

Green Building Information Modelling (BIM) for Sustainable Design and Construction

David Fung

HKIBIM Vice Chairman BIM specialist

HKIA Registered Architect

HKUSPACE, Chu Hai College, Department of Architecture, Associate Professor



HKIBIM

www.hkibim.org



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

http://hkibim.org/ - Windows Internet Explorer

http://www.hkibim.org/

File Edit View Favorites Tools Help

★ Favorites <http://hkibim.org/> www.aec-uk.org

Home Chairman's Corner BIM HKIBIM BIM in HK BIM Projects Courses Commercial

Links About Us

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

HKIBIM Launch on 8th Jan 2010

Hong Kong Institute of Building Information Modelling (HKIBIM) was established in Jan 2009. After one year's preparation, it is proud to announce the launch of HKIBIM. On 8 Jan, 2010, the Launch was successfully held at the Hong Kong Club Building.

After opening speech by Ir Francis Leung, the Chairman of HKIBIM, the first fellow member of HKIBIM, Ms Ada Fung, made her speech followed by Architect Mr David Fung, Vice Chairman, sharing the membership application method and further direction of HKIBIM.

The launch ended with cocktail and networking until late night.



www.hkibim.org

[Click here to view the event photos.](#)

Search for: 

Recent Posts

HKIBIM Launch on 8th Jan 2010
Official Launch of The Hong Kong
Institute of Building Information
Modelling (HKIBIM)

Useful Links

Membership Application Form:



PDF format



Our Objectives

- To promote and advance the general education, understanding, appreciation and interest of and in building information modelling management;
- To foster general awareness, understanding and concerted efforts in the community towards the advancement of the Objects and the issues thereof;
- To establish and advance standards of building information management practice in the industry.
- To establish links with relevant institutes of tertiary education, Government Bureaus/Departments, Statutory bodies and other organizations;
- To research, facilitate and promote the means of better management of building information for improving communication, co-ordination, management, productivity, delivery time, cost, and quality throughout the whole building life cycle;
- To provide guidance on careers in building information management profession;

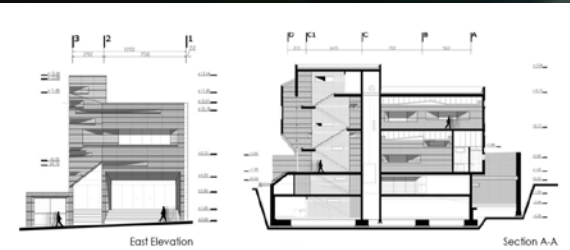
Building information modeling (BIM)

is a **process** involving the generation and management of a digital representation of physical and functional characteristics of a facility. The resulting building information model becomes a shared knowledge resource to support **decision-making** about a facility from earliest conceptual stages, through design and construction, then through its operational life before its eventual demolition.

Architectural floor plan of the University of Illinois at Chicago (UIC) campus. The plan shows a complex arrangement of buildings, parking lots, and surrounding streets. Key features include:

- Buildings:** Administration Building, Library, Student Union, Academic Building, and various other academic and administrative structures.
- Parking:** Numerous parking lots are distributed throughout the campus, including a large lot near the Student Union.
- Streets:** Lake Shore Drive, Broadway, and other major thoroughfares are shown.
- Landmarks:** The plan includes labels for various landmarks and facilities, such as the UIC Medical Center and the UIC Hospital.

The plan is a detailed technical drawing, likely used for urban planning and transportation studies. It includes various annotations and labels in both English and Chinese, providing a comprehensive overview of the campus layout.



The top portion of the image displays a Microsoft Excel spreadsheet titled "Energy Valley Farm" and "Energy Valley Farm, Inc.". The spreadsheet is a complex financial model, likely for a real estate or agricultural investment, detailing cash flows, taxes, and depreciation over a 25-year period. Key sections include:

- Inputs:** Lists various parameters such as "Cash Flow", "Taxes", "Depreciation", and "Interest Rate".
- Outputs:** Calculated values for "Net Present Value", "Internal Rate of Return", and "Payback Period".
- Assumptions:** A section detailing the underlying assumptions for the model, including "Cash Flow Growth", "Taxes", and "Depreciation".
- Summary:** A final section summarizing the key results of the analysis.

The bottom portion of the image shows a large, dense pile of manila folders, likely representing the physical data or documents associated with the financial model. The folders are stacked in a way that suggests a large volume of data, possibly organized by year or category, corresponding to the 25-year timeline of the spreadsheet.

Building Projects

Modelling

- Plan
- Section
- Elevation
- Area Diagrams
- Schematic Designs
- General Building Plan
- Structural Plans
- E/M Drawings
- Schematics
- Other Diagrams

BIM

Information

- Area Schedule
- Finishing Schedules
- Door/Window/Louvre Sch
- Beam/Column Schedule
- Equipment Schedule
- Program
- Cost Estimate
- Quantity Take Off
- Bills of Quantities
- Variations

Building Information Modeling

信息化建築模型

BIM - INFORMATION FLOW

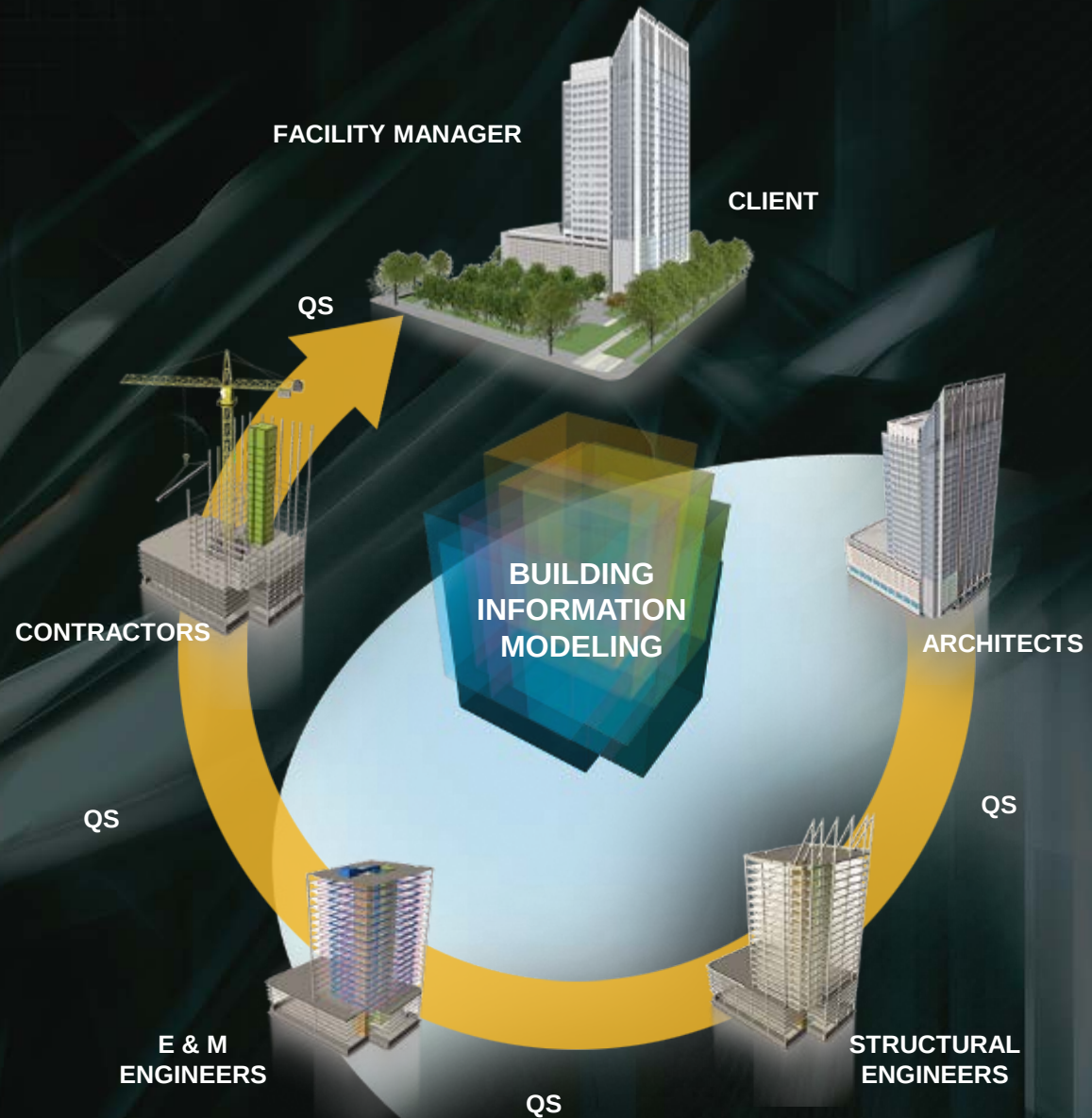
Graphical Data
(model)

+

Non-Graphical
Data
(Information)

+

New workflow

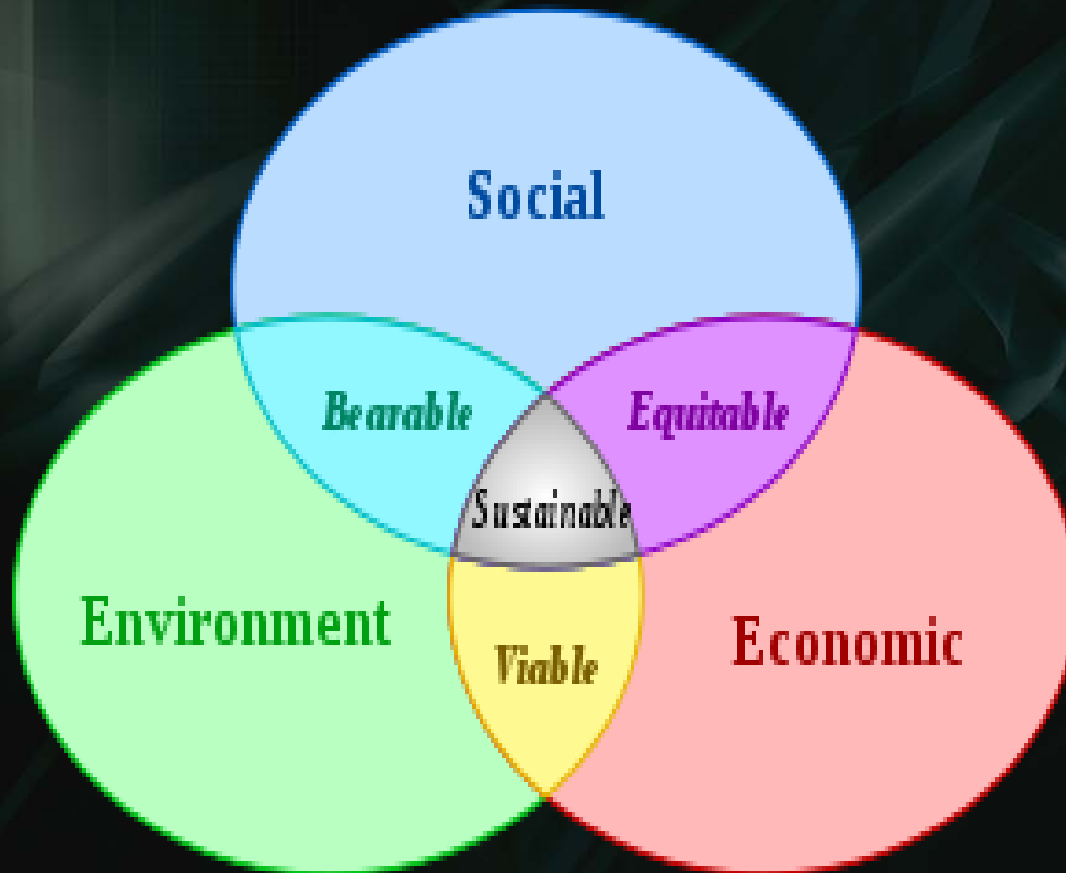


BIM & SUSTAINABILITY

BIM facilitates better decisions:

1. Development Control and Development potential
2. Analytical approach
3. Collaborations
4. Hong Kong BEAMPLUS platinum project

1. Development Control and Development potential

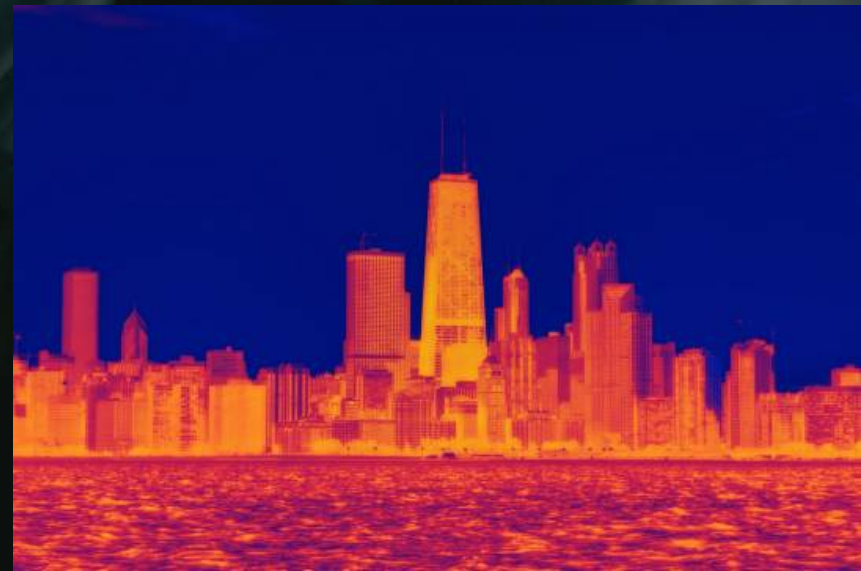


1. Development Control and Development potential

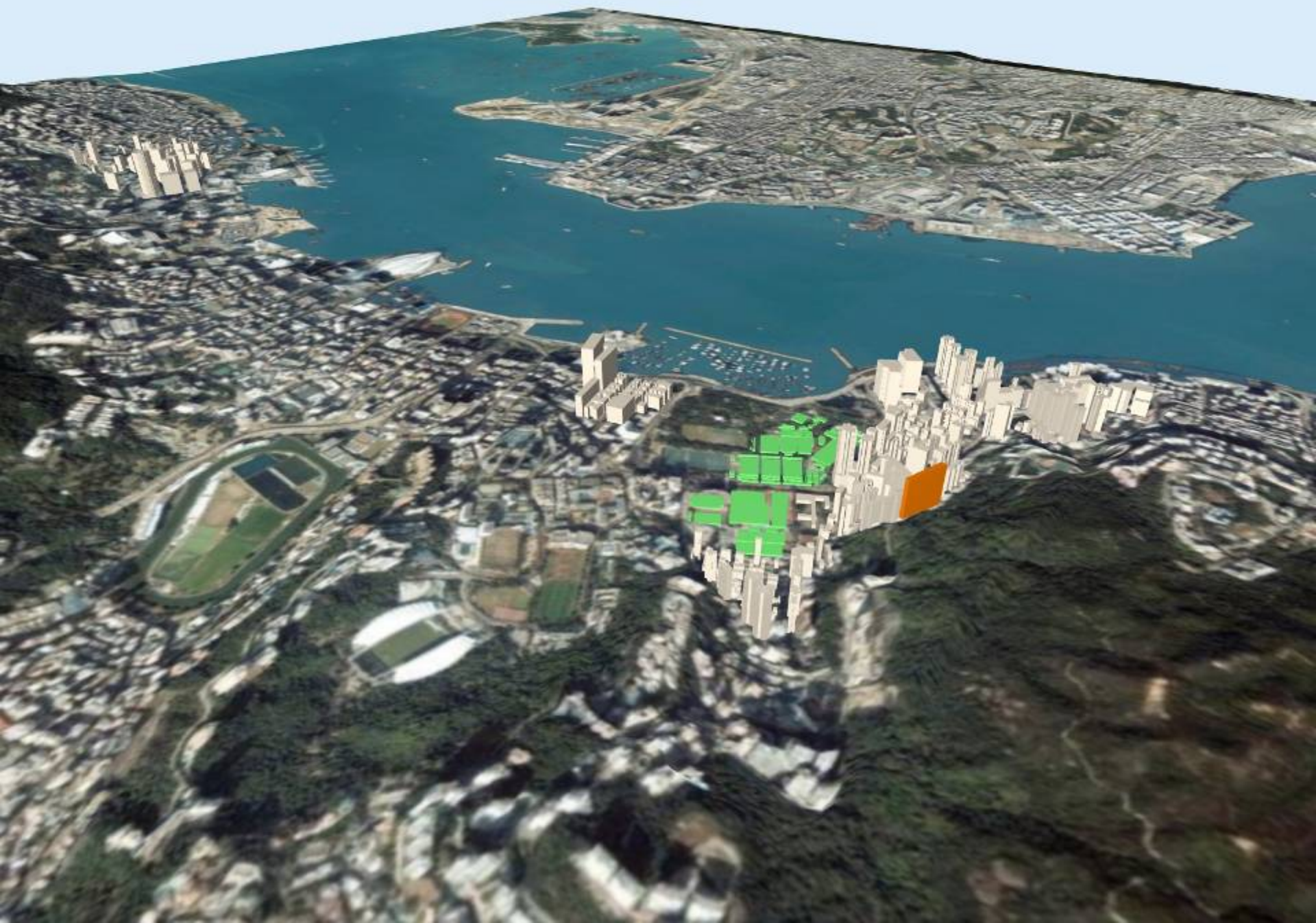
Development



Heat Island Effect

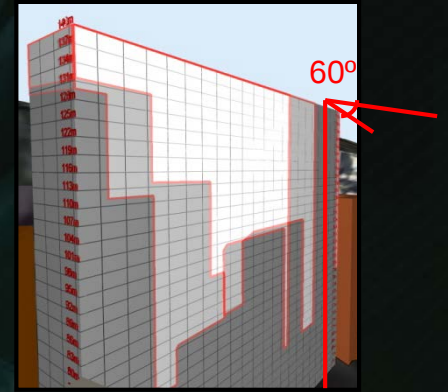
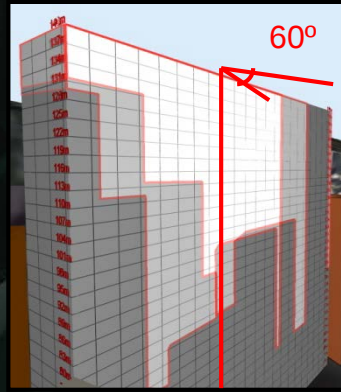
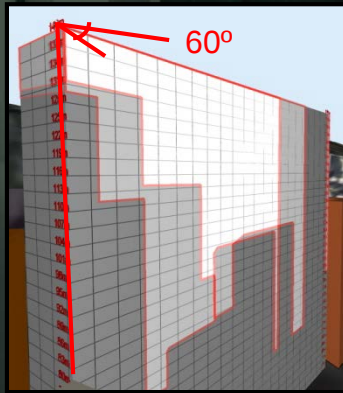


“Screen” Effect



140m

Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

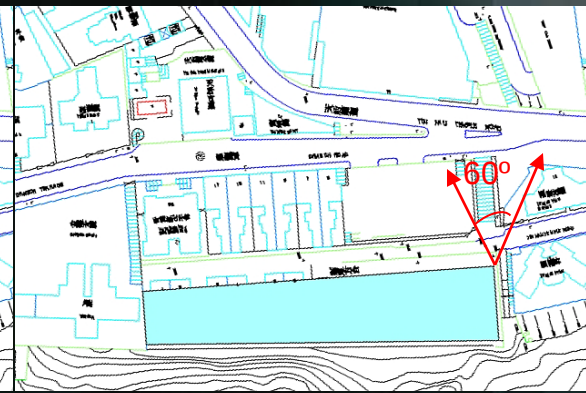
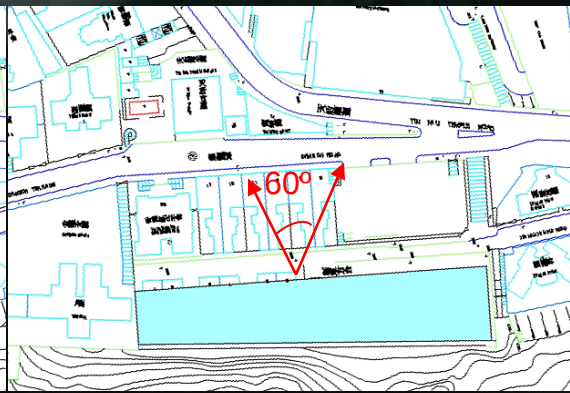
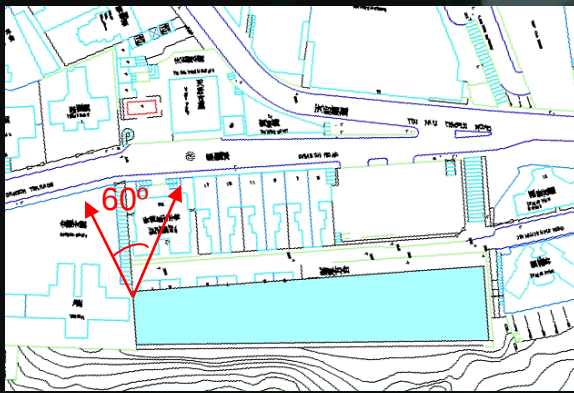
100m

95m

90m

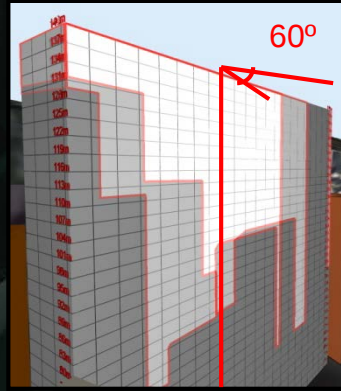
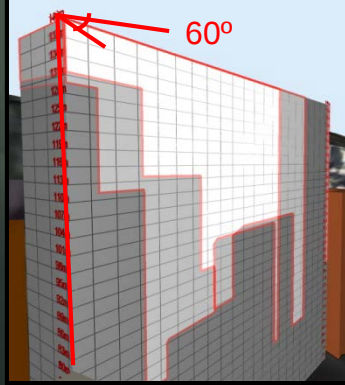
85m

