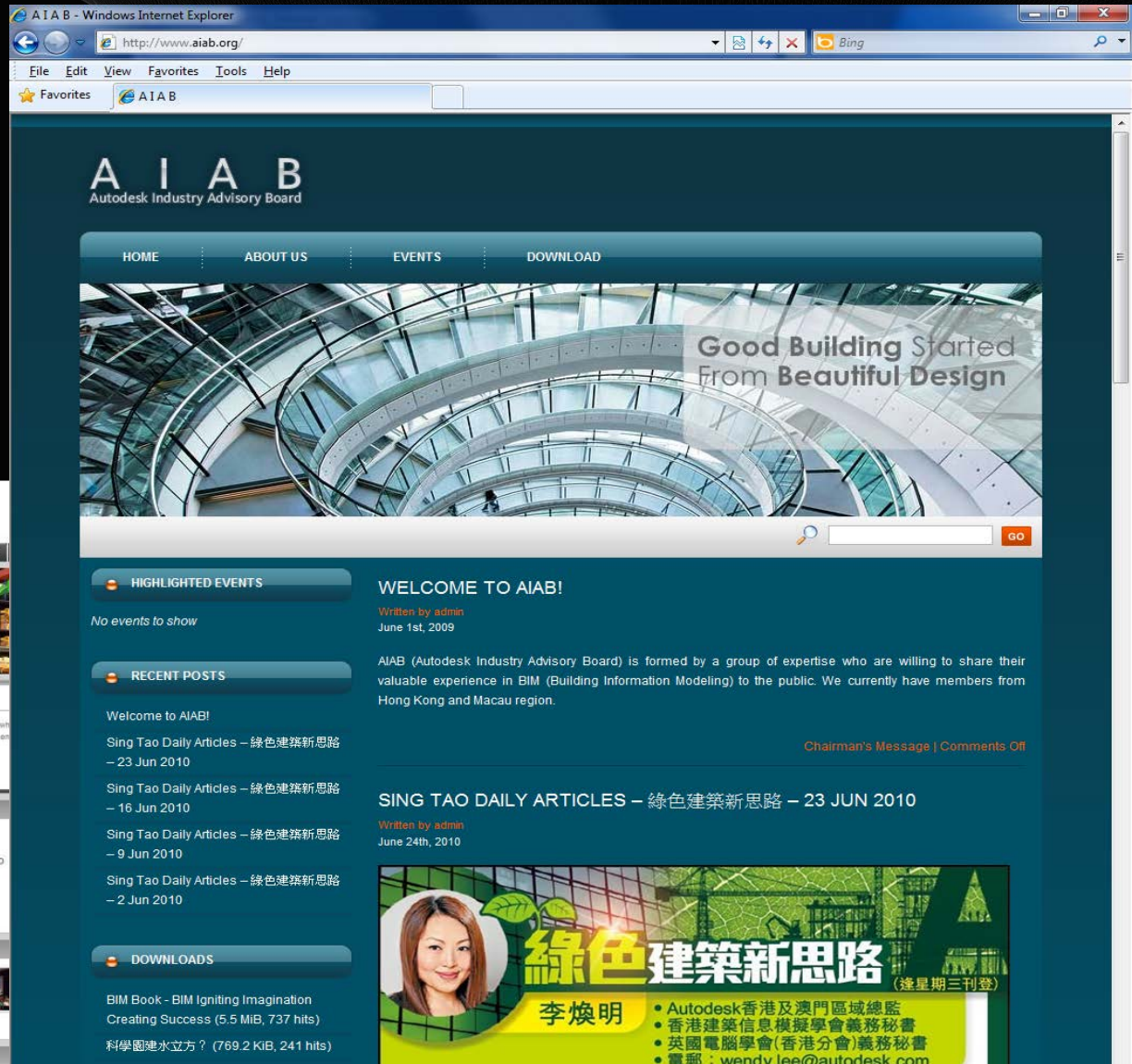
NCID



PROJECT MANAGEMENT

A.C.I.D.'s project team assists the client and team to carry out the BIM process in the project.







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Hong Kong, Hong Kong

Founded Nov 21, 2014

BIMeets 189

Group reviews 2

Past Meetups 20

Our calendar 

Organizers:

Jake Lucier,
Carol P,
Desmond
Leung,
Kelvin Tam, Mike Chan,
Stellar Leung



 Contact


We're about:

Interior Design ·
Architecture ·
Construction · Autodesk ·
Revit · Building

Welcome to Hong Kong's Autodesk Revit User Group connecting to share our collective experience to drive and support Building Information Modeling, or BIM for short. A seasoned group of professionals will gather often to tackle tough questions, explore new ideas and pioneer BIM concepts throughout Asia with the worlds leading practices, top designers and engineers.



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when new Meetups are scheduled



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2 days ago · 7:00 PM

The Monkey King's resolution of the year: Revit vs BD?



38 BIMeets |  | 16 Photos

Sneak Peek from Marcin:

January 14 · 12:30 PM

What's new





All Files

Family Name Category [Search](#)

STE-STU-AEC-PedestalFireHydrant-WSD154



Parametric Pedestal Fire Hydrant according to Water Supplies Department Standard Drawings, Section 1 - Mainlaying, Drawing No. WSD 1.54

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STE-STU-AEC-SwanNeckFireHydrant-WSD155



Parametric Swan Neck Fire Hydrant (with band) according to Water Supplies Department Standard Drawings, Section 1 - Mainlaying, Drawing No. WSD 1.55

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STE-STU-AEC-GI_Bollard-H2179B

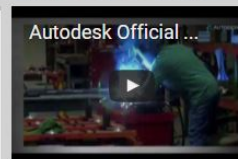


Parametric G.I. Bollard (with visibility band) according to Highways Department Standard Drawings, Section 2 - Street Furniture, Drawing No. H2179B

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STE-STU-AEC-EmergencyCrashGate-H2108B



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■ Thank you !