80m

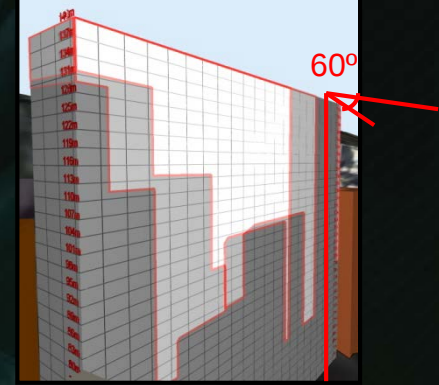


135m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

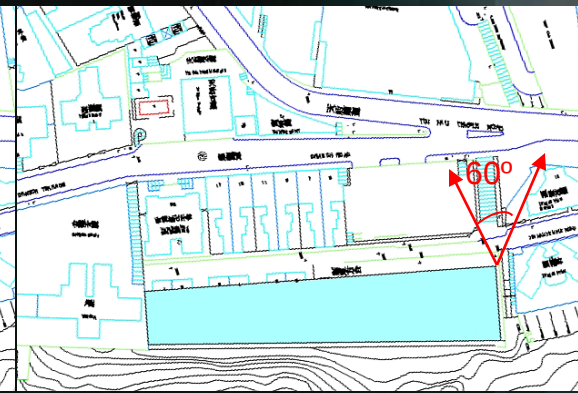
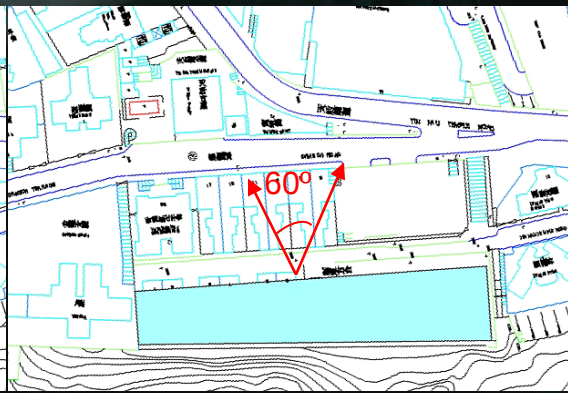
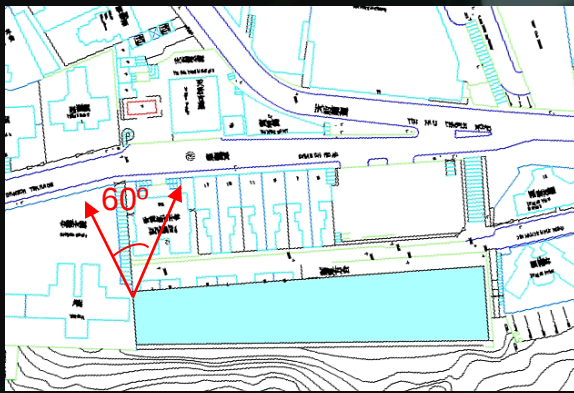
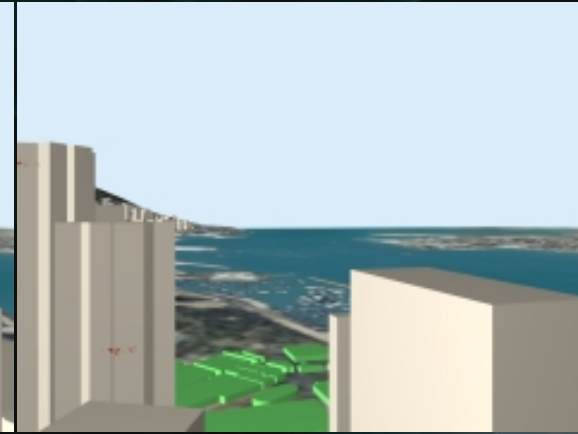
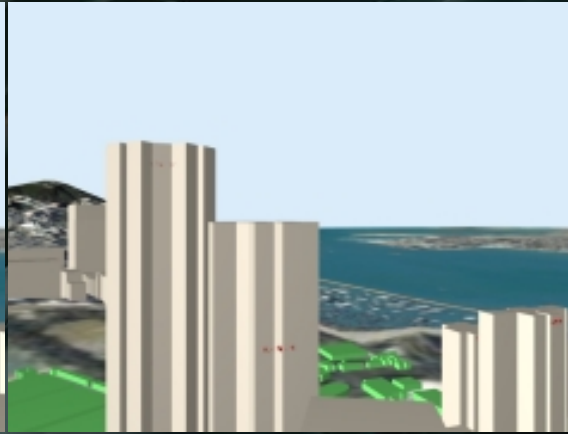
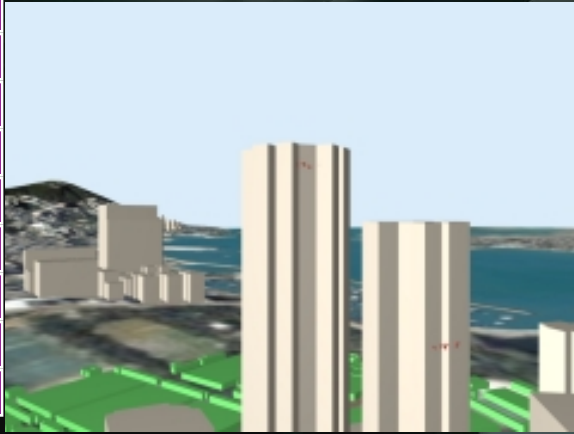
100m

95m

90m

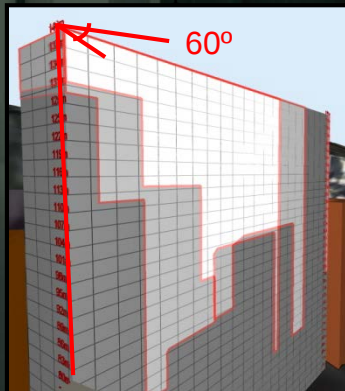
85m

80m

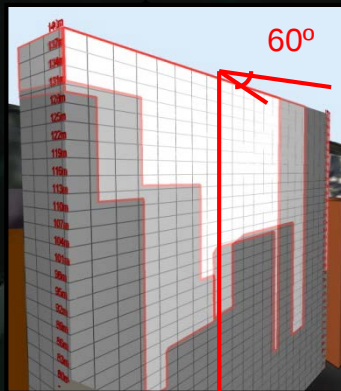


View from: 130m
130m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

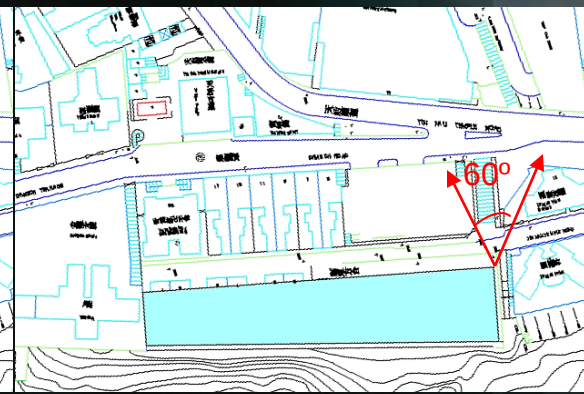
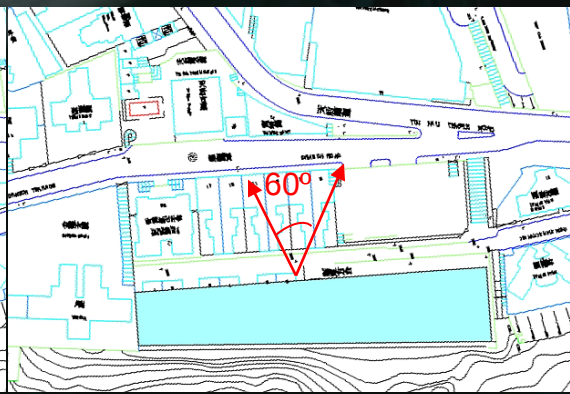
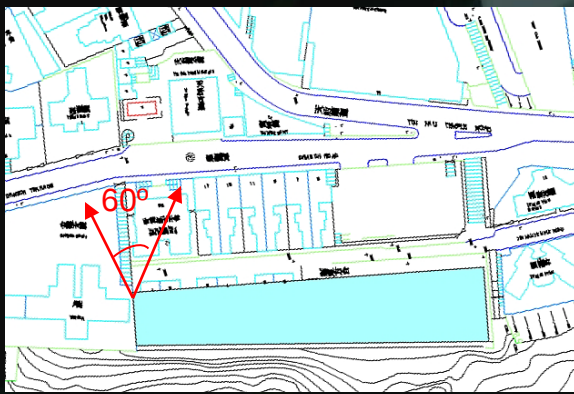
100m

95m

90m

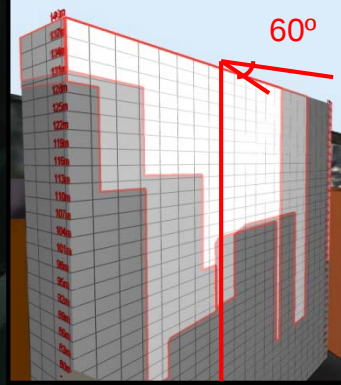
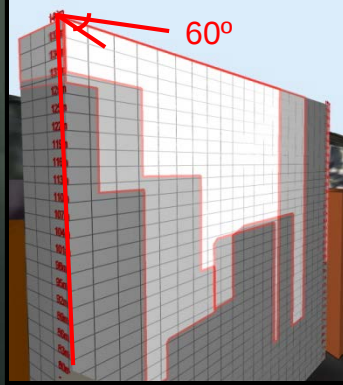
85m

80m

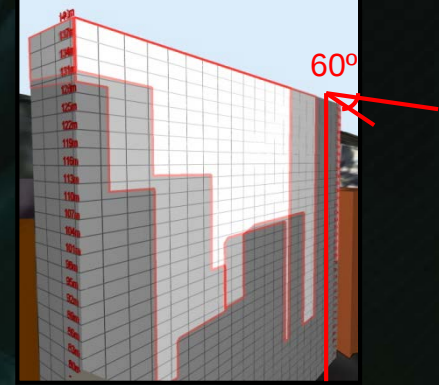


125m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

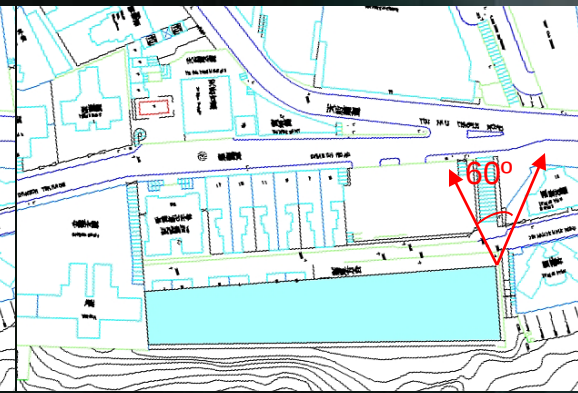
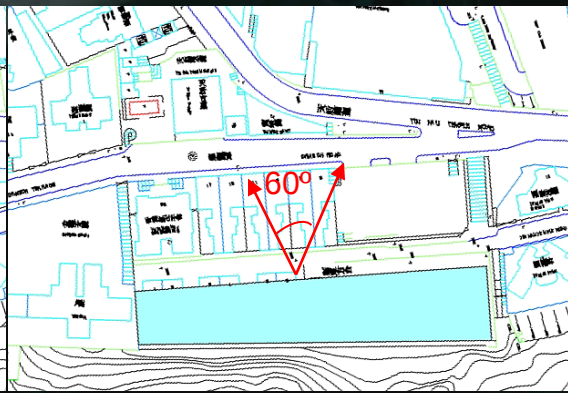
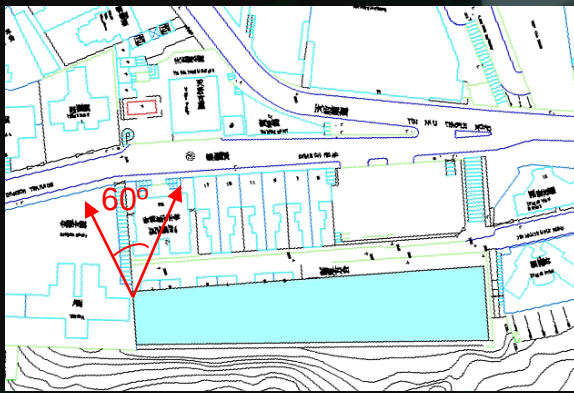
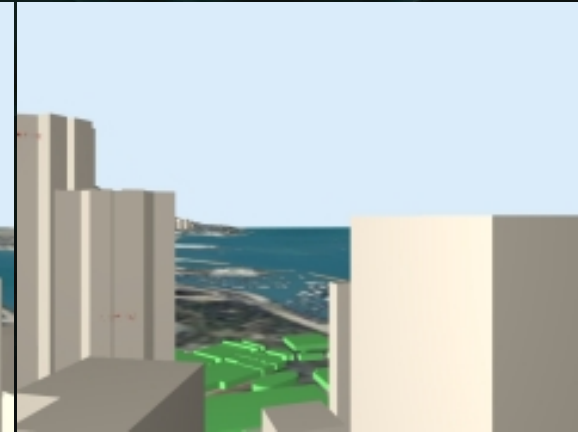
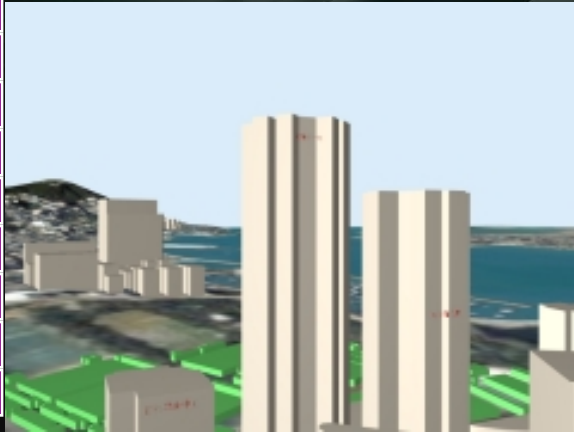
100m

95m

90m

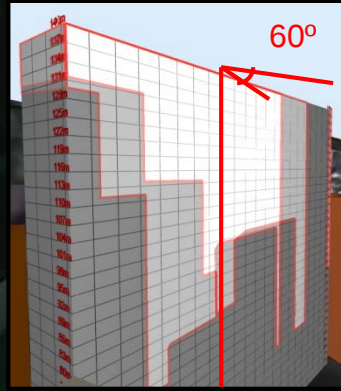
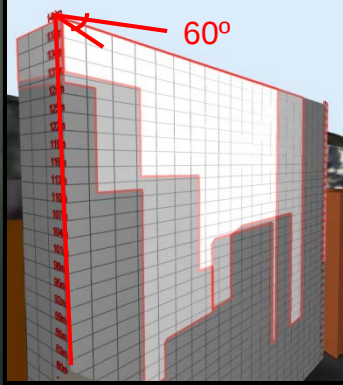
85m

80m

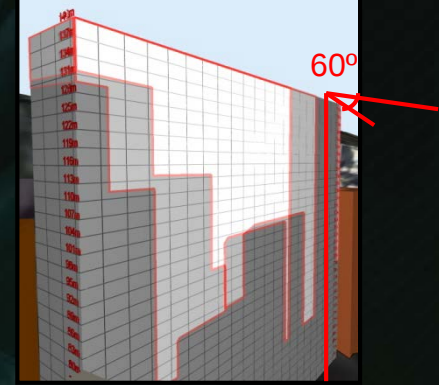


120m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

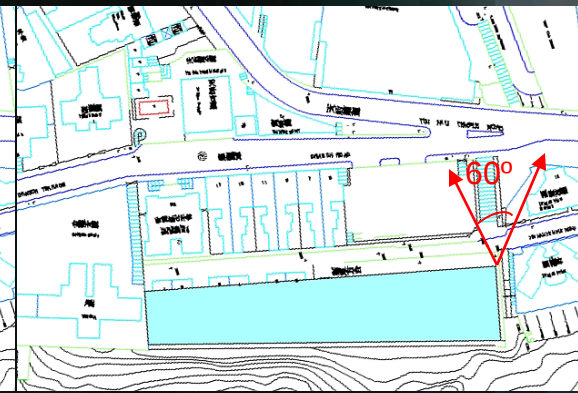
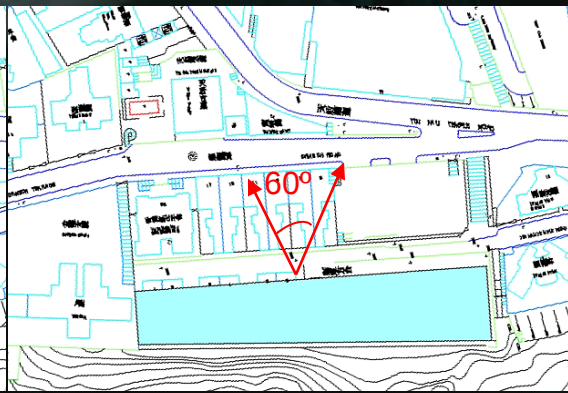
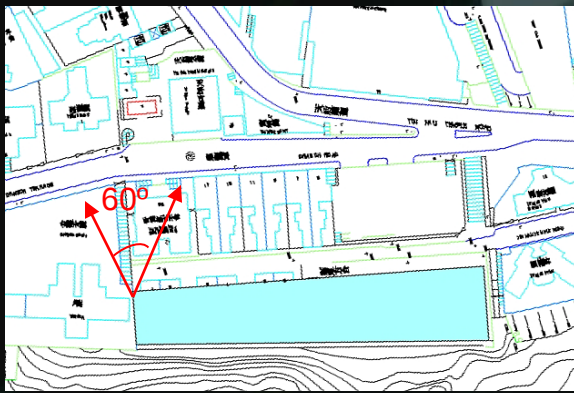
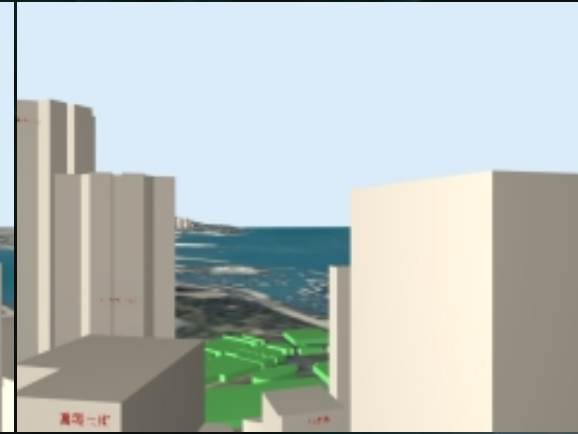
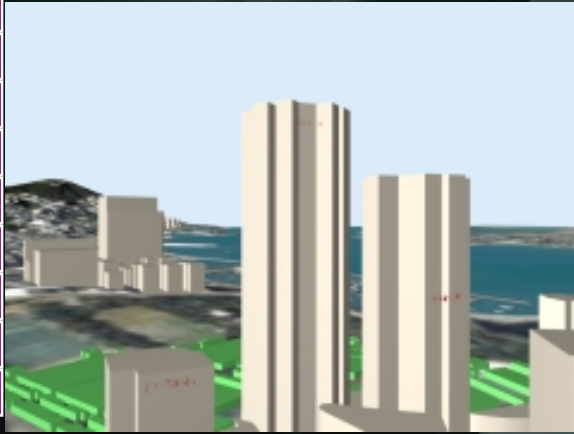
100m

95m

90m

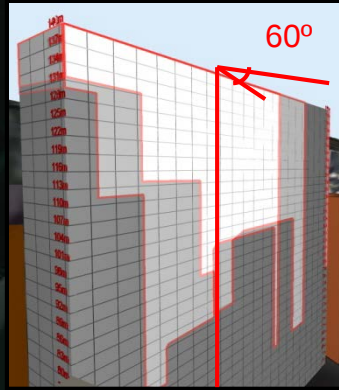
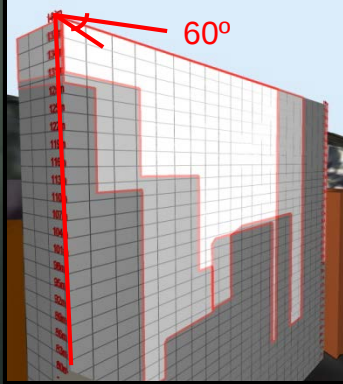
85m

80m

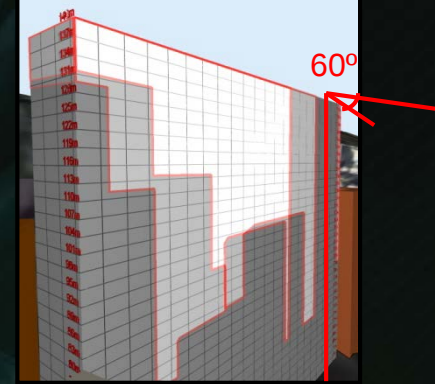


115m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

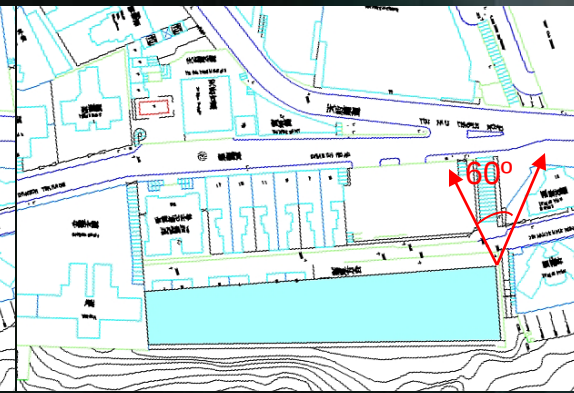
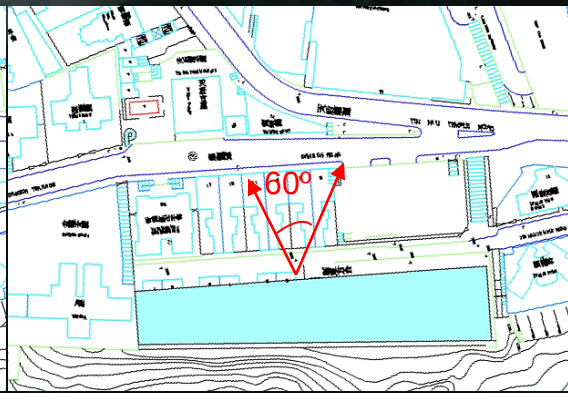
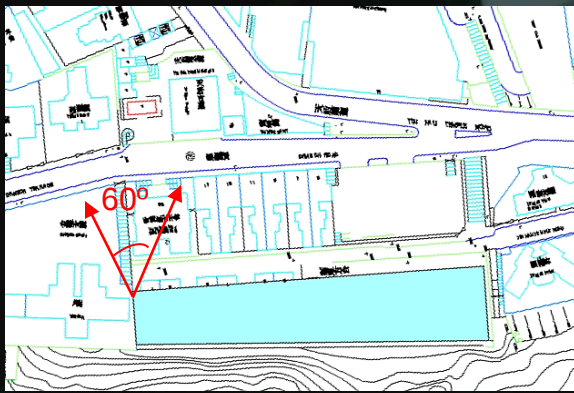
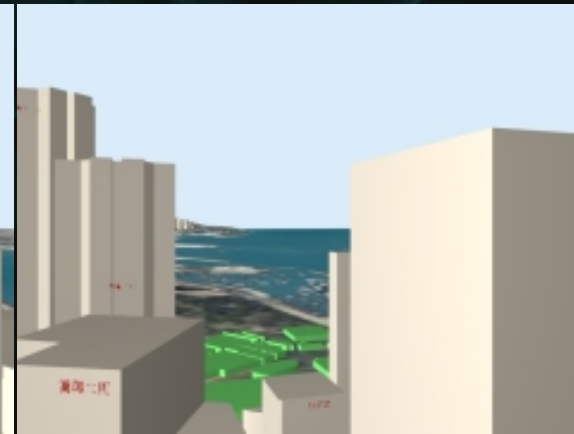
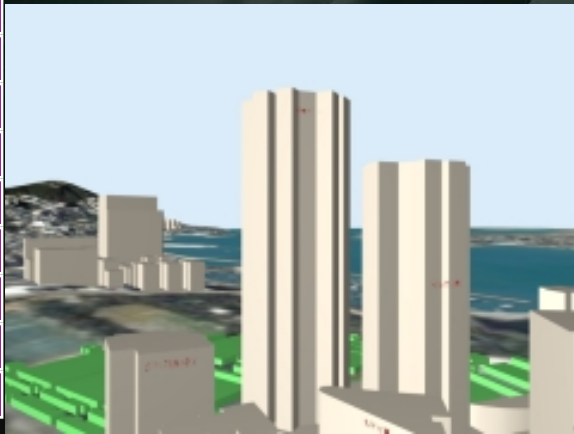
100m

95m

90m

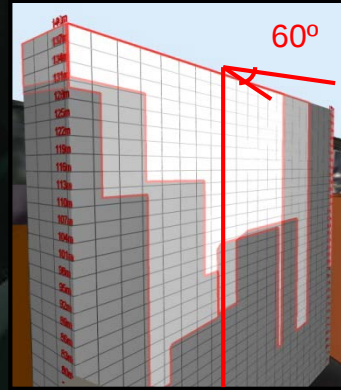
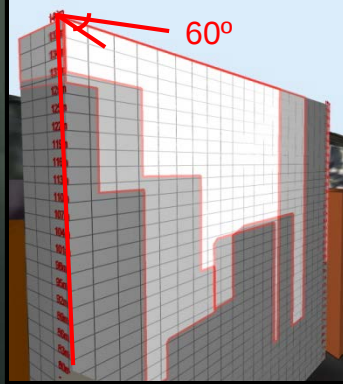
85m

80m

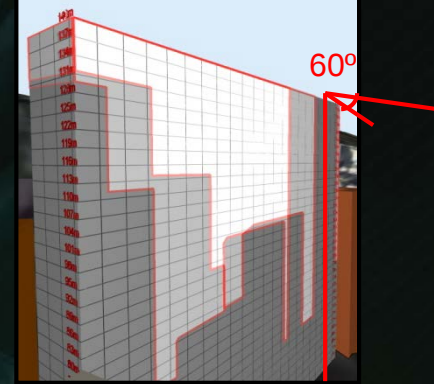


110m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

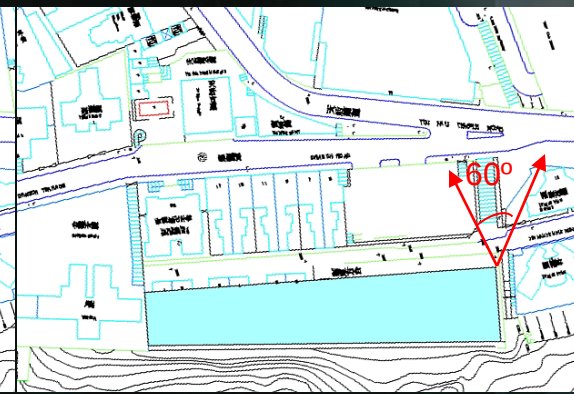
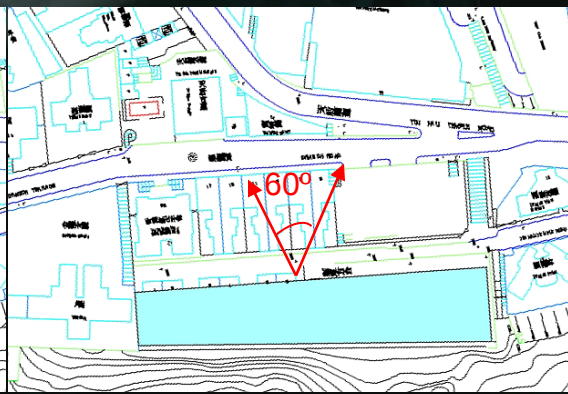
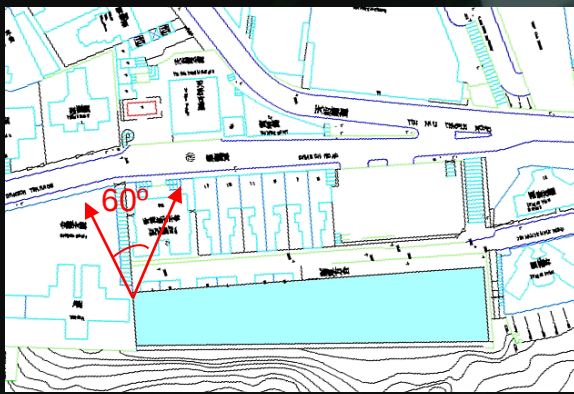
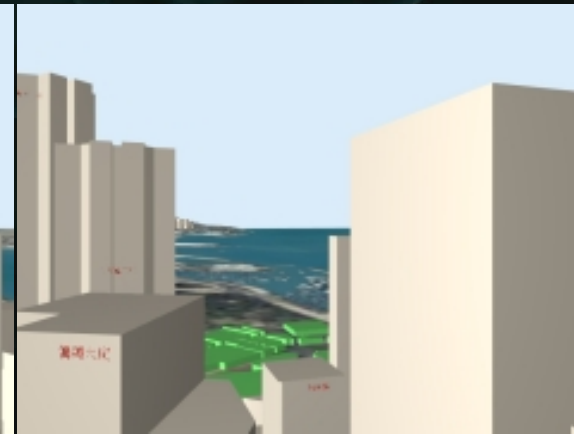
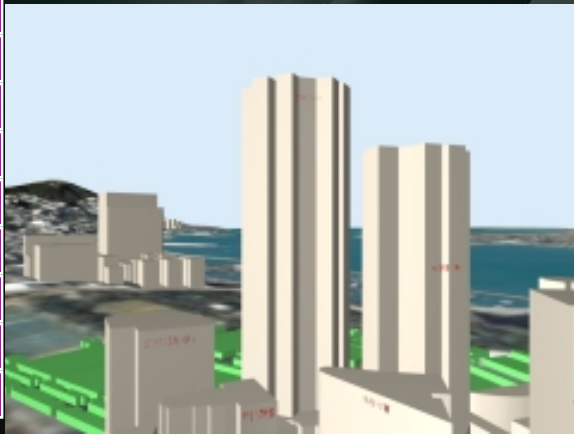
100m

95m

90m

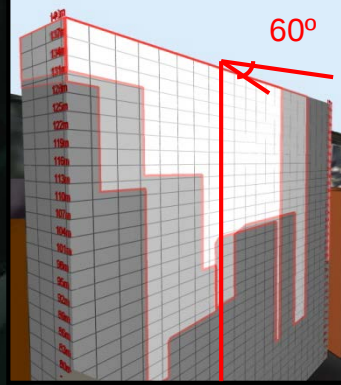
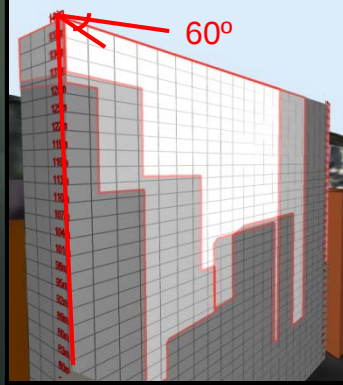
85m

80m

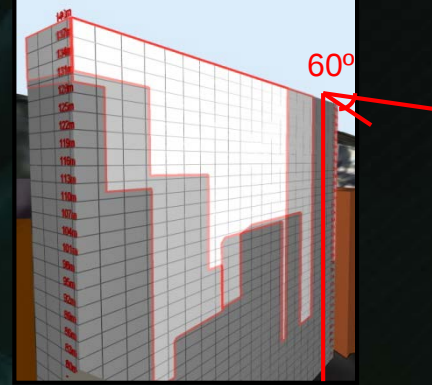


105m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

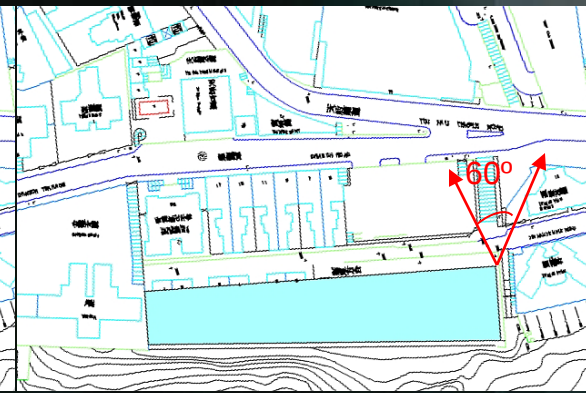
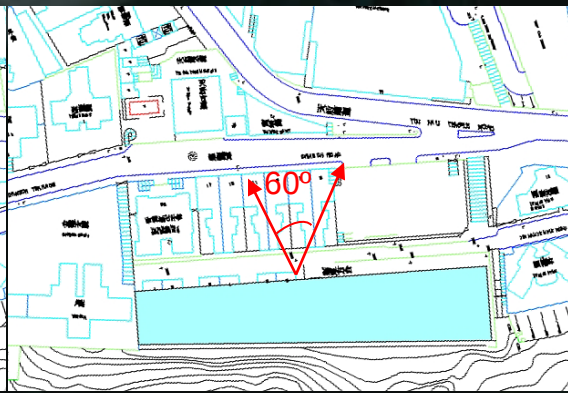
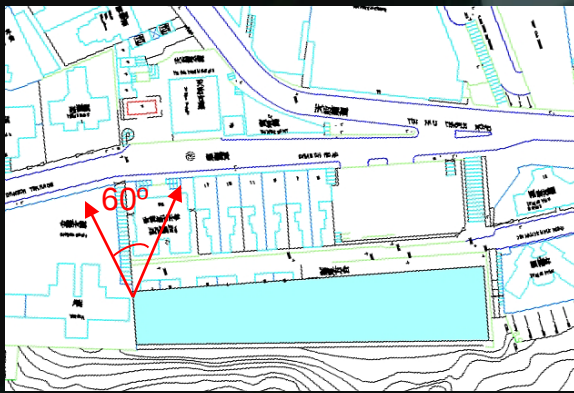
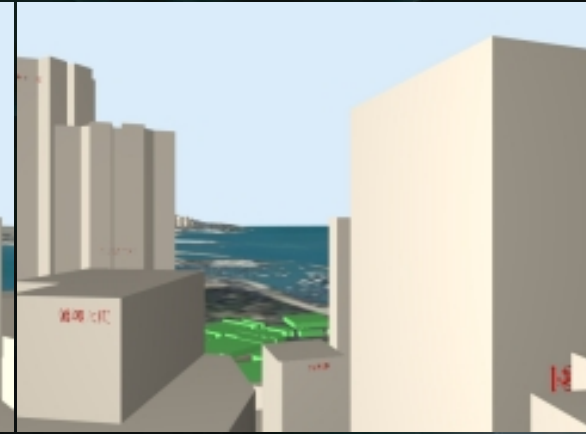
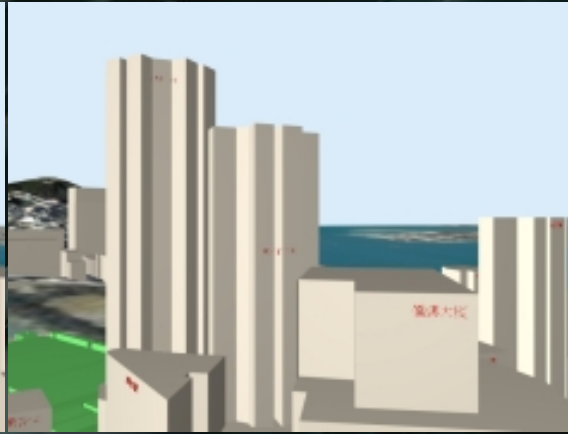
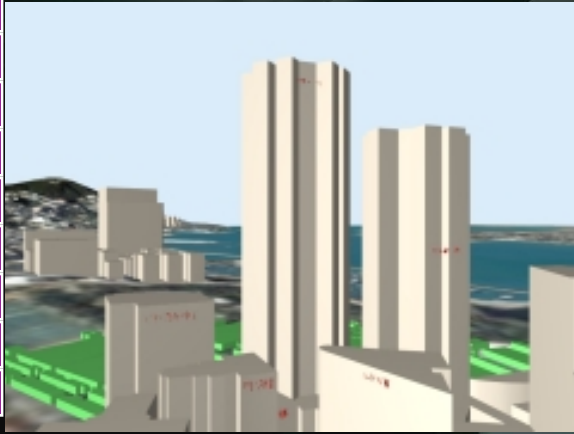
100m

95m

90m

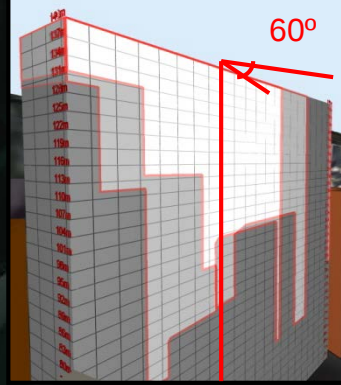
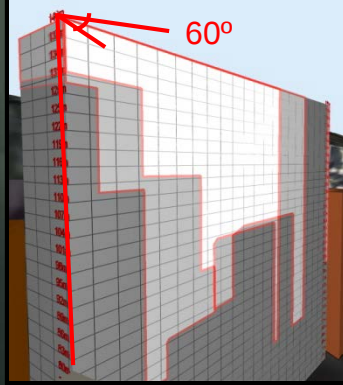
85m

80m

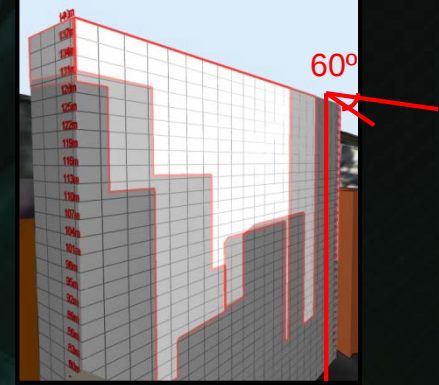


100m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

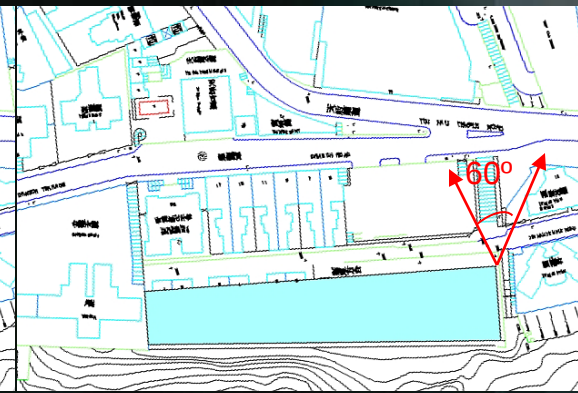
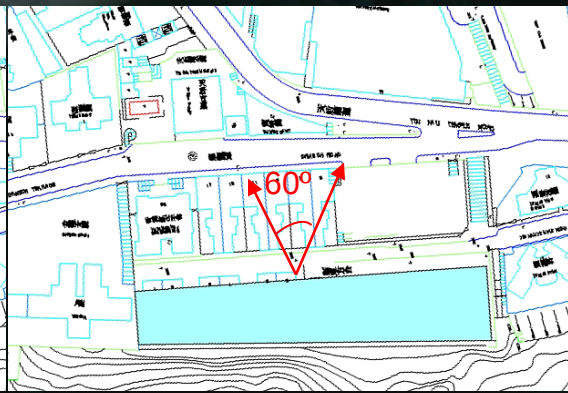
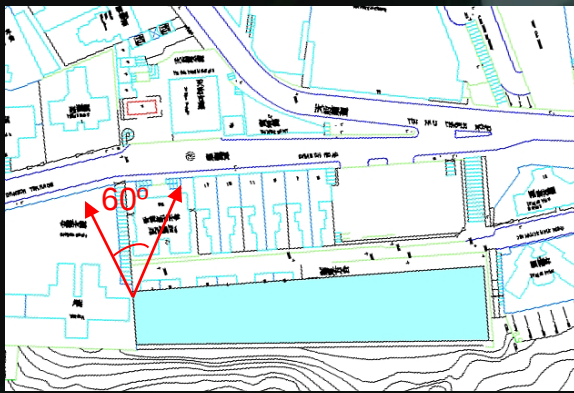
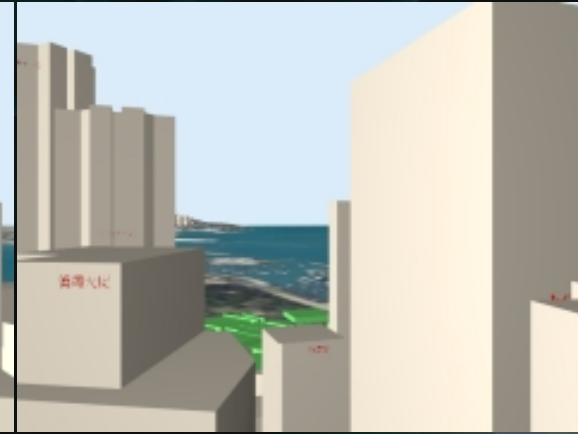
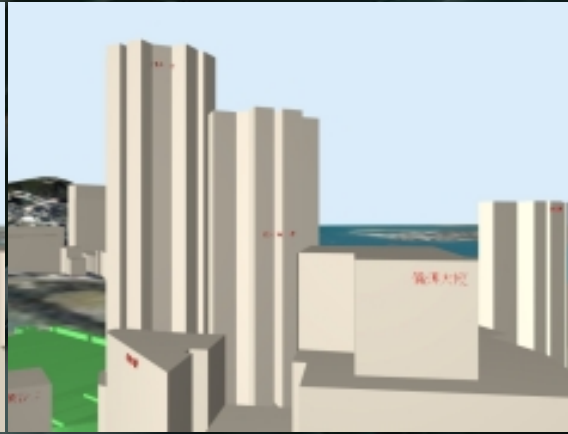
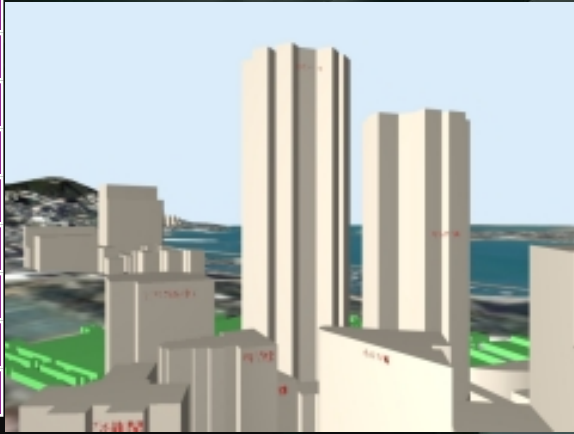
100m

95m

90m

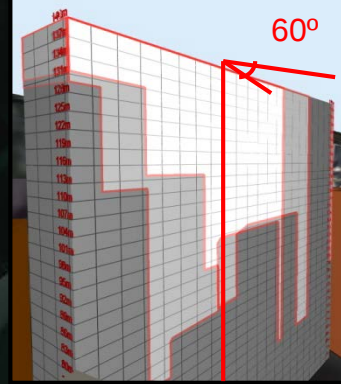
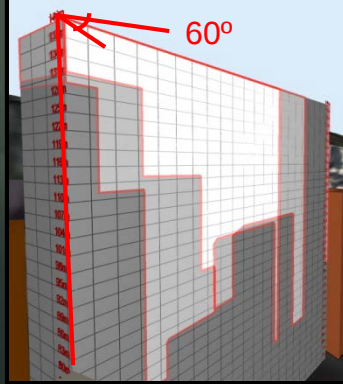
85m

80m

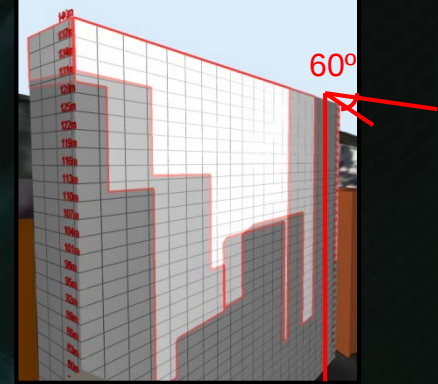


95m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

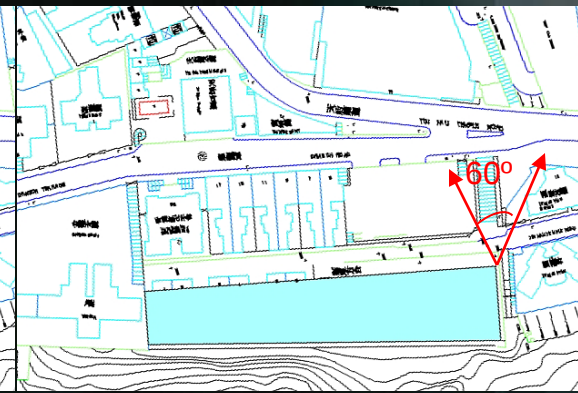
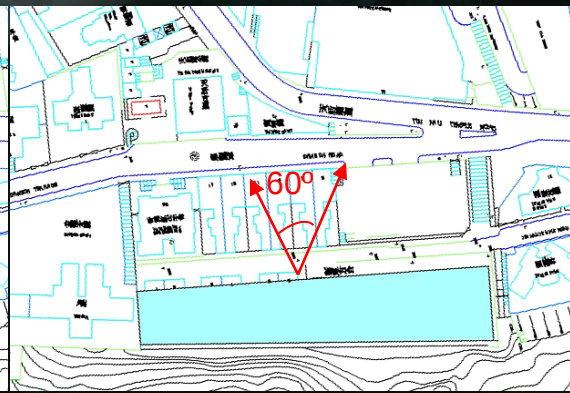
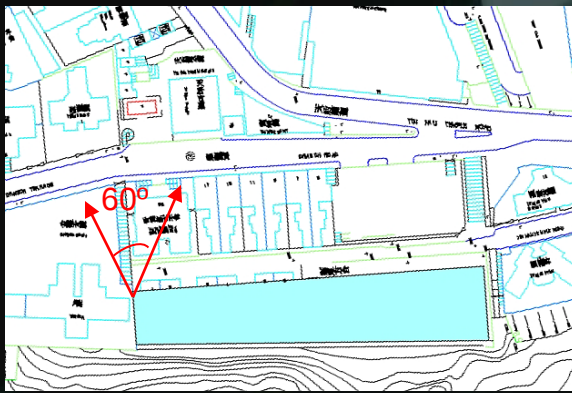
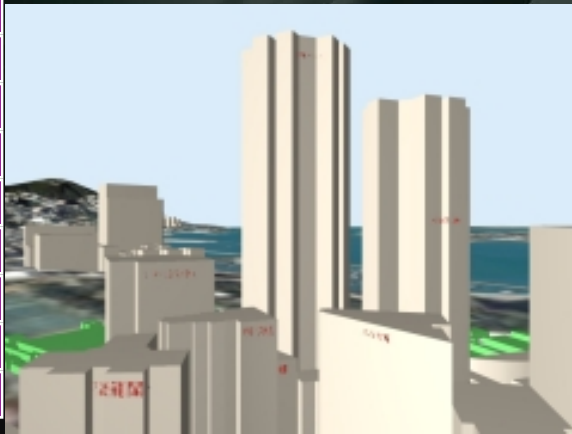
100m

95m

90m

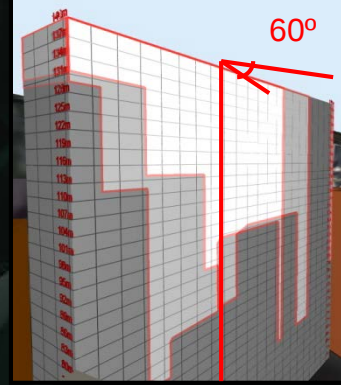
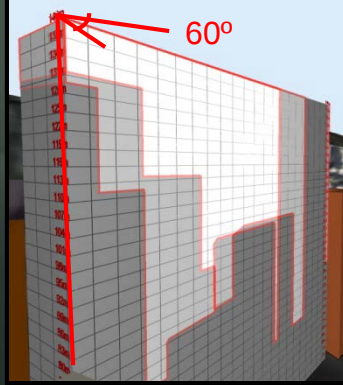
85m

80m

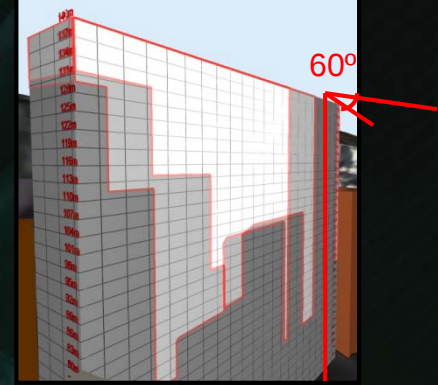


90m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

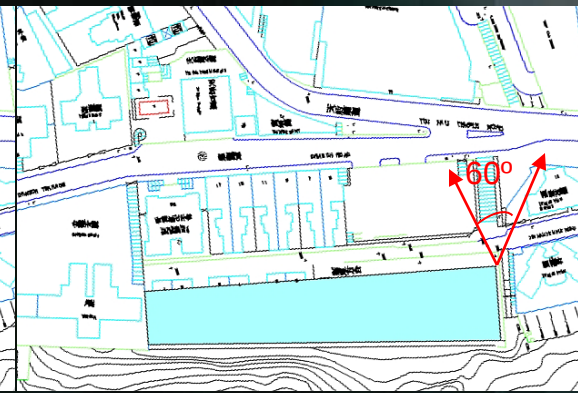
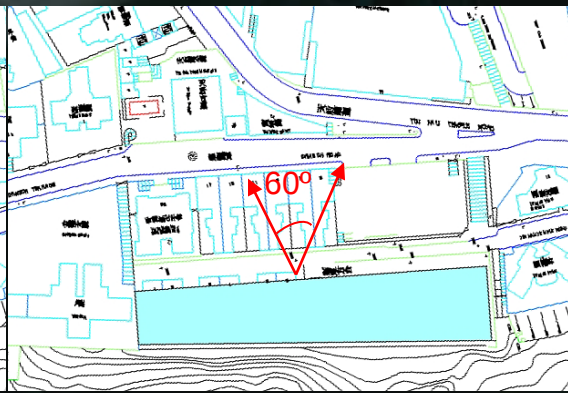
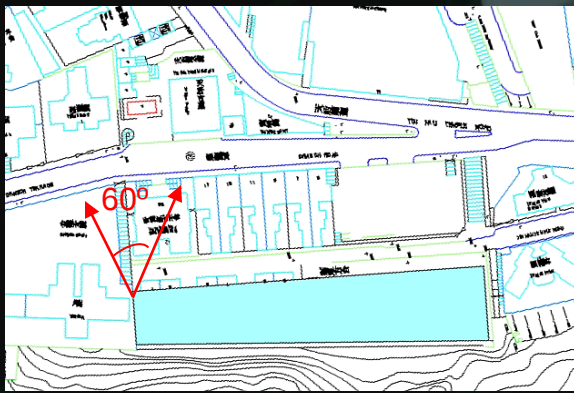
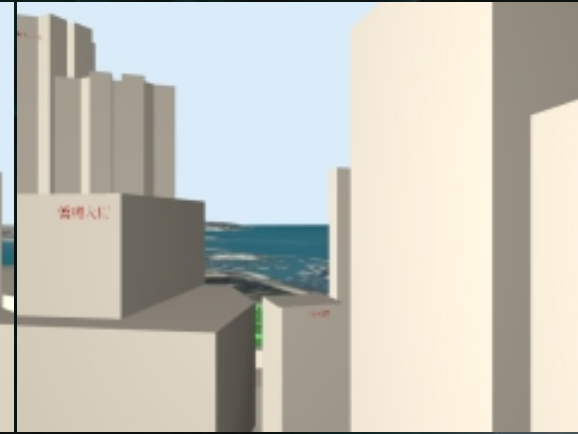
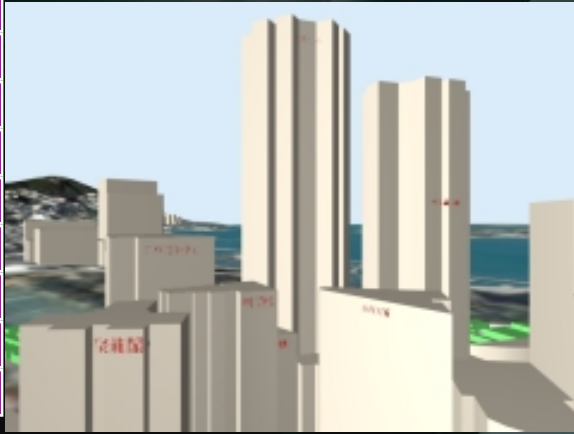
100m

95m

90m

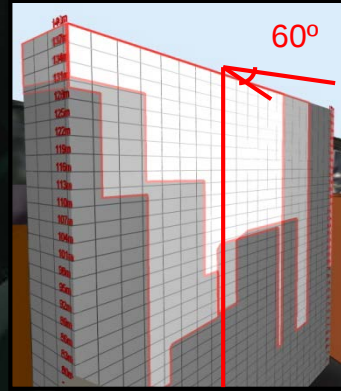
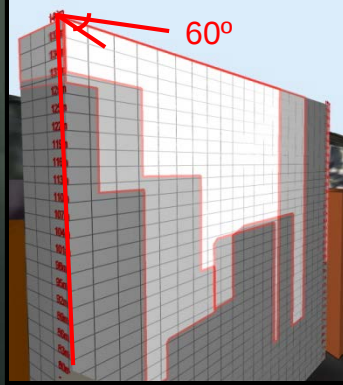
85m

80m

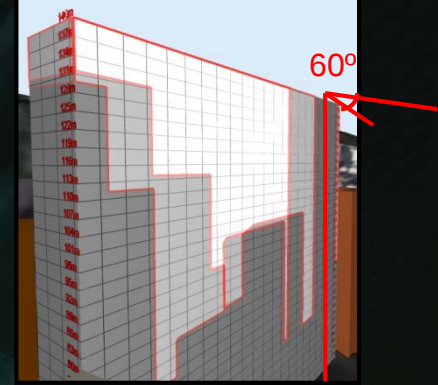


85m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

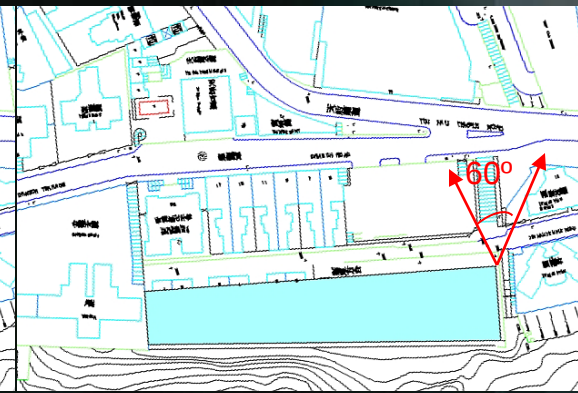
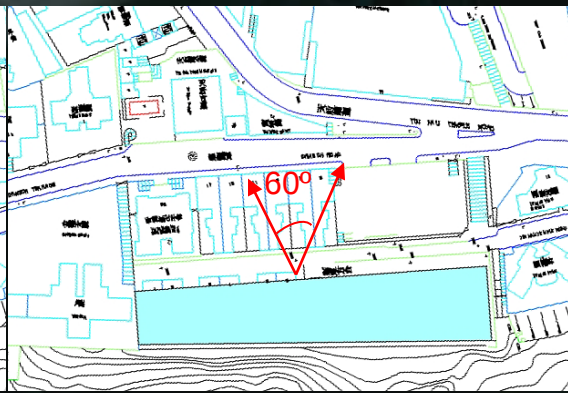
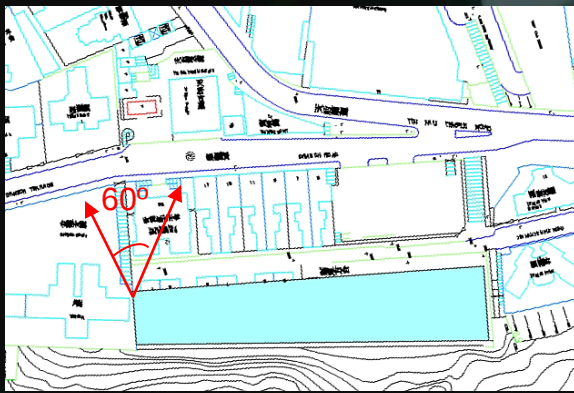
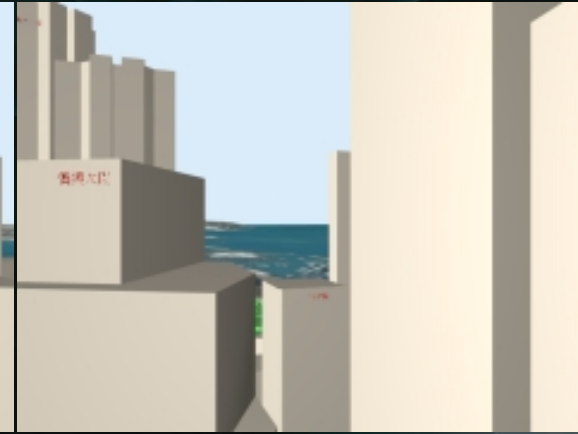
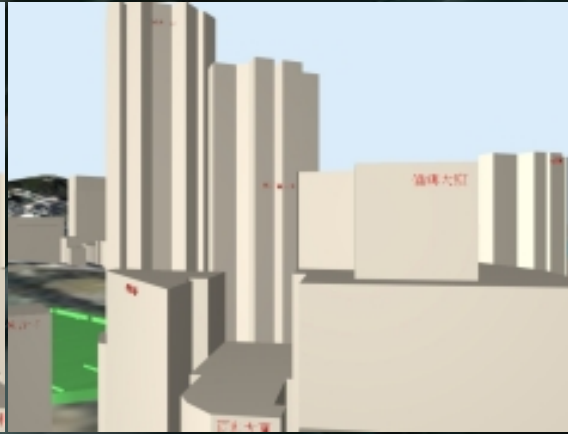
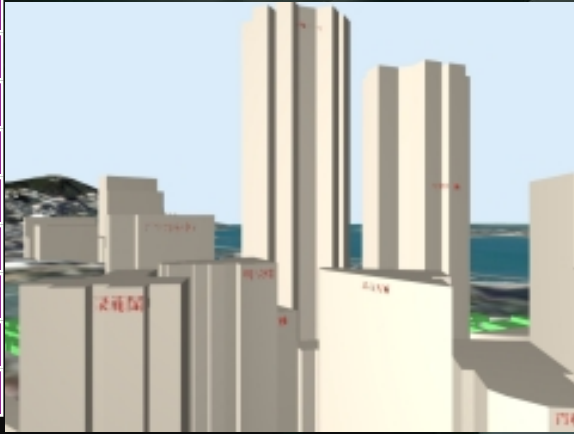
100m

95m

90m

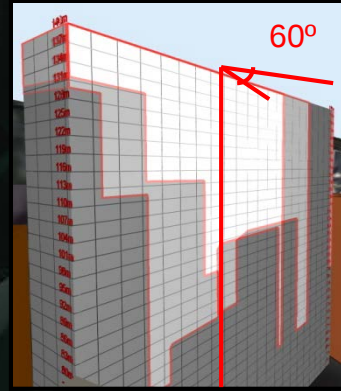
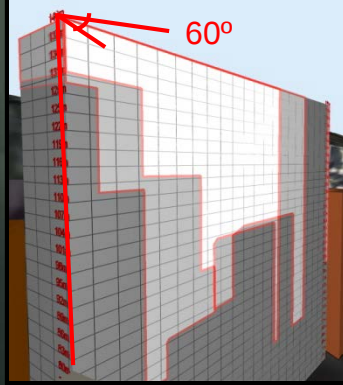
85m

80m

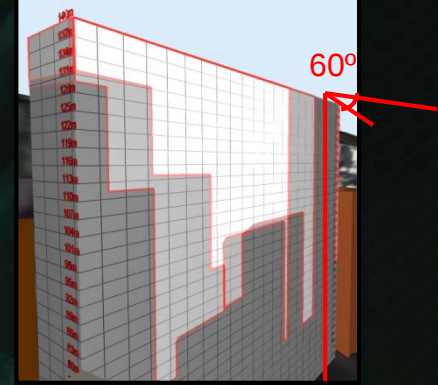


80m

Tin Hau Temple Road No.1



Tin Hau Temple Road No.1



140m

135m

130m

125m

120m

115m

110m

105m

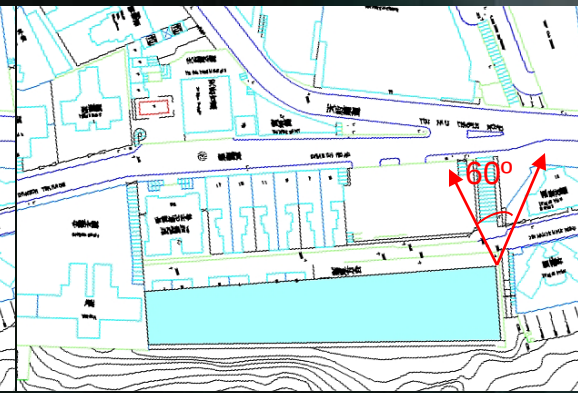
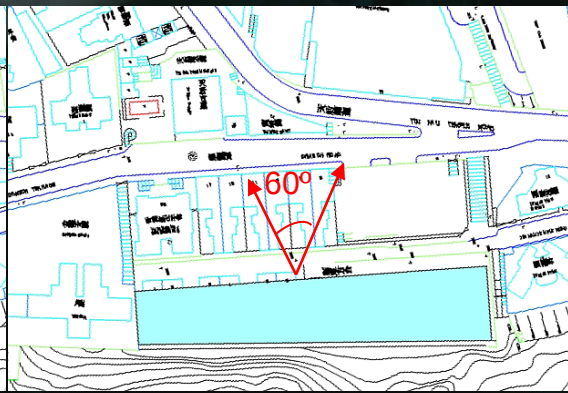
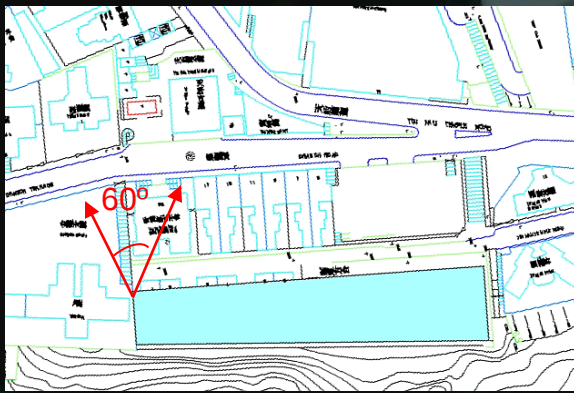
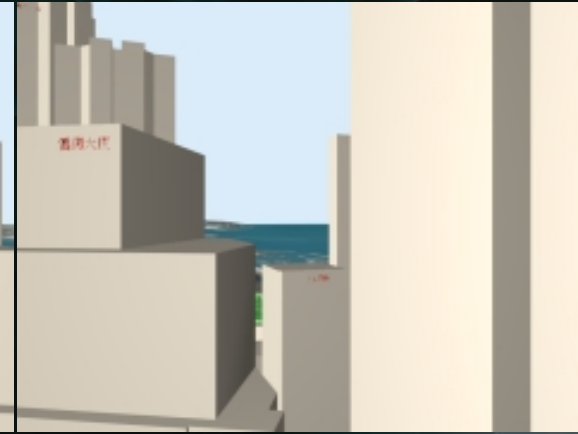
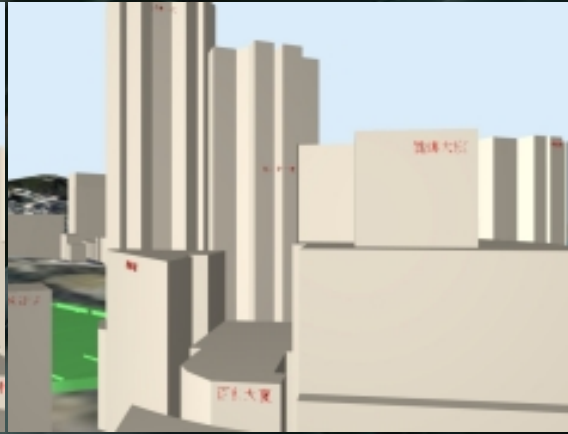
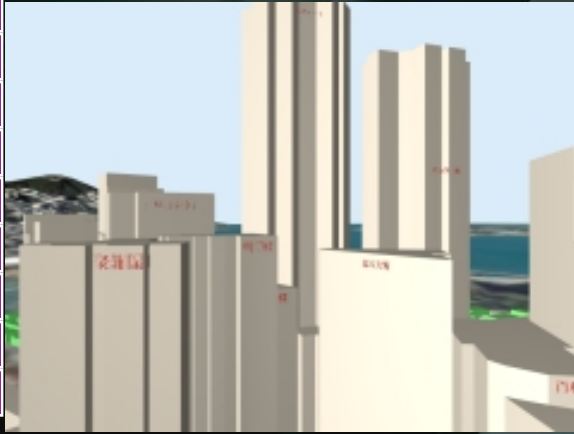
100m

95m

90m

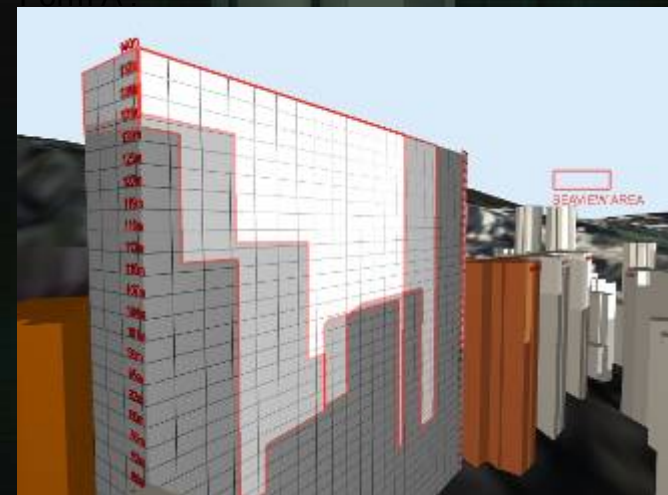
85m

80m



Sea View Area of Star Ferry Pier & Tsim Sha Tsui East

Form A:



Form B:

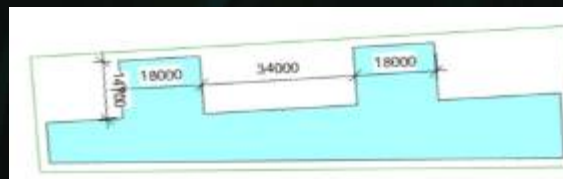
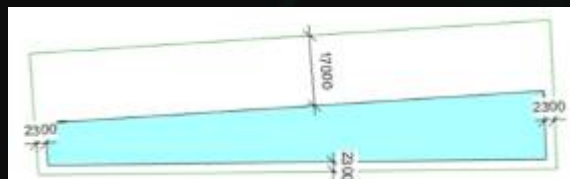
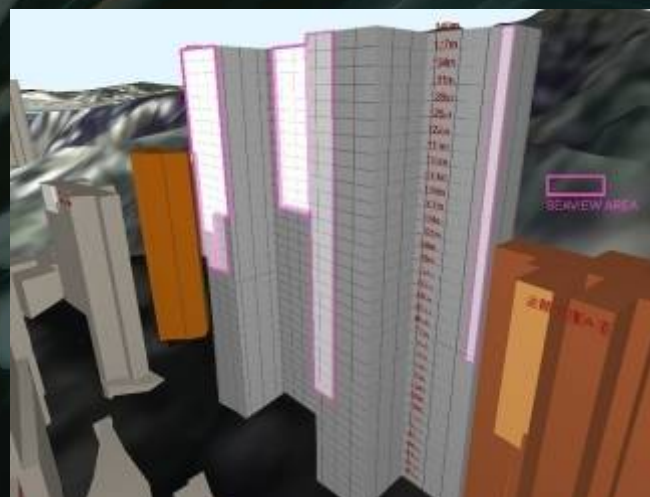
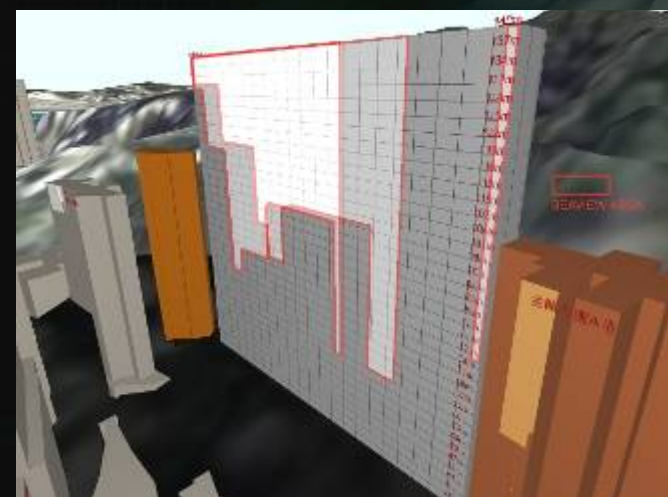


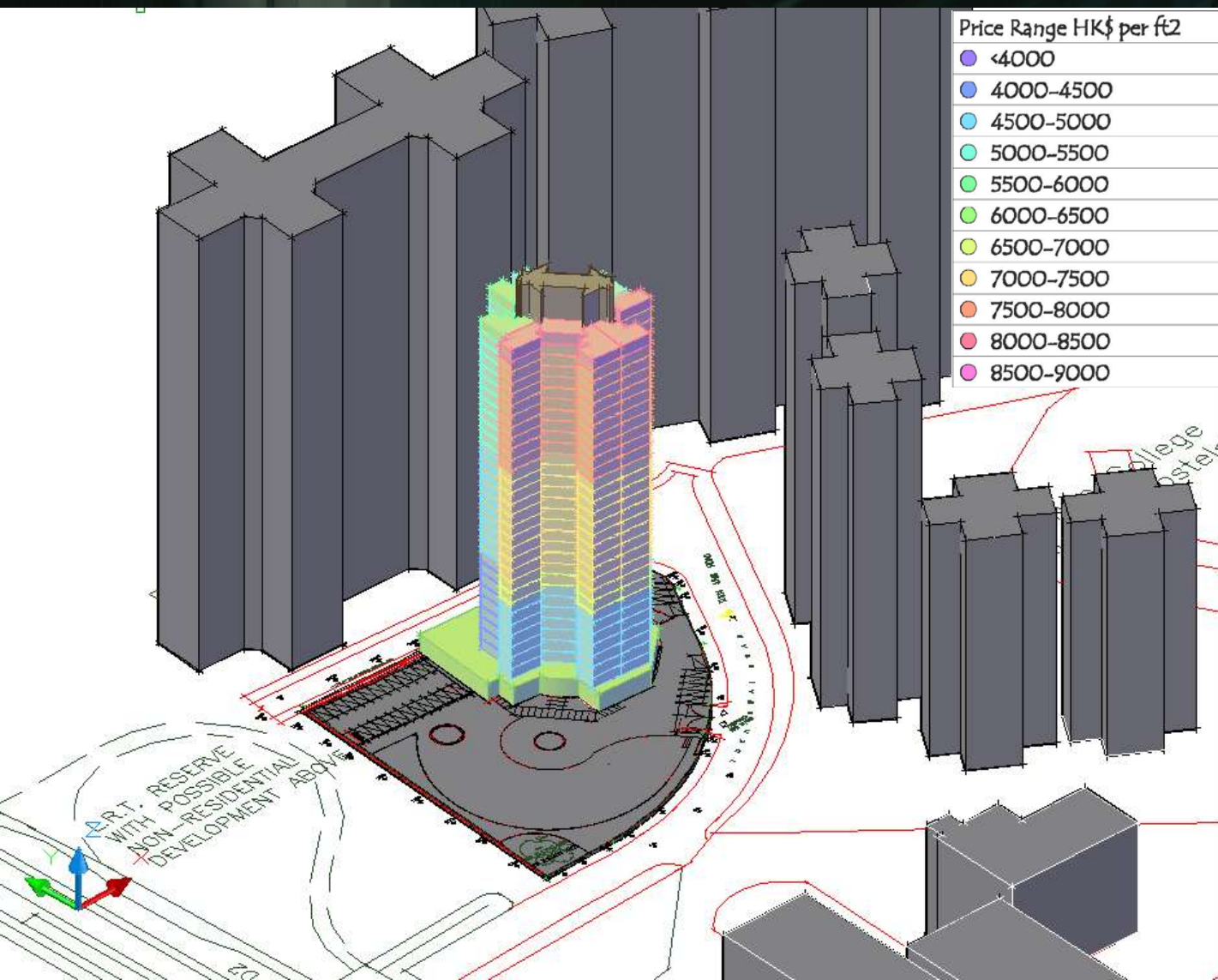
Form A

Sea View Area

Form B

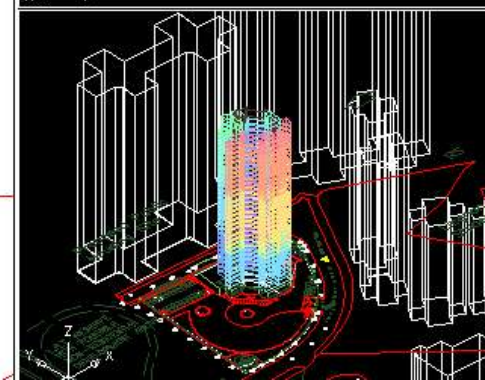
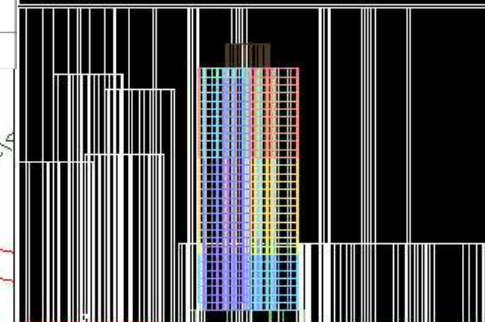
Sea View Area

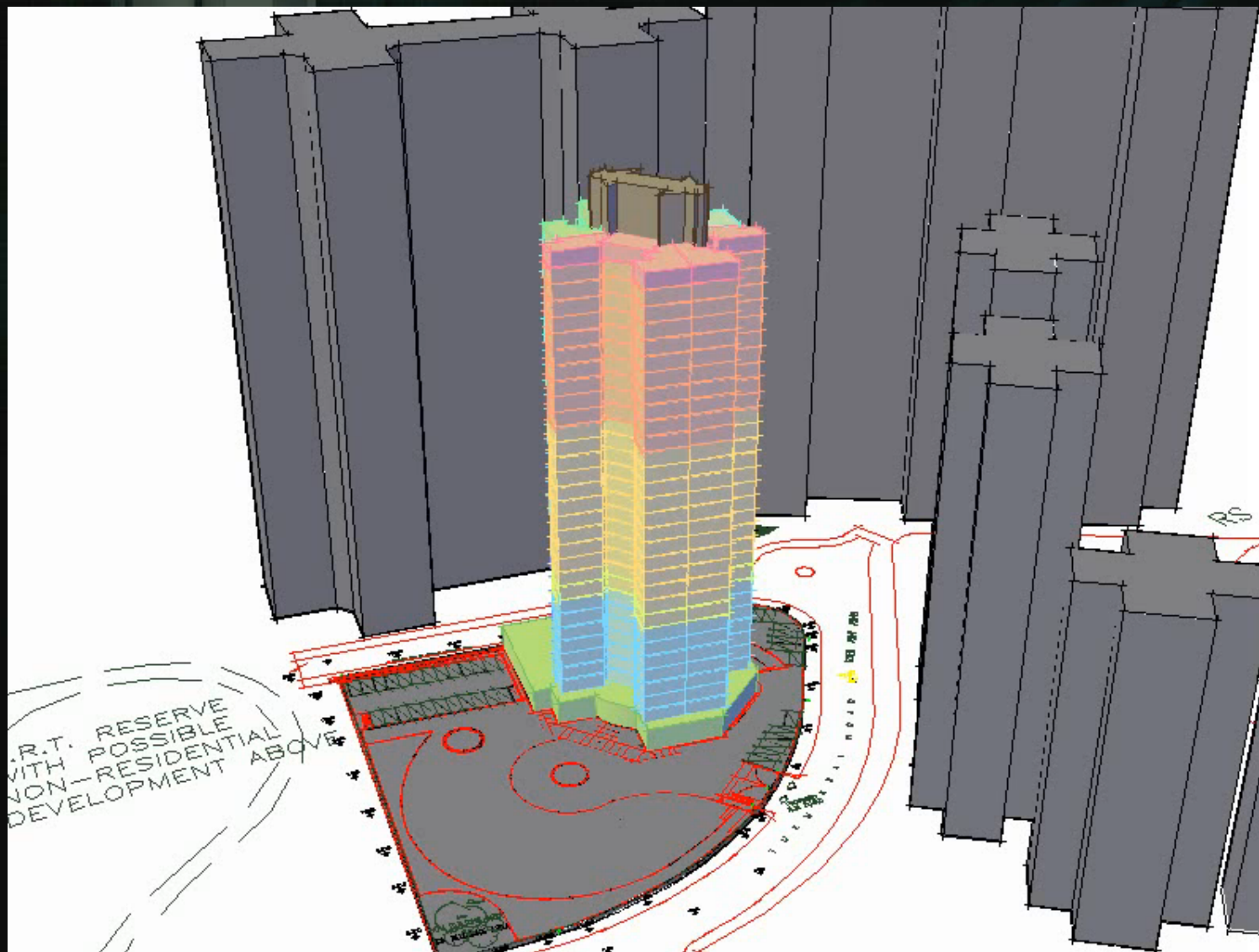




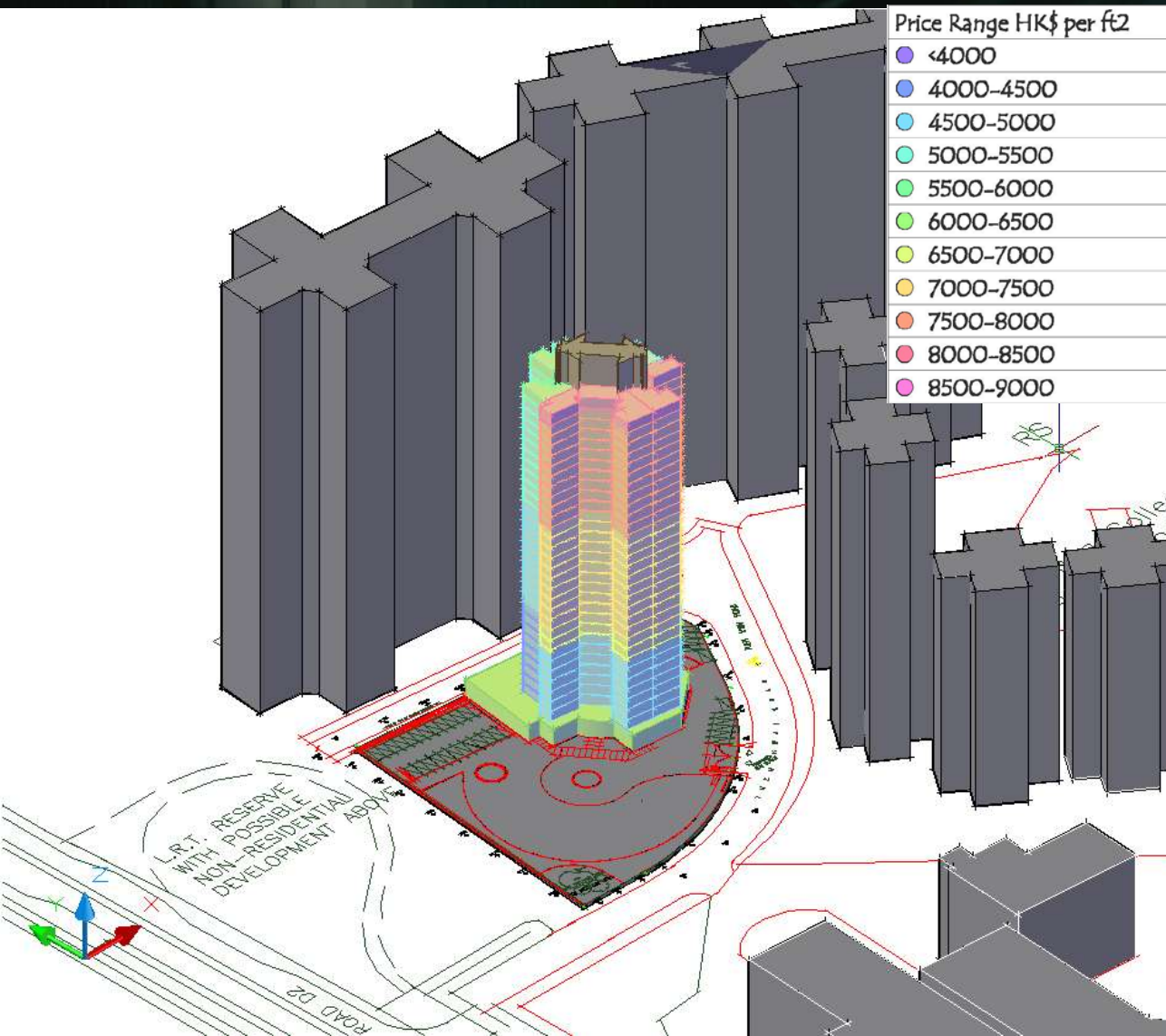
Analysis

Area	Price / Flat
66	\$3,256,000
50	\$2,198,000
15780	\$967,386,000



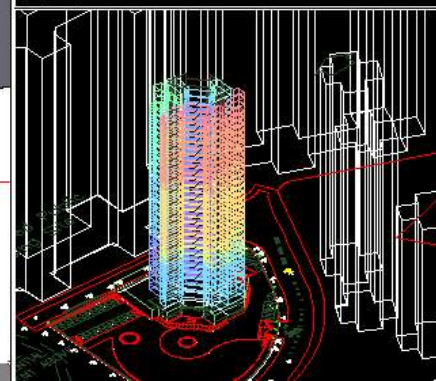
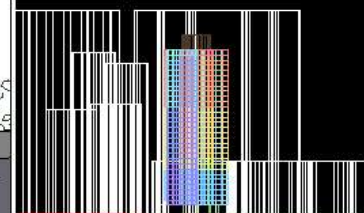


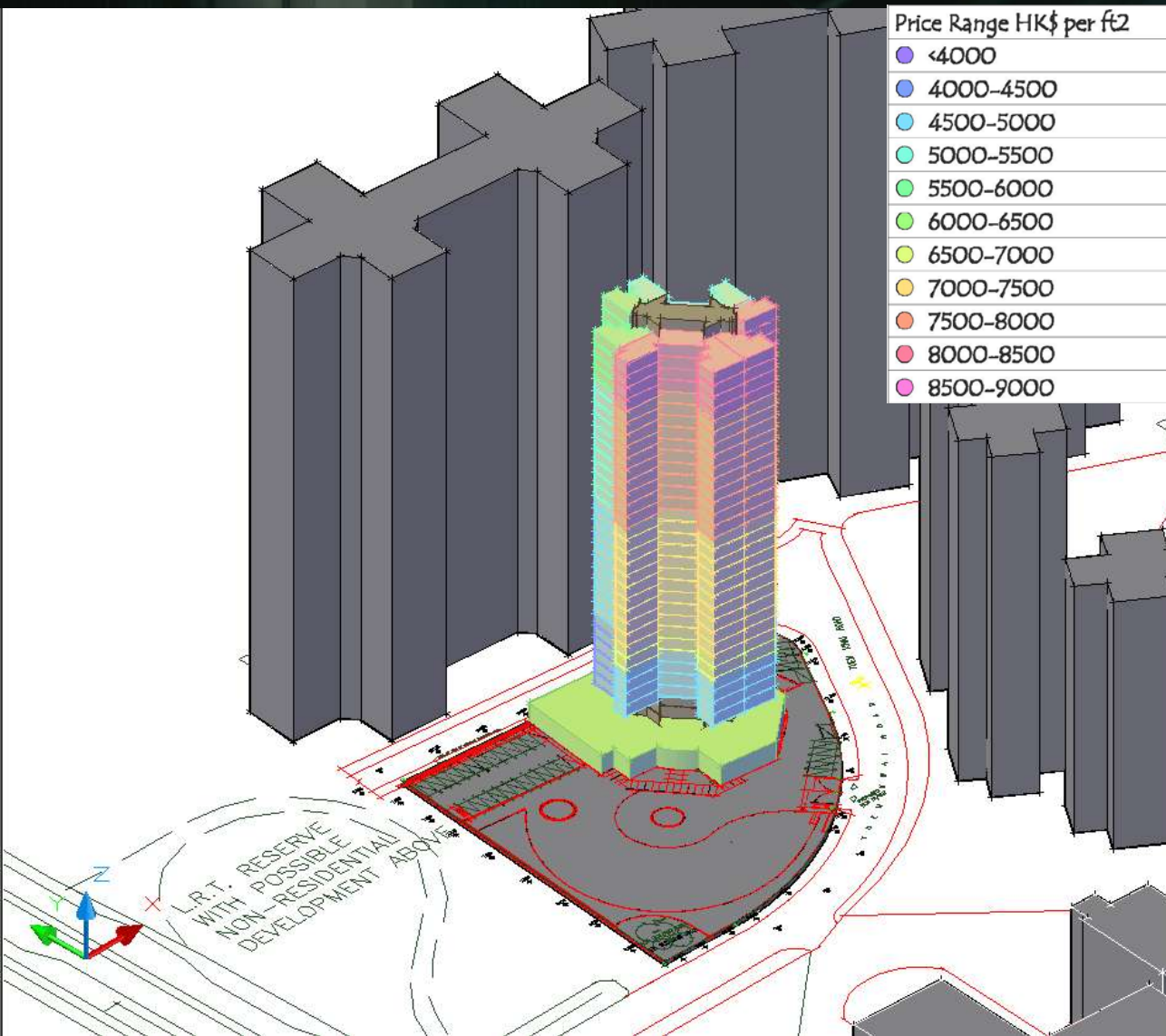
Price Range HK\$ per ft2	
●	<4000
●	4000-4500
●	4500-5000
●	5000-5500
●	5500-6000
●	6000-6500
●	6500-7000
●	7000-7500
●	7500-8000
●	8000-8500
●	8500-9000



Analysis

Area	Price / Flat
66	\$3,256,000
50	\$2,198,000
15780	\$967,386,000

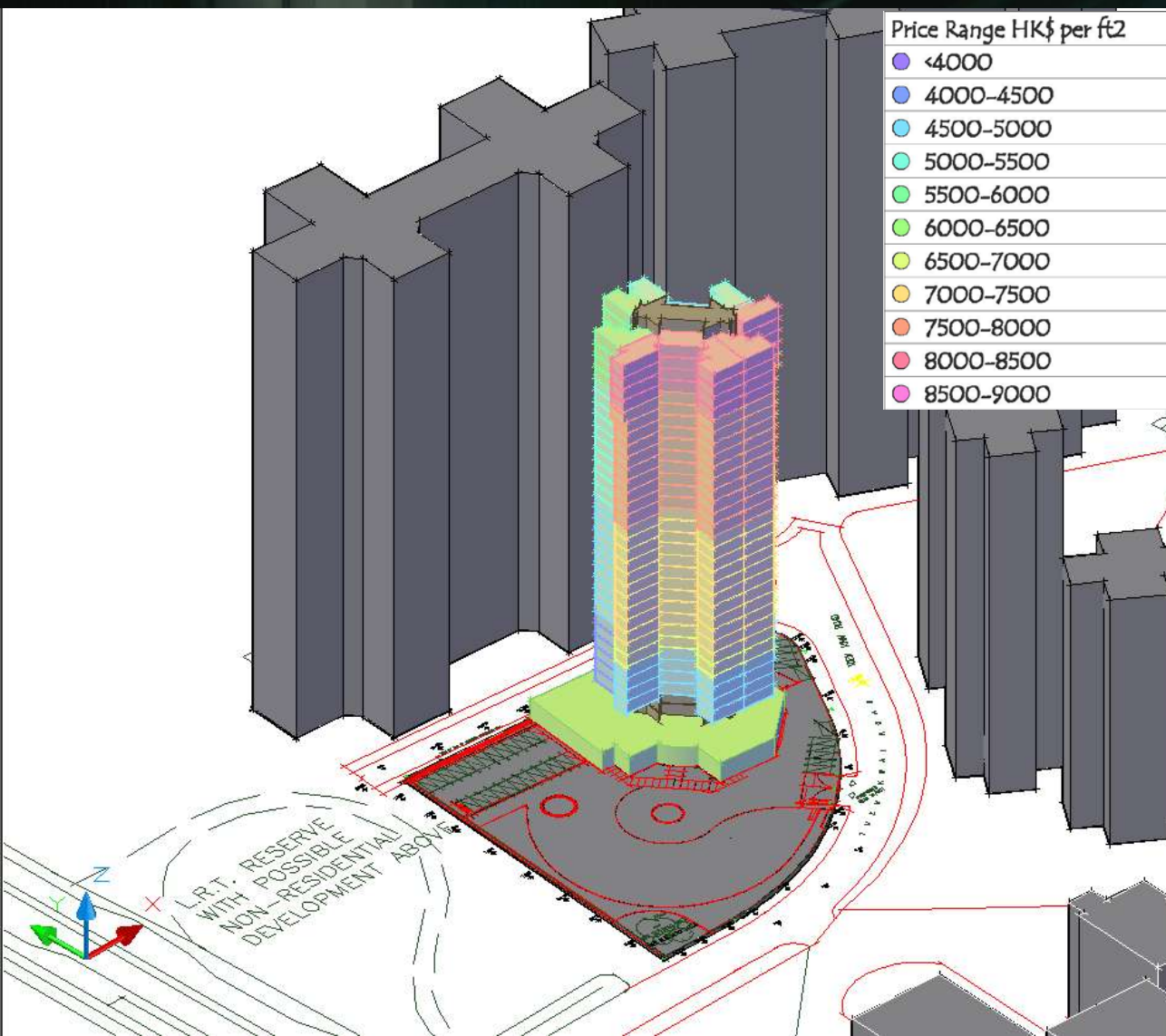




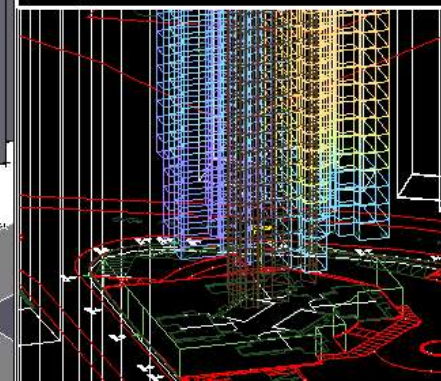
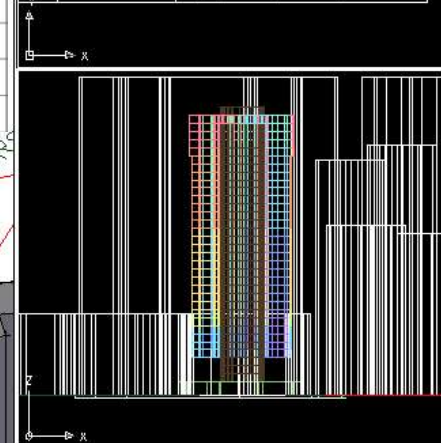
Value Analysis

ft2	Area	Price / Flat
3	66	\$3,363,000
3	50	\$2,279,000
	15780	\$1,010,820,000

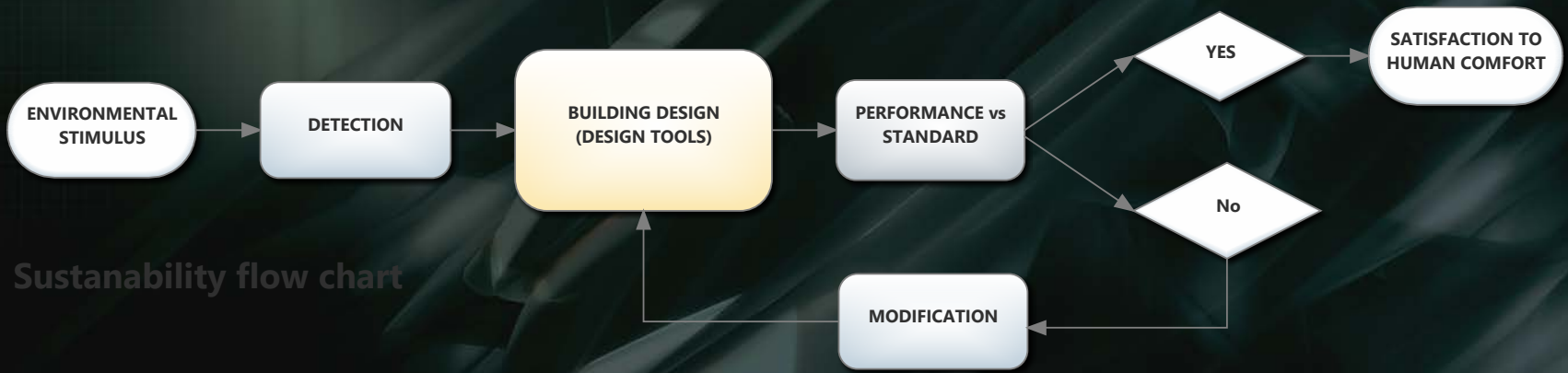




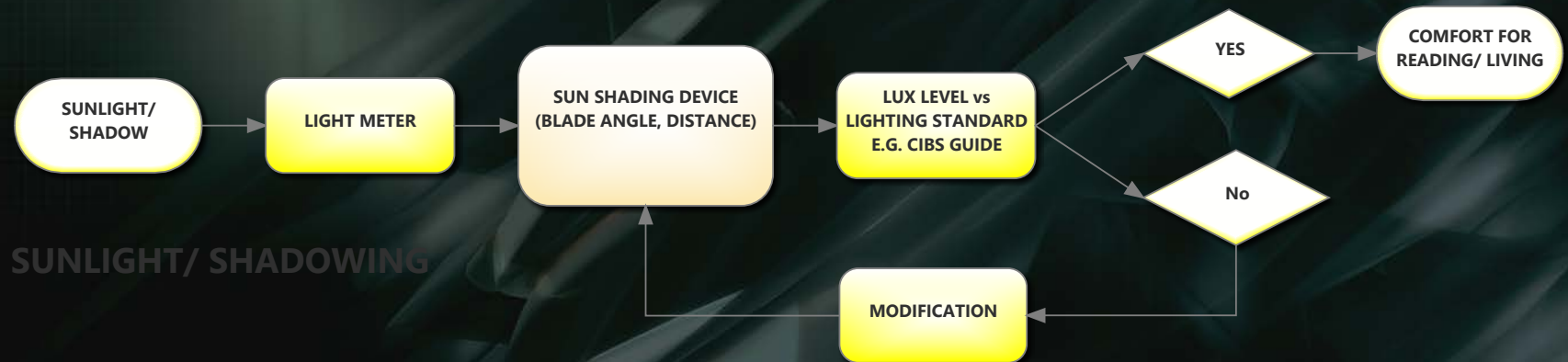
45	\$2,051,000
50	\$2,010,000
65	\$3,312,000
66	\$3,363,000
46	\$1,849,000
50	\$2,279,000
15780	\$1,012,542,000



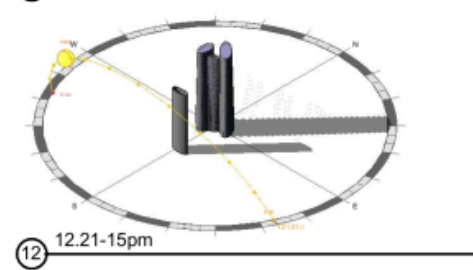
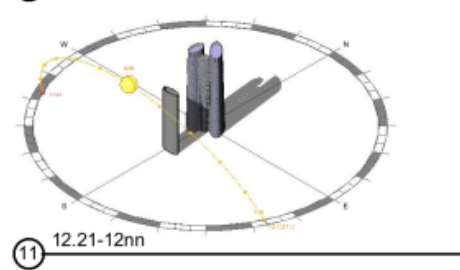
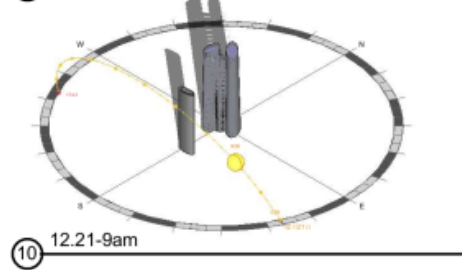
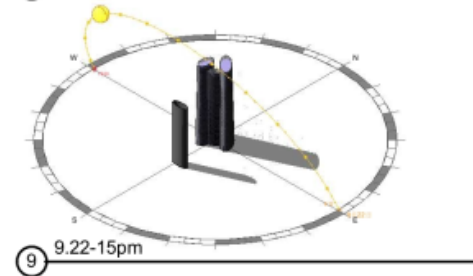
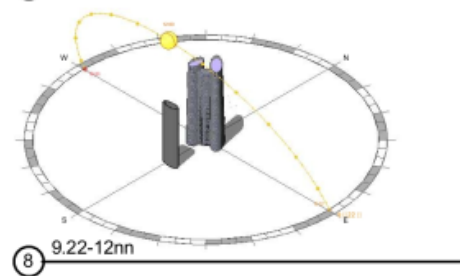
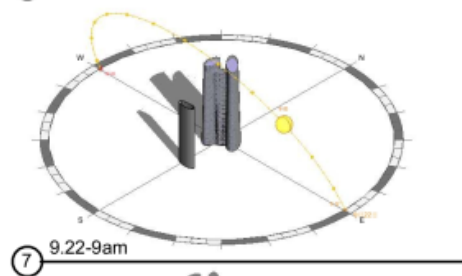
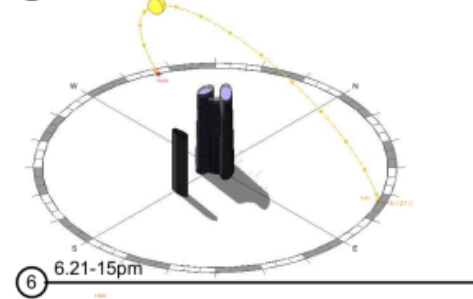
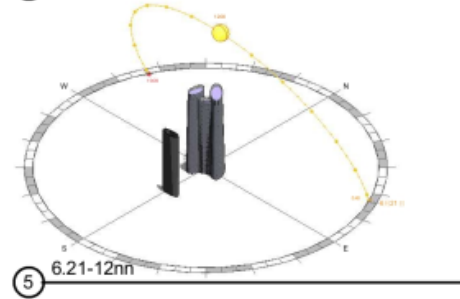
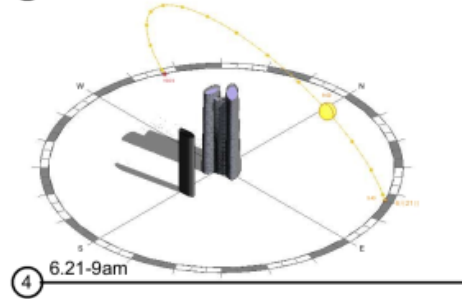
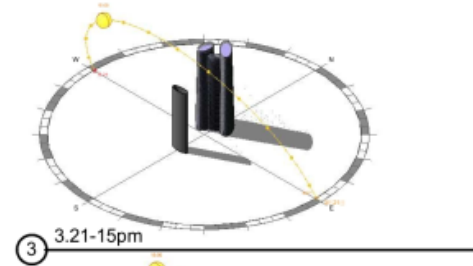
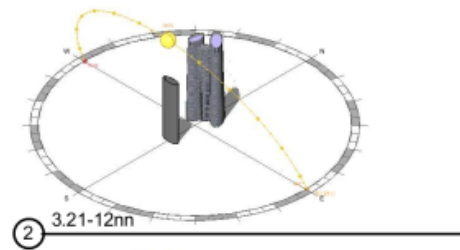
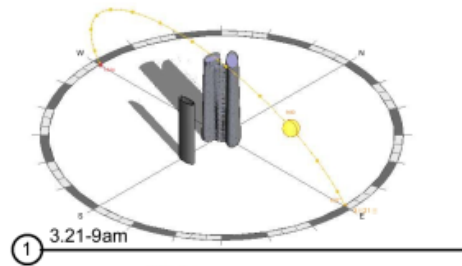
2. Analytical approach



2. Analytical approach

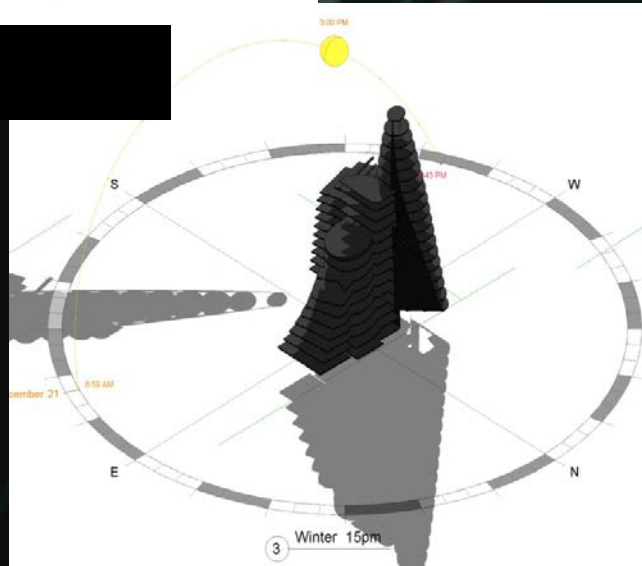
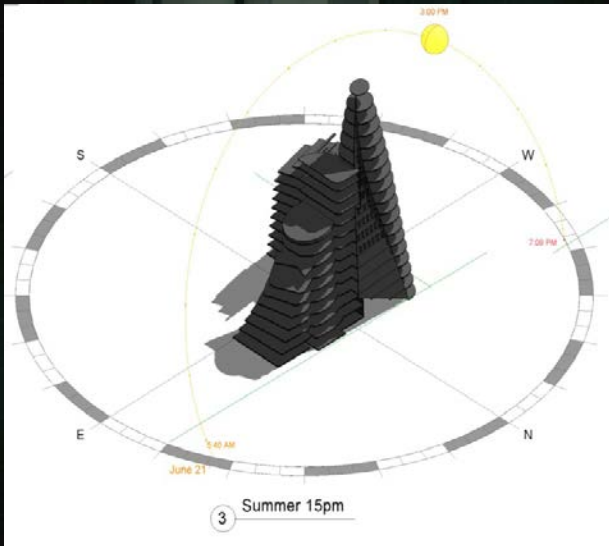


2. Analytical approach



The building needs most of the shadings on the southern façade, during the day time. Major concern about the summer sun at Jun 21, the sun is directly facing to the southern side of the building, and that façade need to be shaded and try limiting the sun light going into the building.

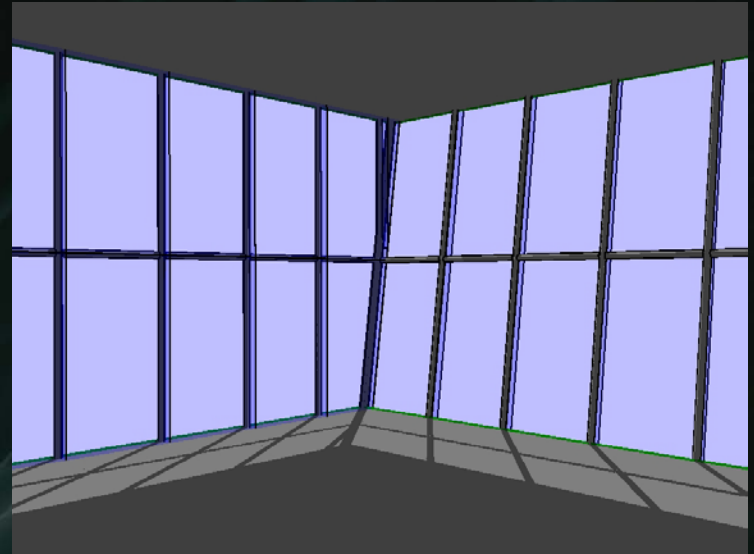
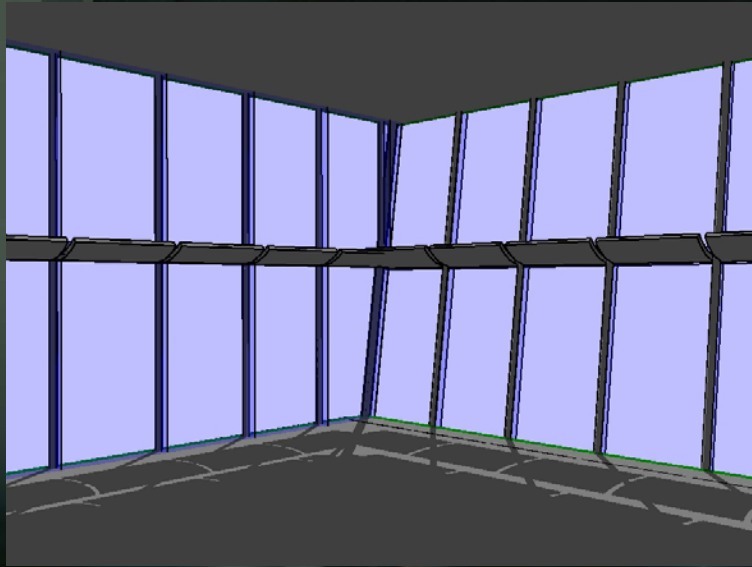
2. Analytical approach



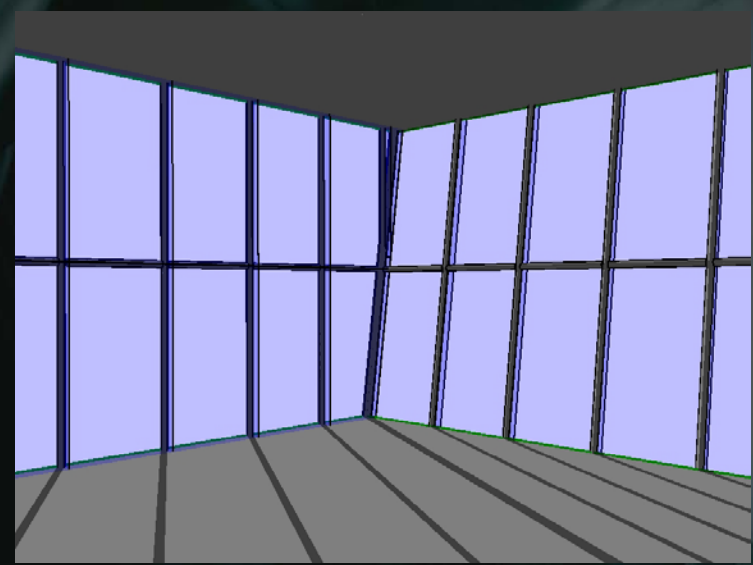
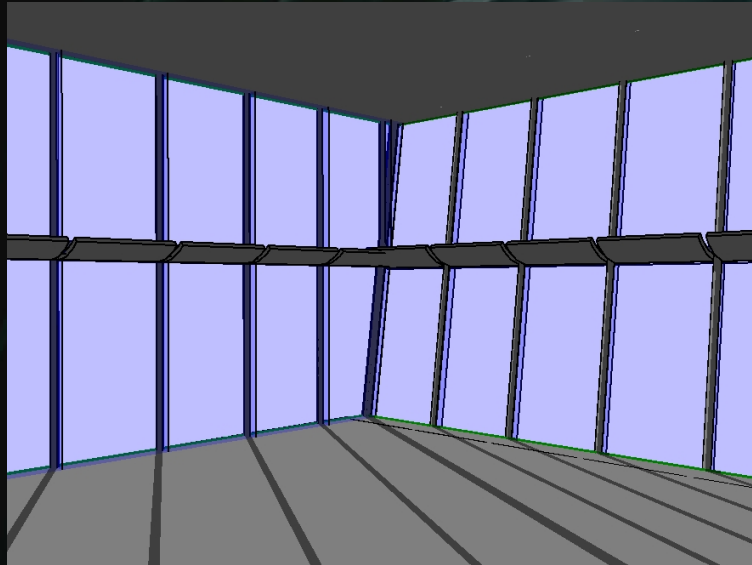
Natural Daylight –Windows for natural daylight to minimize artificial lights use

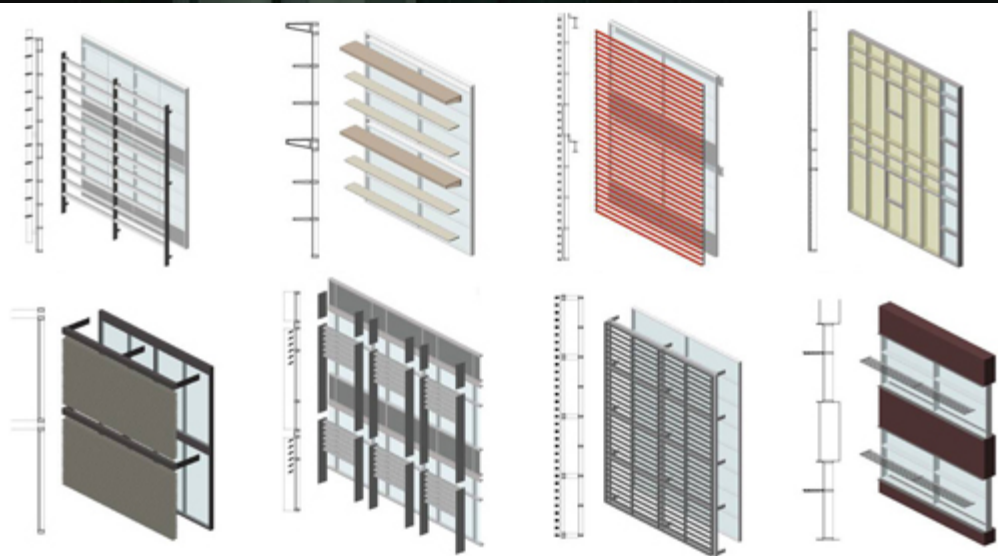
2. Analytical approach – Shading device

Summer

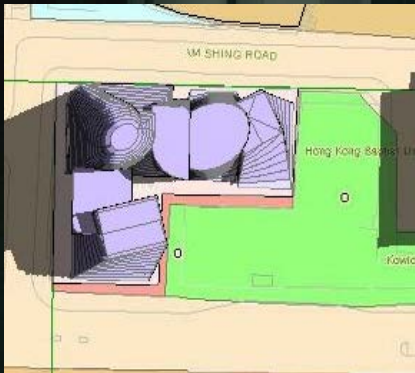


Winter





2. Analytical approach



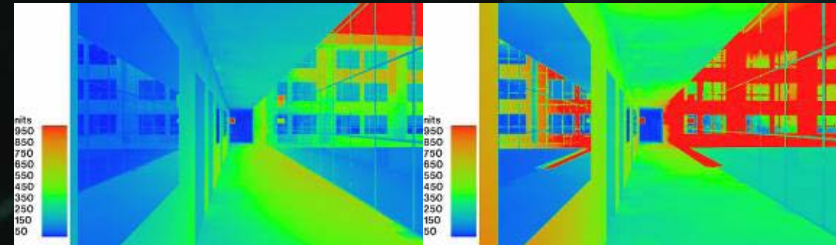
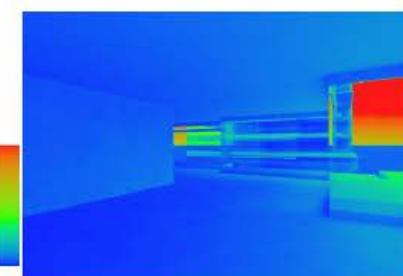
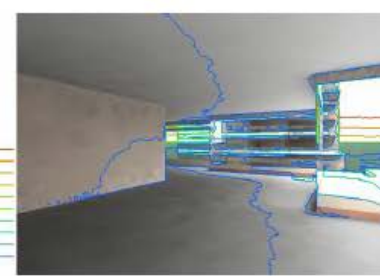
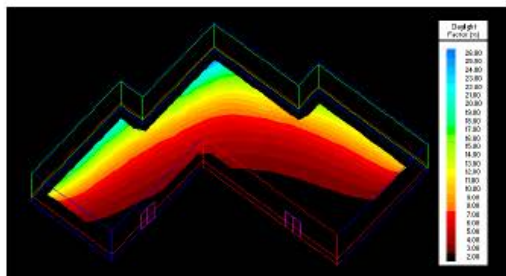
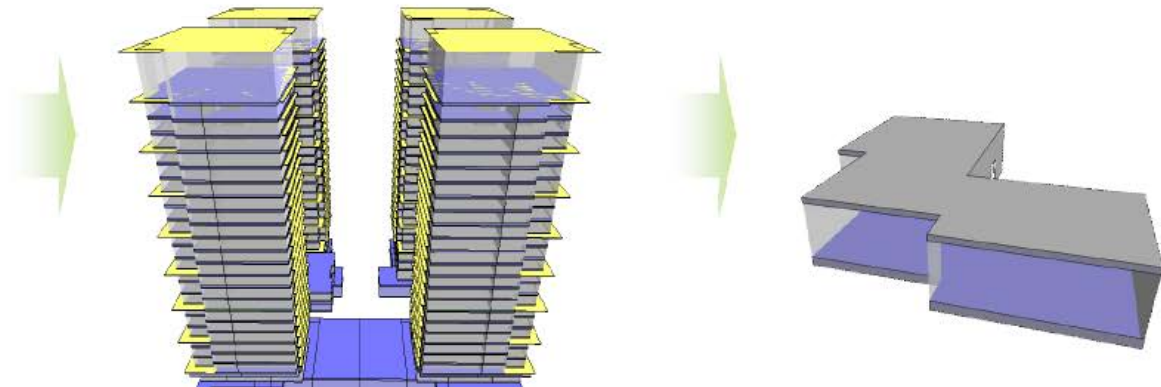
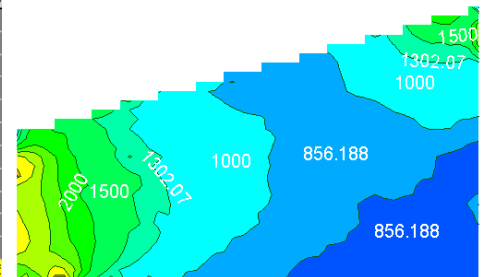
Summer 10am



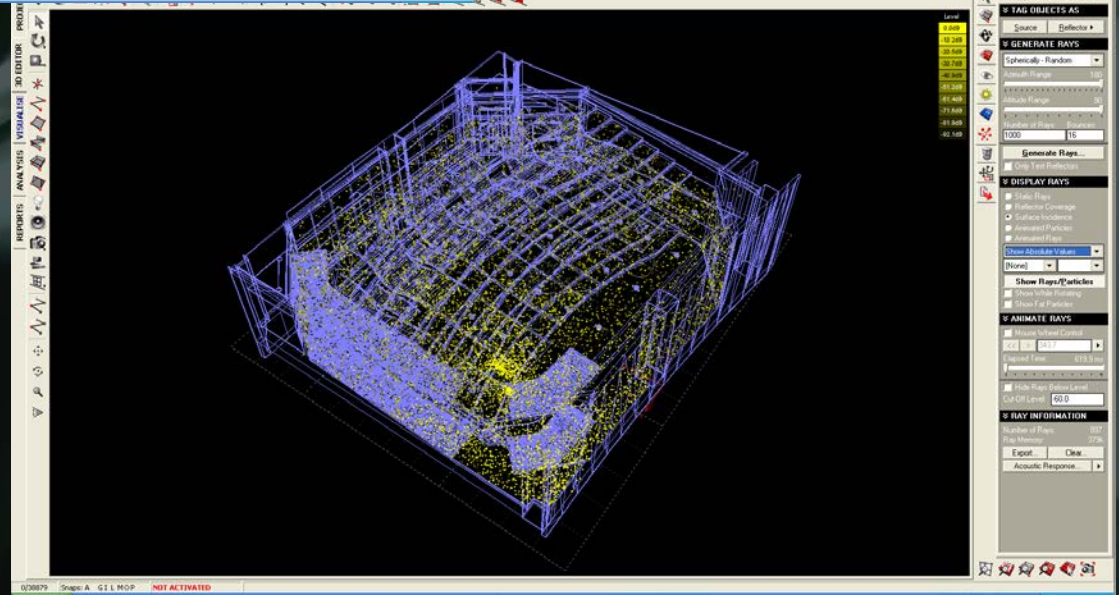
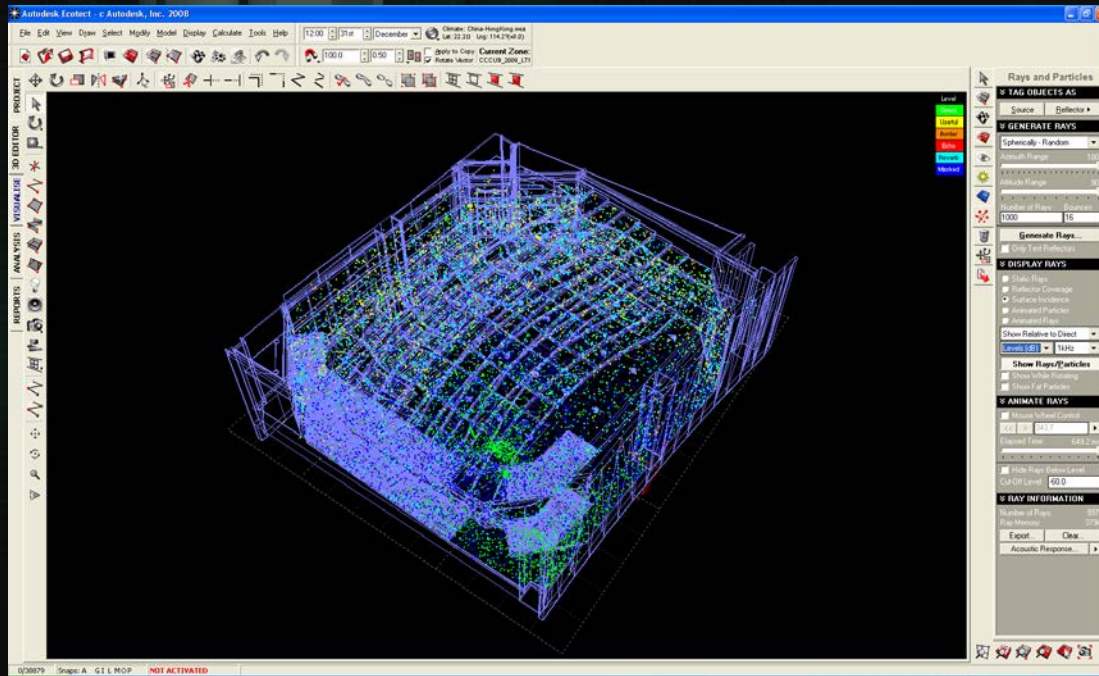
Summer 3pm



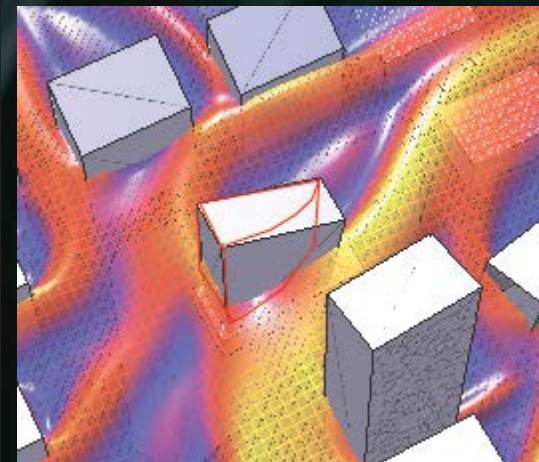
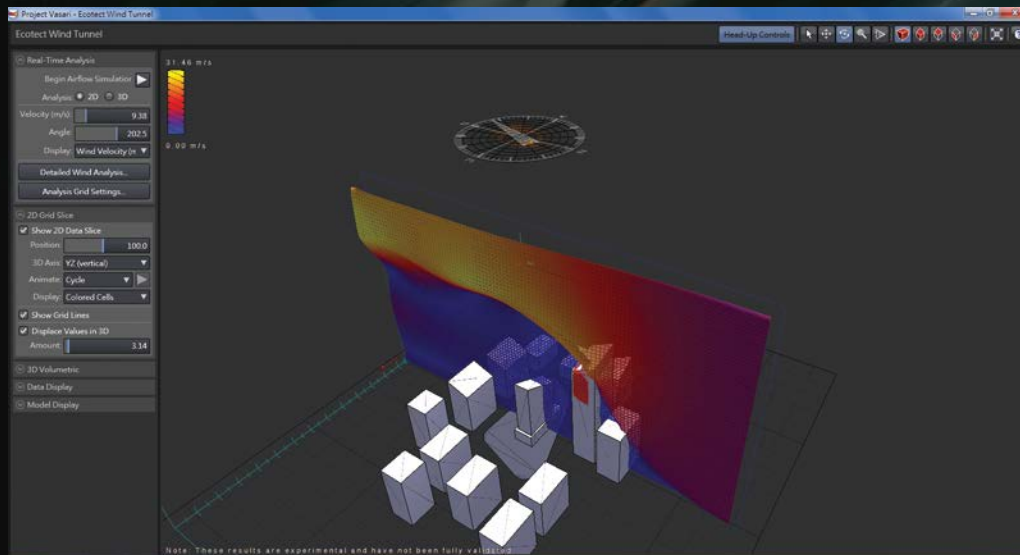
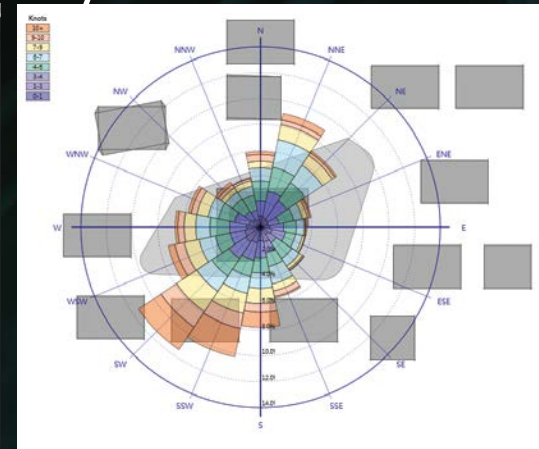
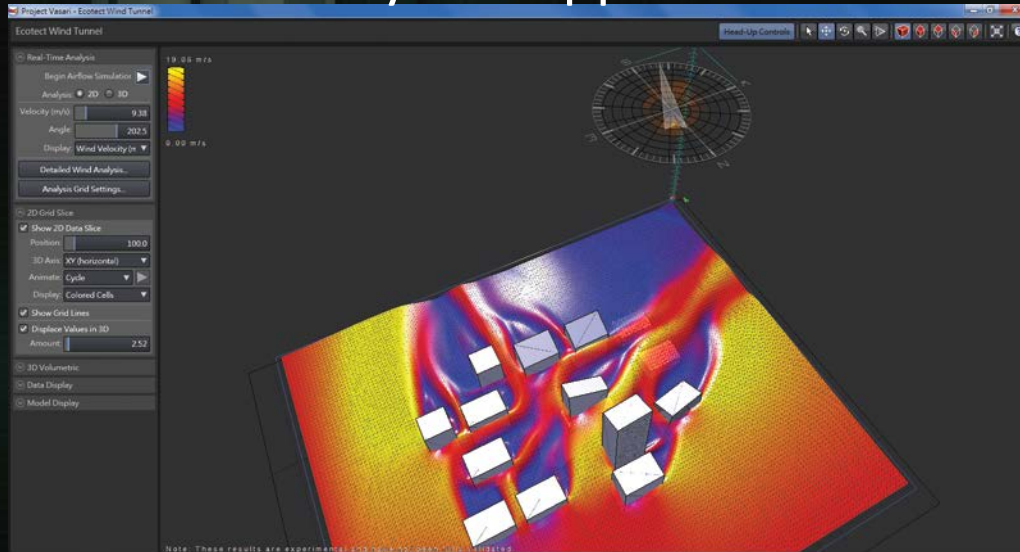
PV Panel

[illegible]

2. Analytical approach – Acoustic Analysis



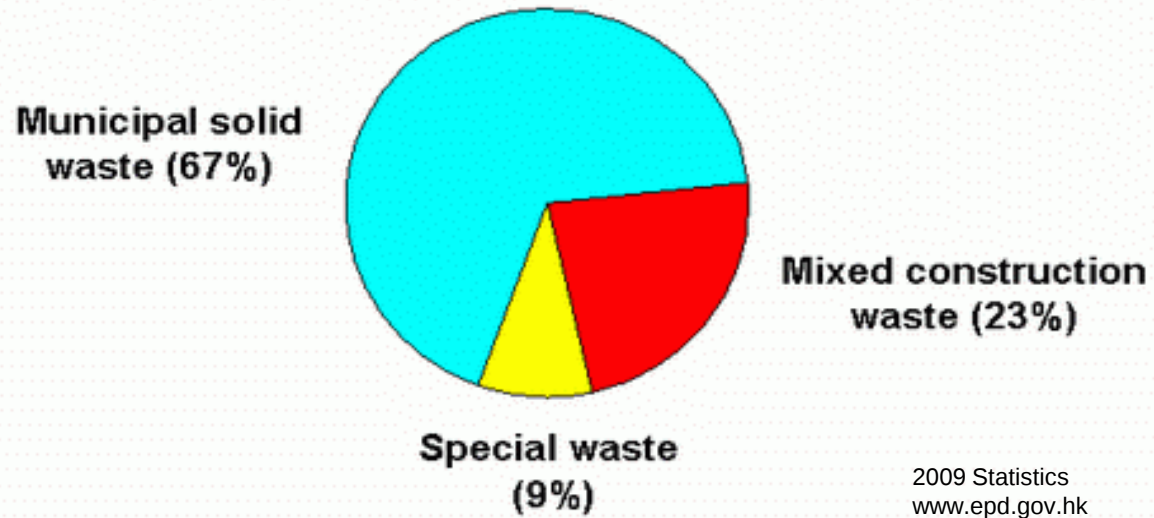
2. Analytical approach – Wind Analysis



2. Analytical approach



3. Collaboration



3. Collaboration

Demolition



Lack of co-ordinations / Mistakes

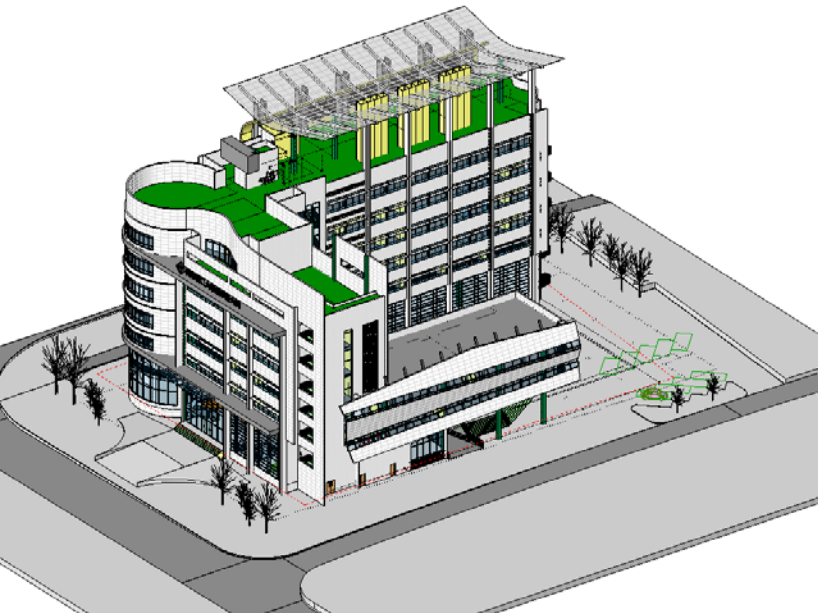


Surplus Materials

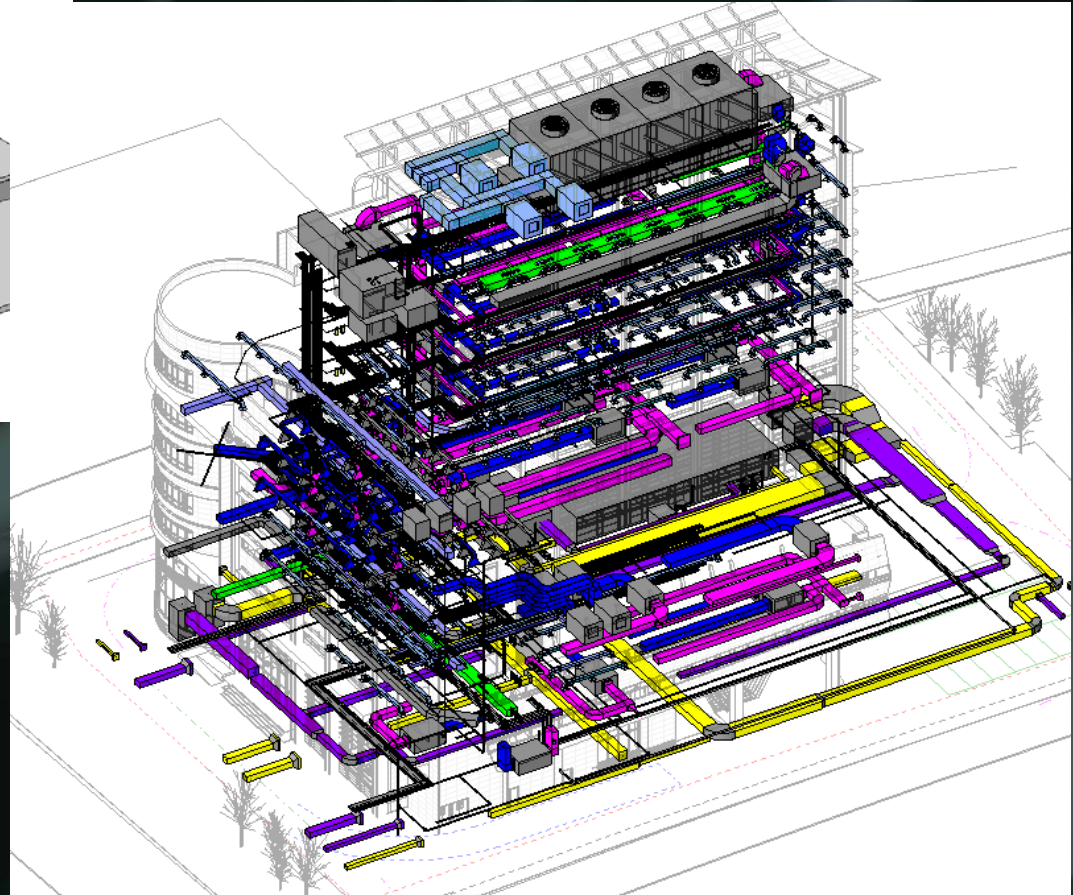


3. Collaboration

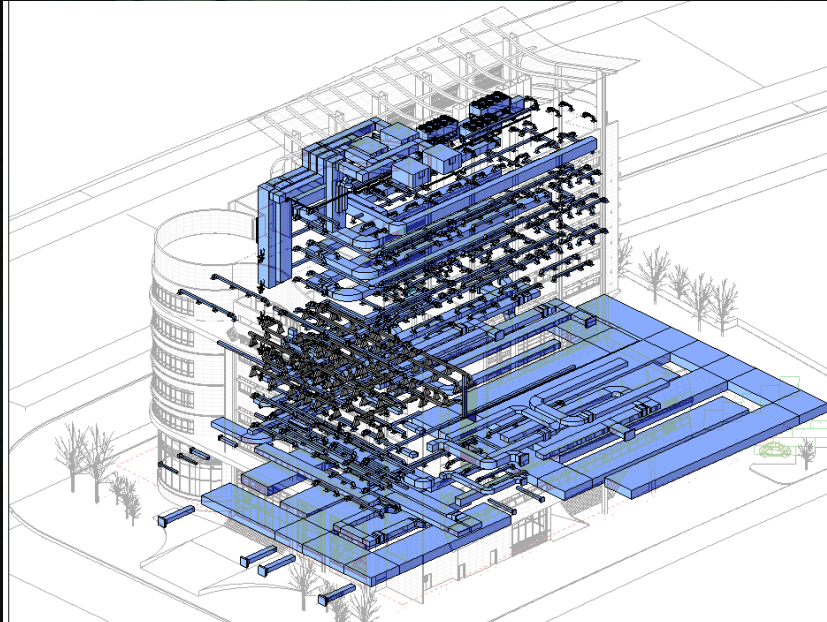
Architecture



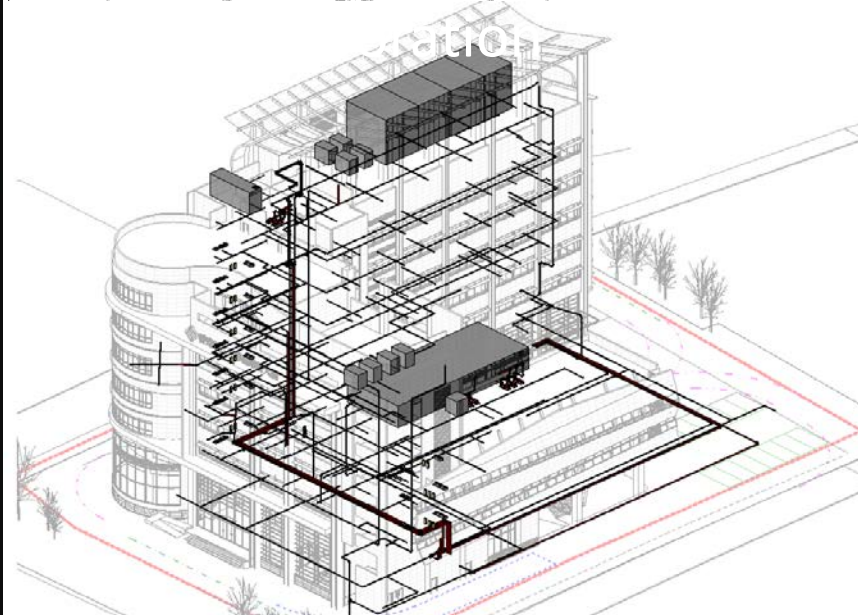
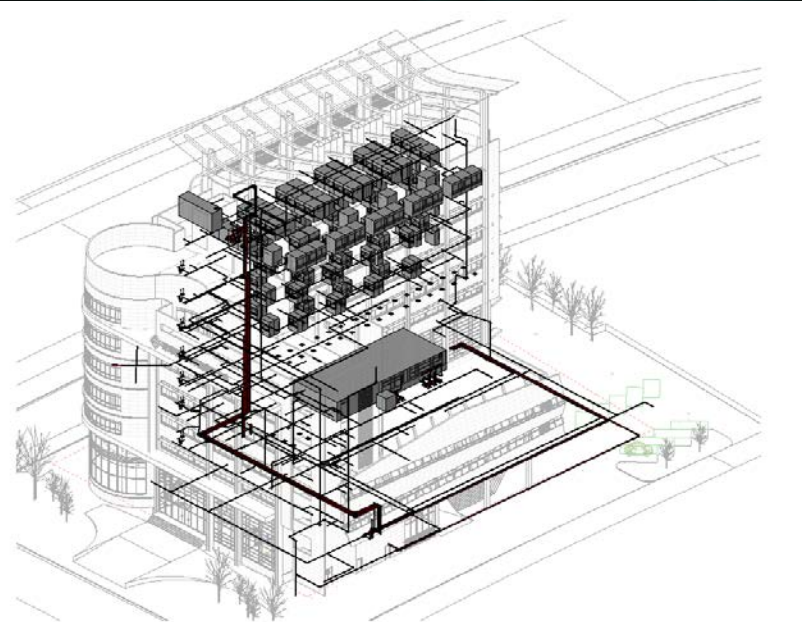
Structure



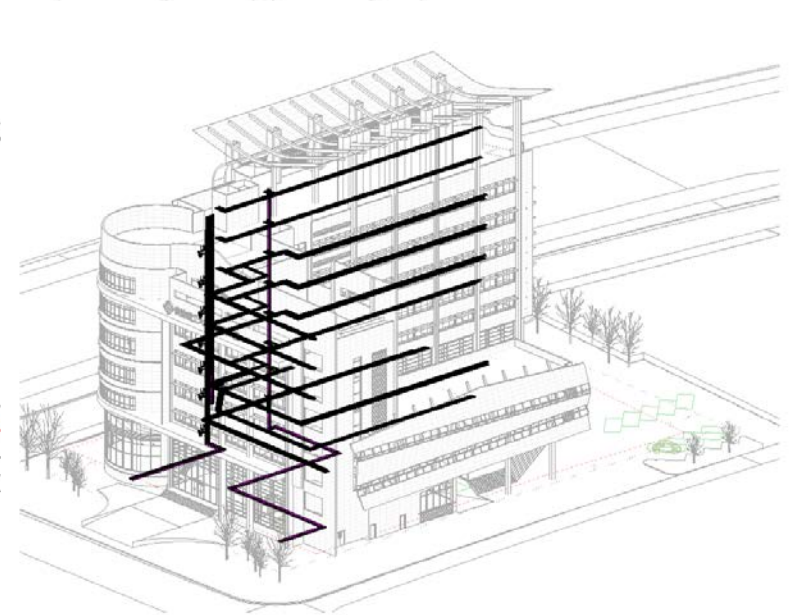
HVAC Installation



Fire Services Installation



P/D Installation

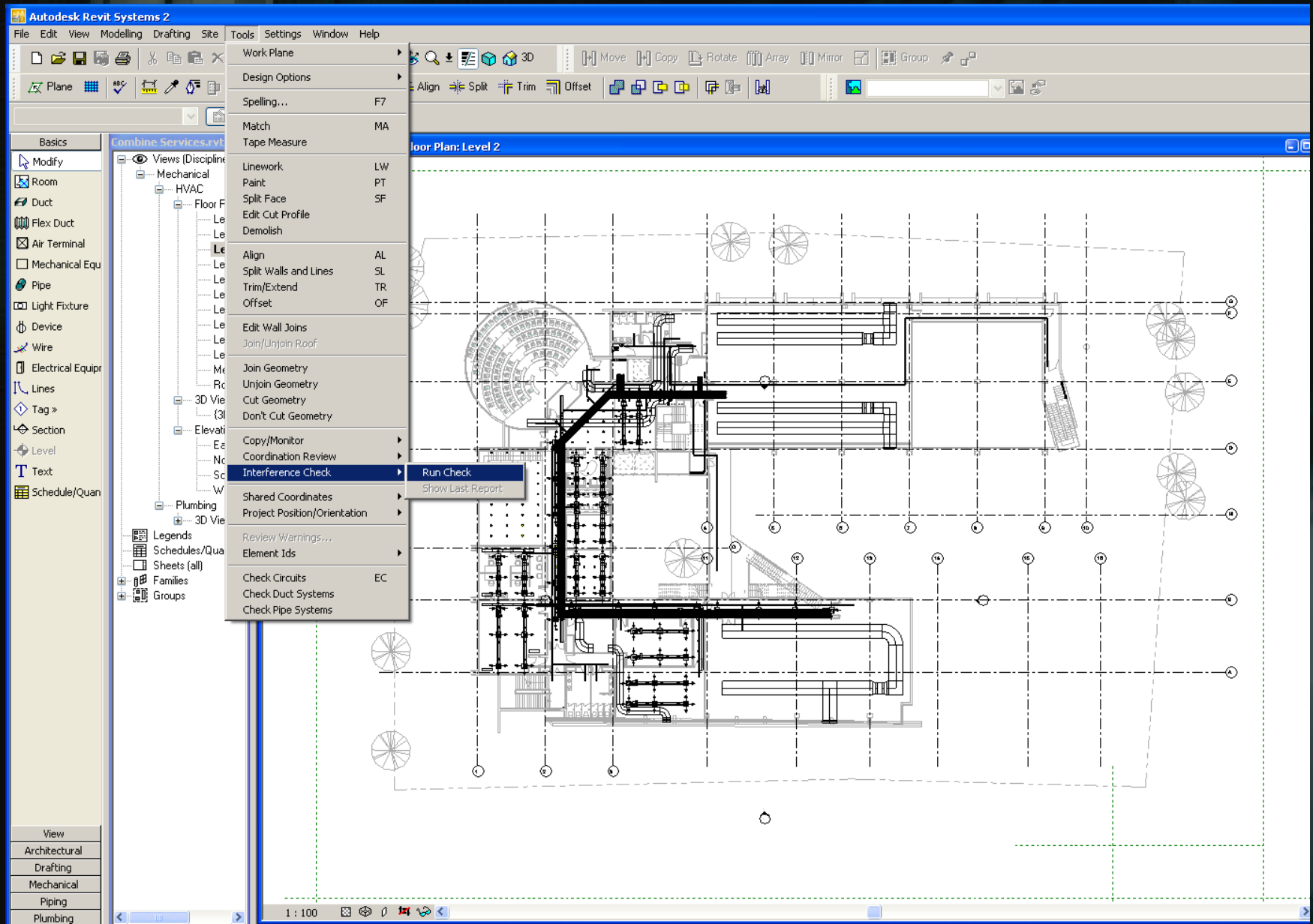


Electricity Installation

3. Collaboration

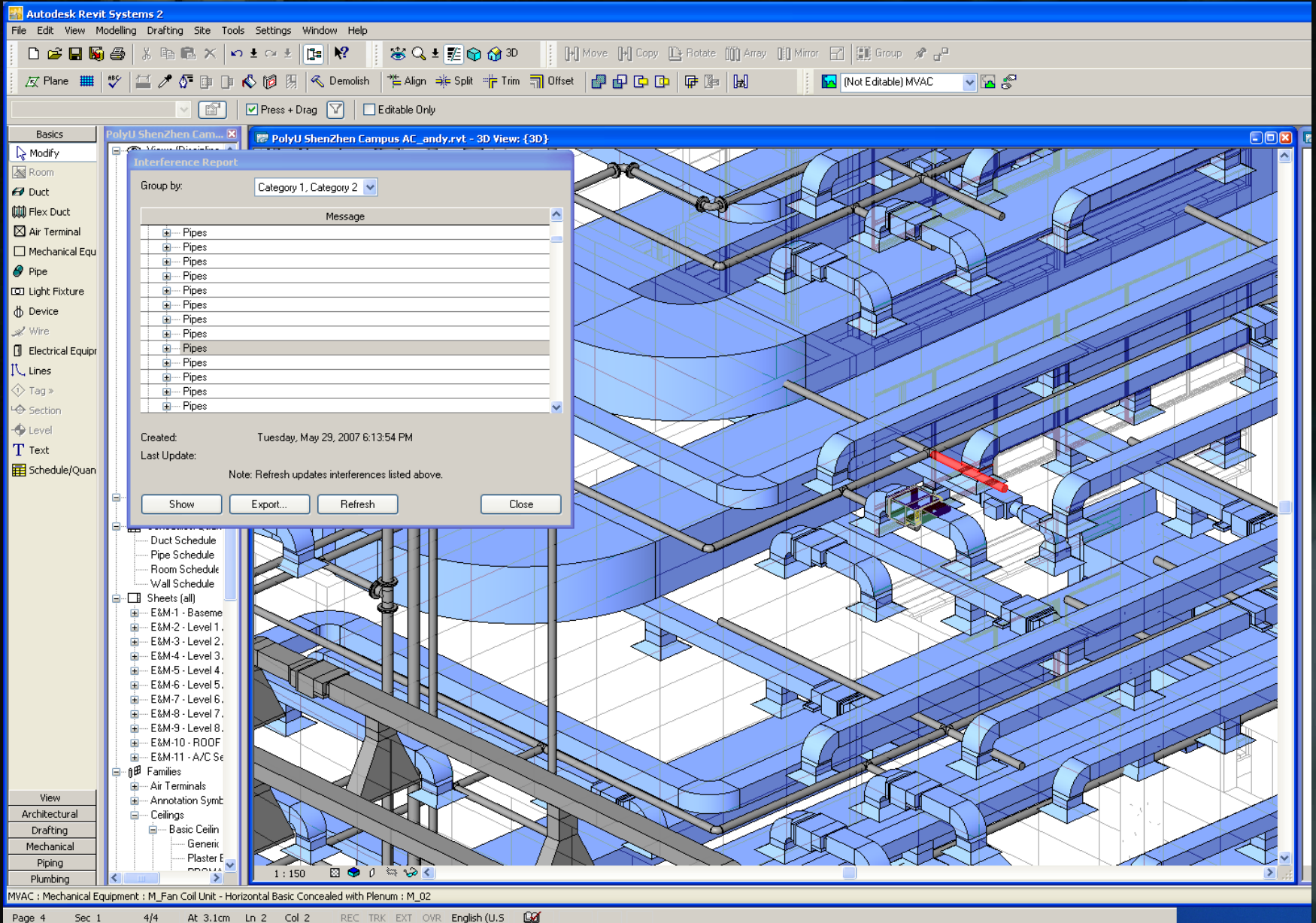


3. Collaboration

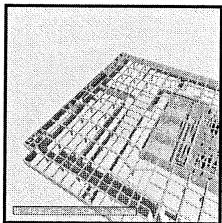
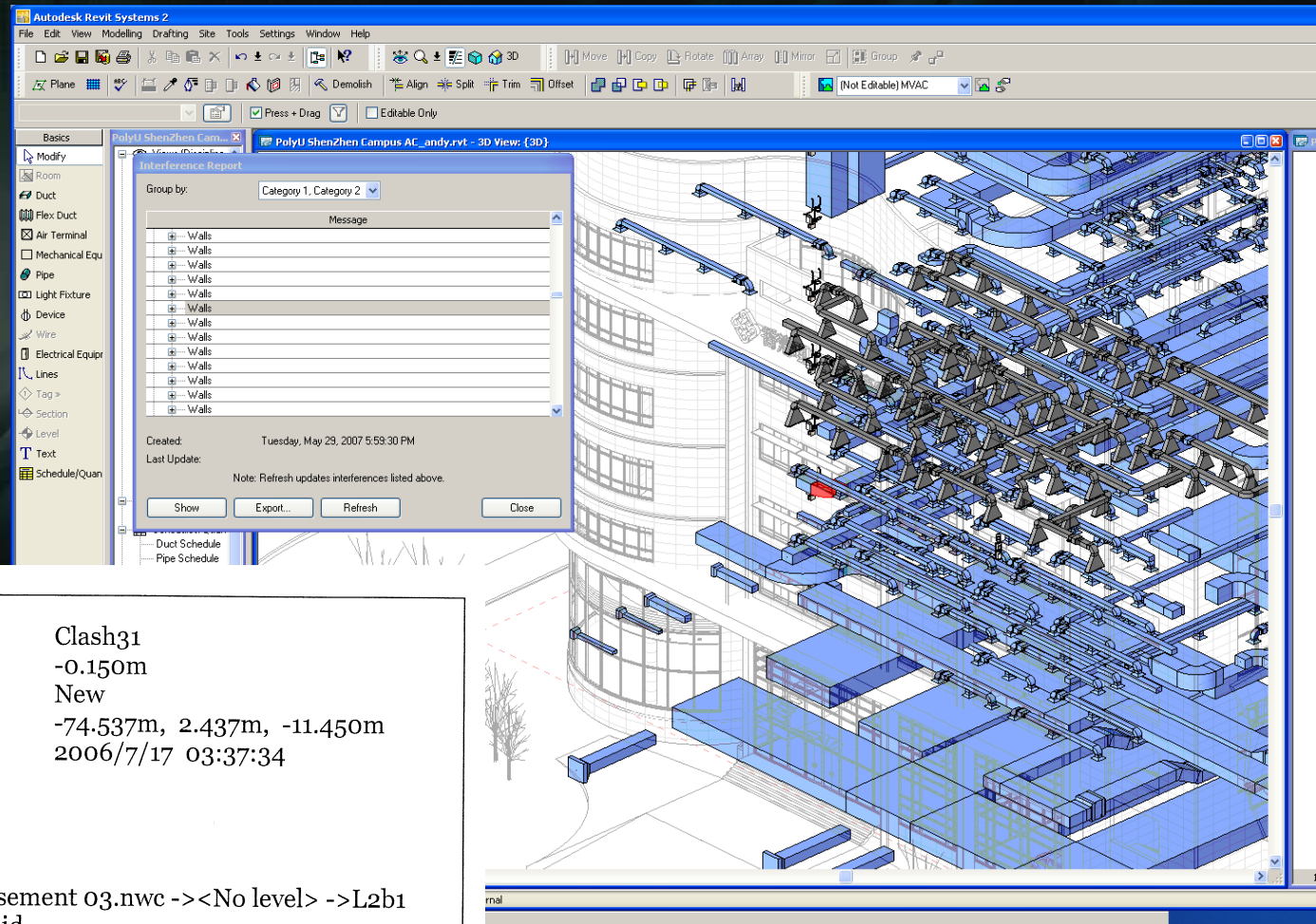


Run Interference Check on the current project, a selection, or a linked project.

3. Collaboration



3. Collaboration



Name Clash31
 Distance -0.150m
 Status New
 Clash Point -74.537m, 2.437m, -11.450m
 Date Created 2006/7/17 03:37:34
 Approved By

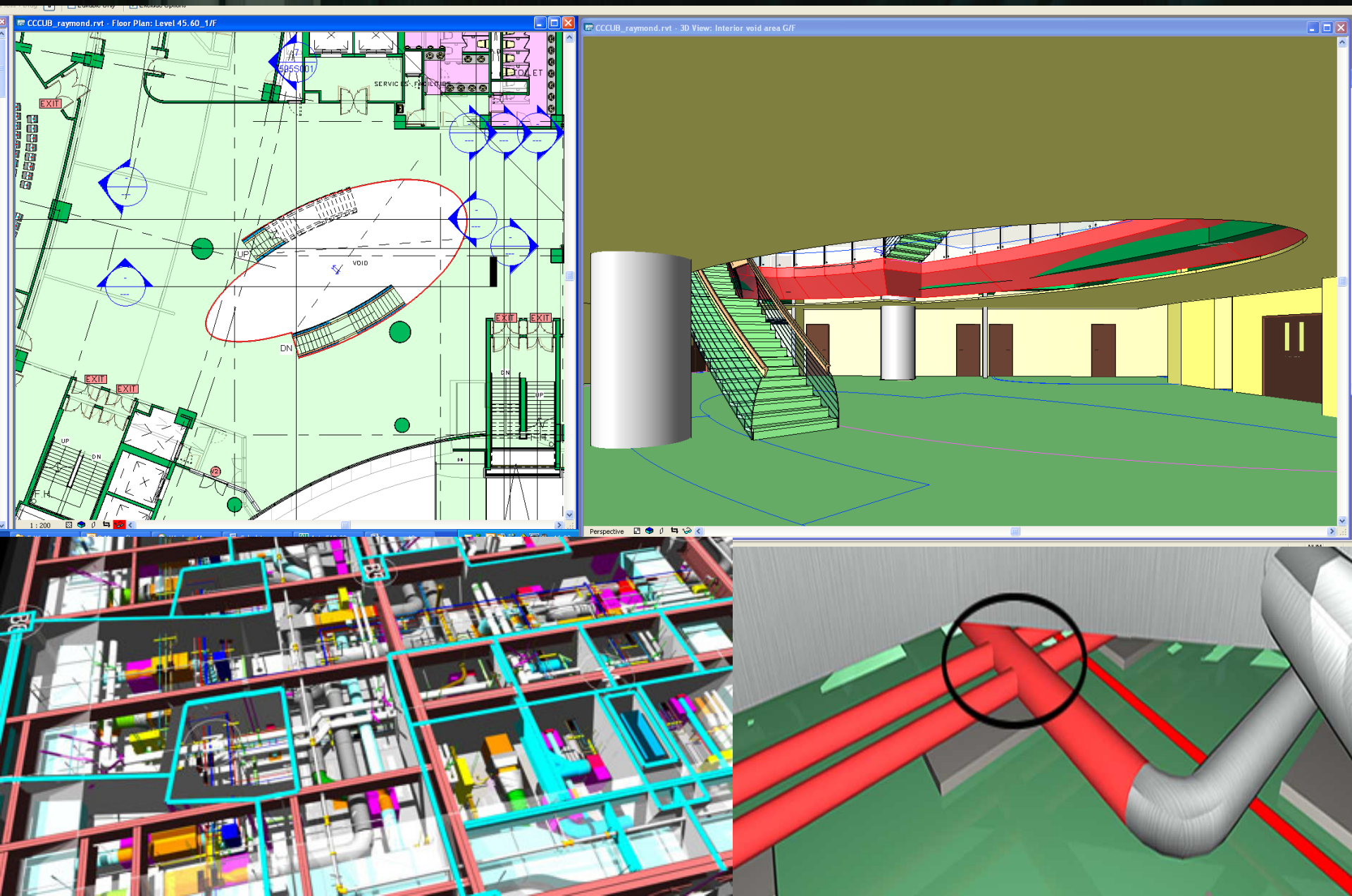
Item 1

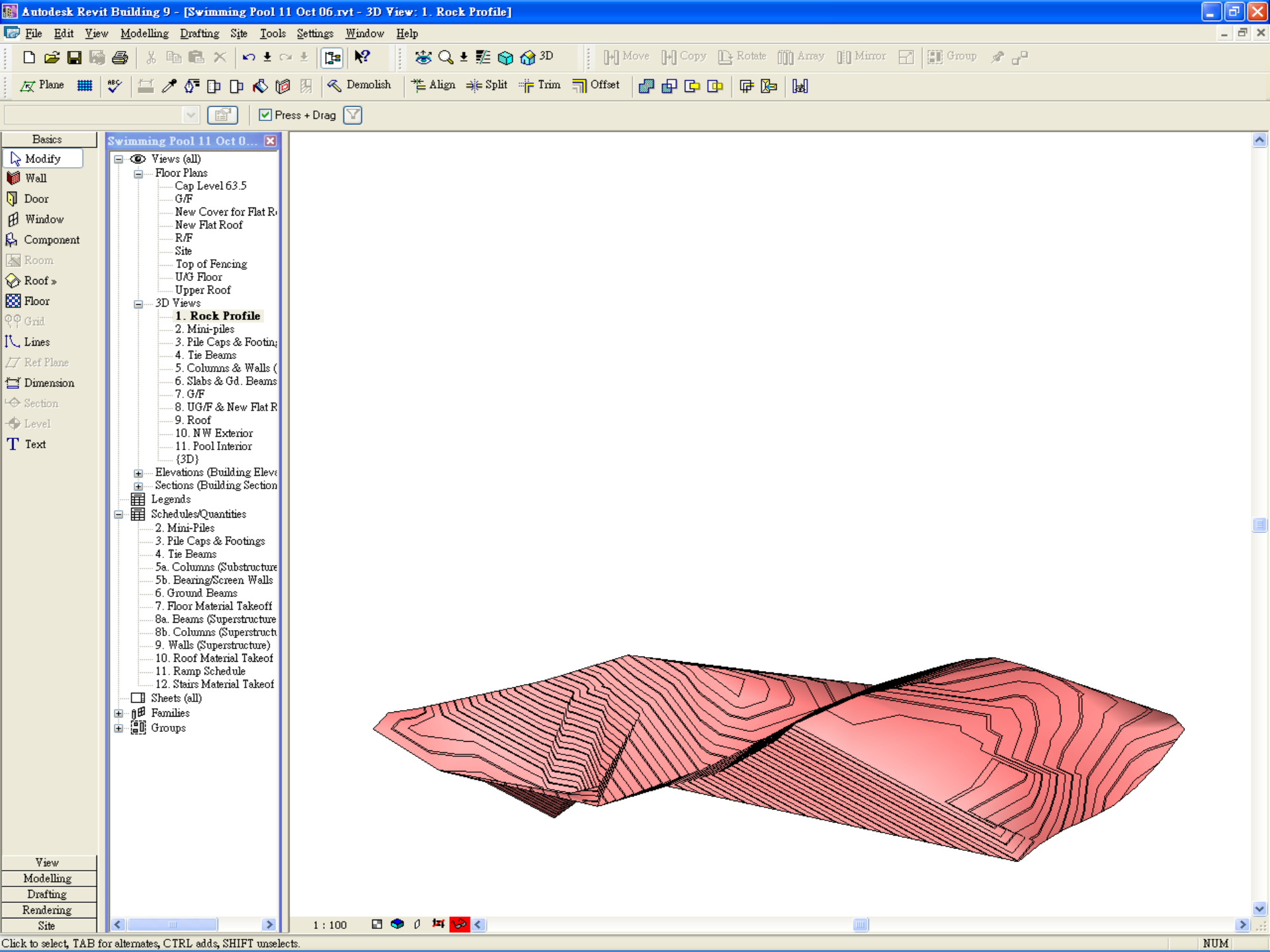
Path File ->File ->Basement 03.nwc -><No level> ->L2b1
 500 x 700 ->L2b1 500 x 700 ->Solid

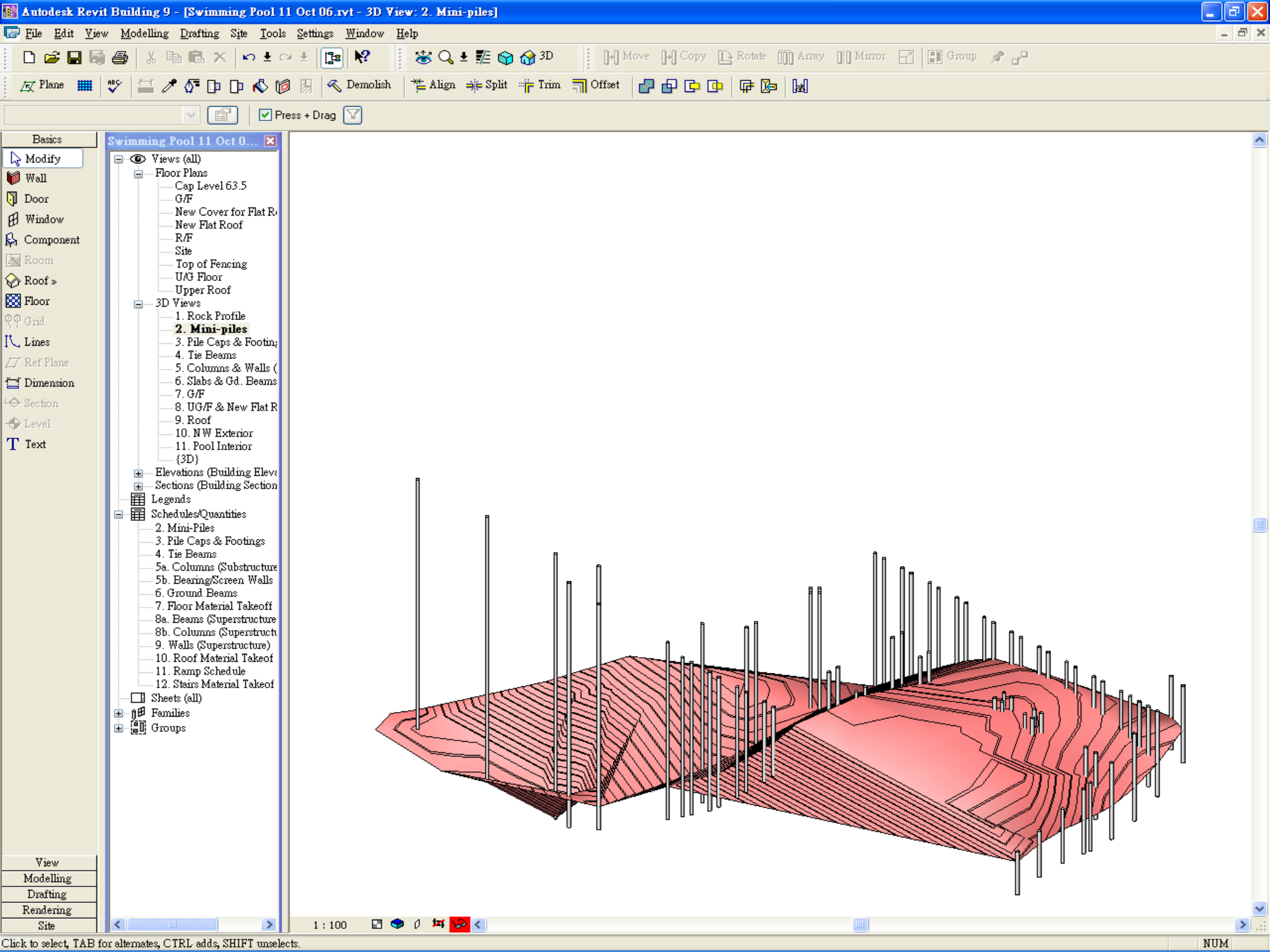
Item 2

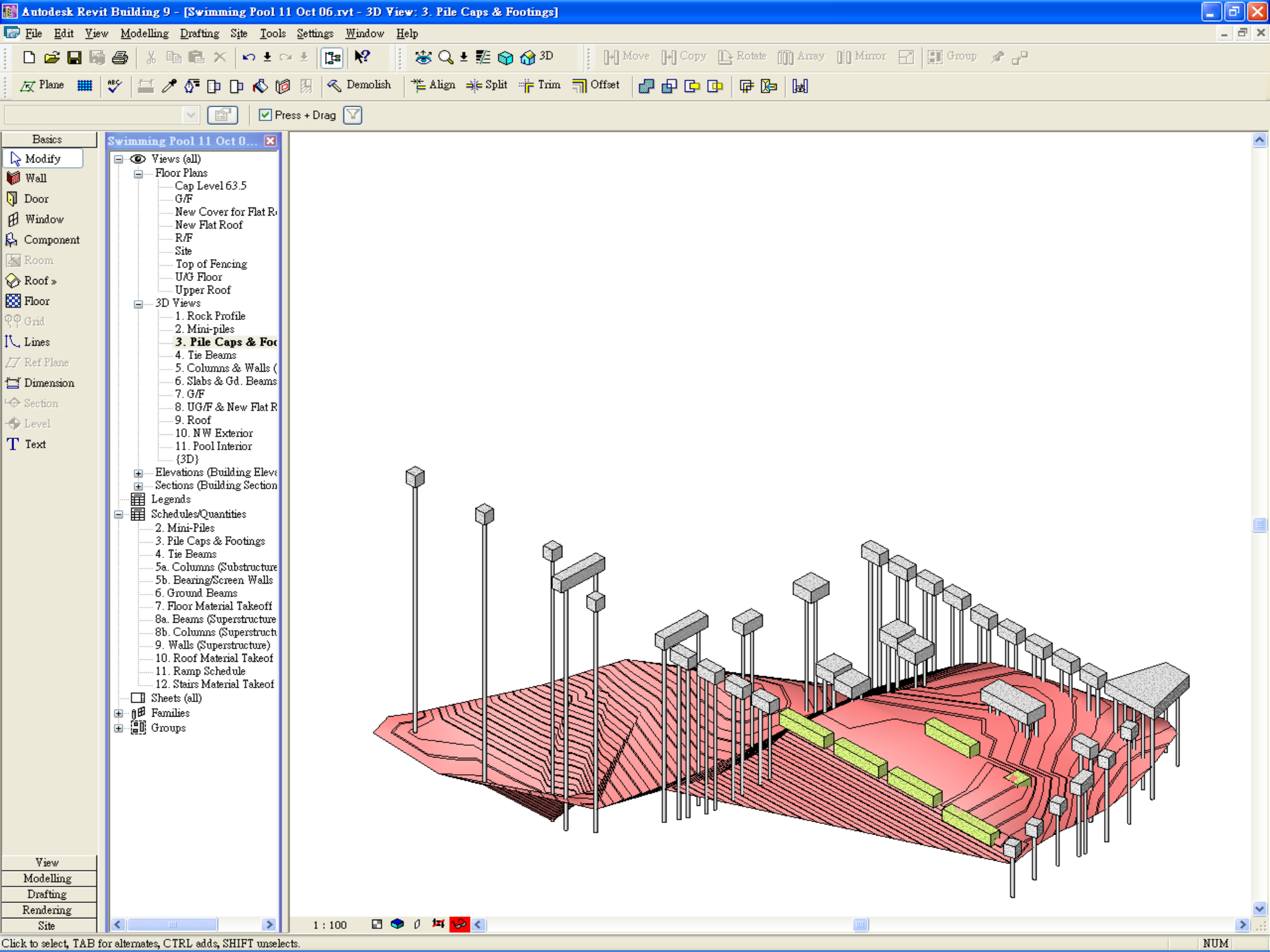
Entity Handle 2AD6
 Path File ->File ->B3HVAC_Duct.nwd ->H-Ductwork-G -
 >Duct

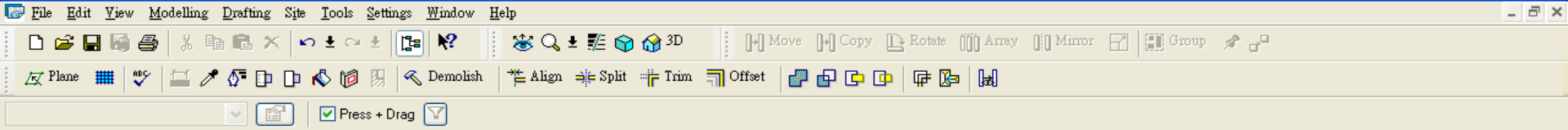
3. Collaboration – clash detection











Basics

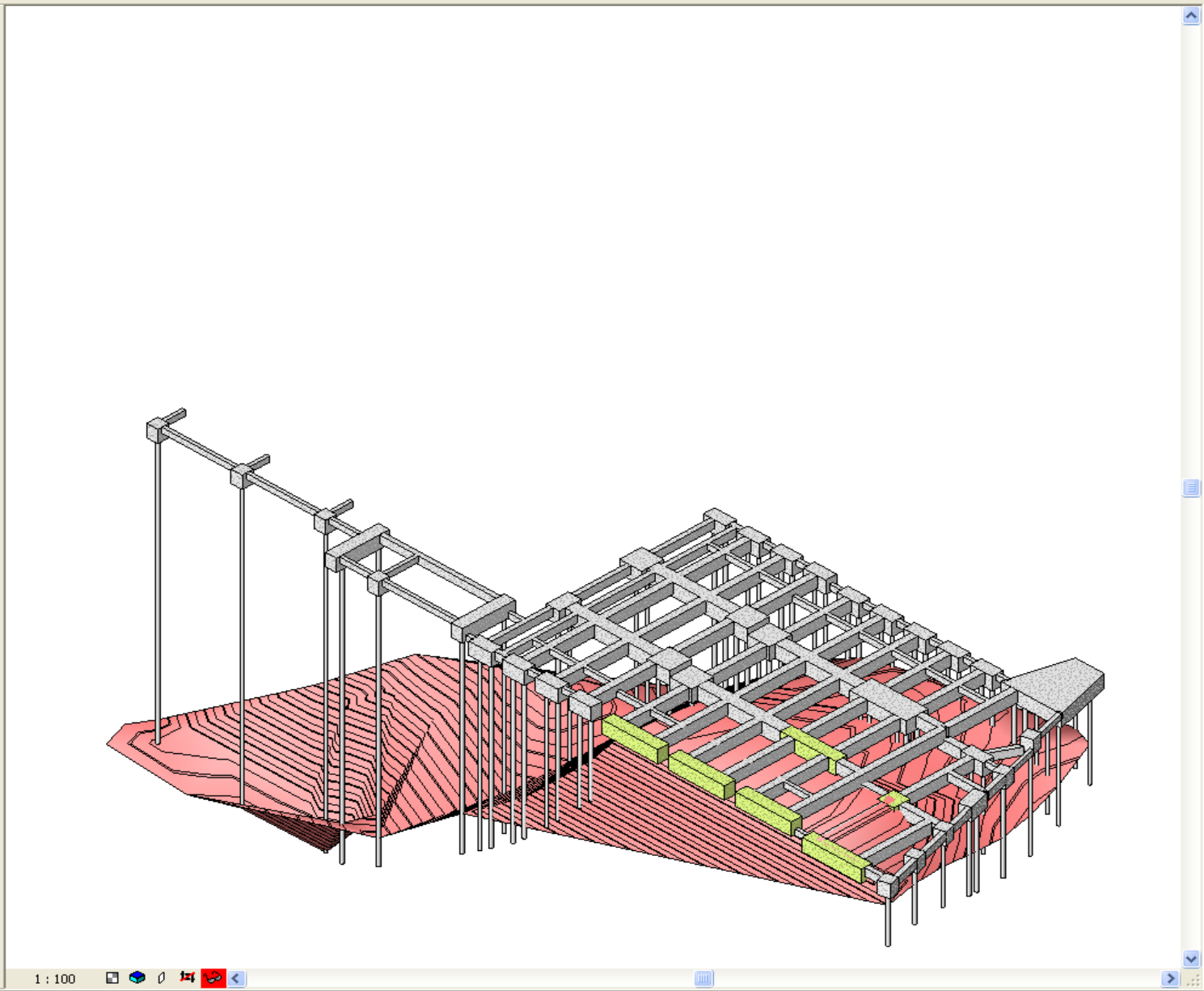
- Modify
- Wall
- Door
- Window
- Component
- Room
- Roof »
- Floor
- Grid
- Lines
- Ref Plane
- Dimension
- Section
- Level
- Text

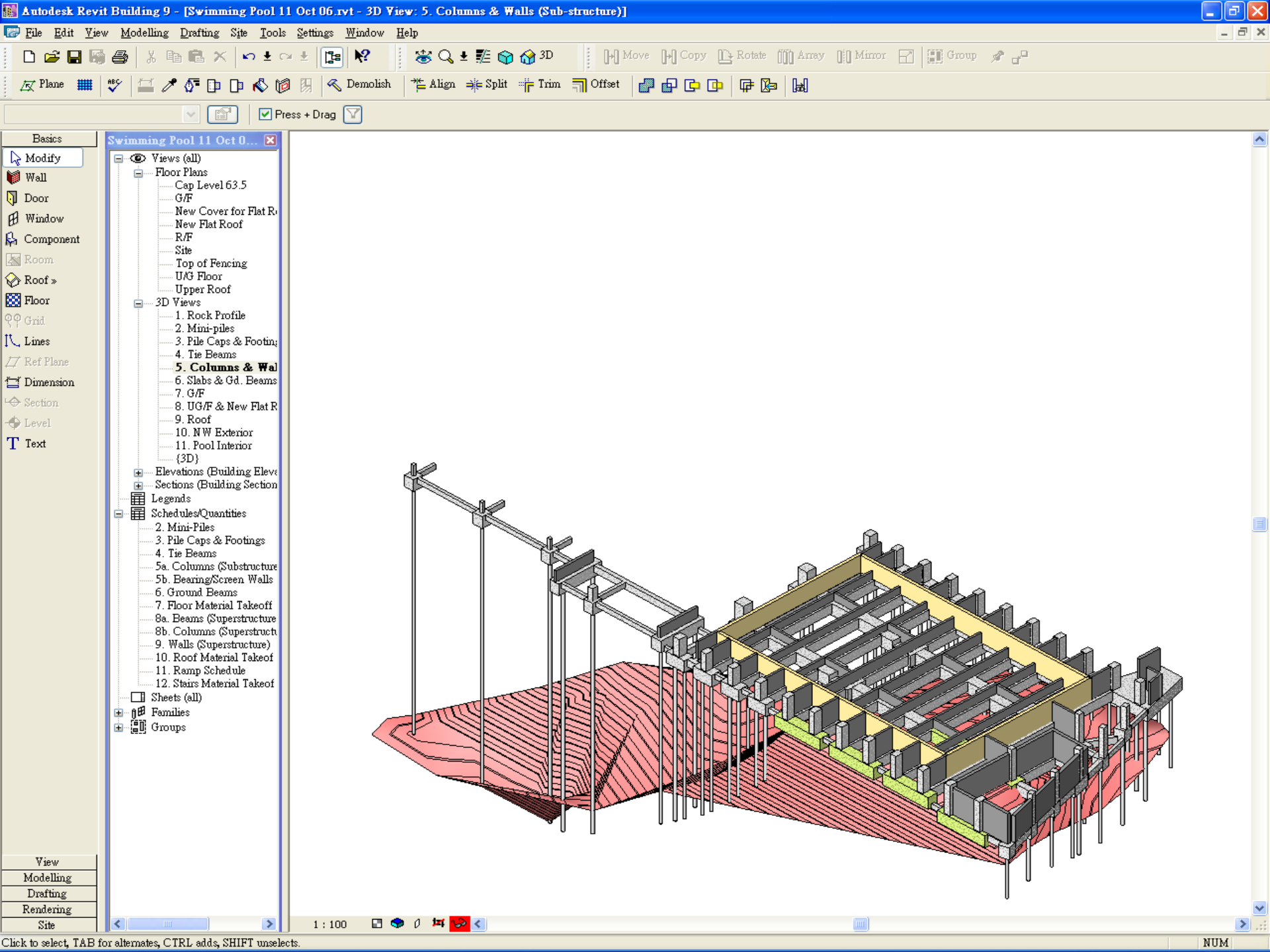
Swimming Pool 11 Oct 0...

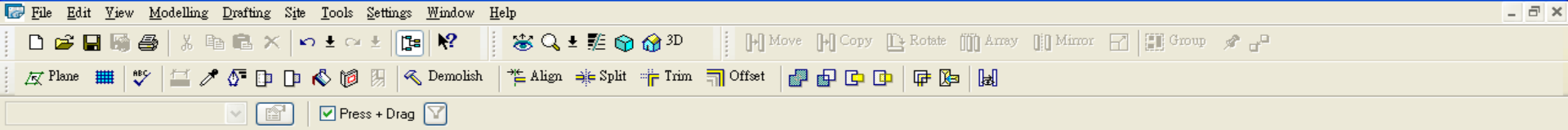
- Views (all)
 - Floor Plans
 - Cap Level 63.5
 - G/F
 - New Cover for Flat R
 - New Flat Roof
 - R/F
 - Site
 - Top of Fencing
 - UG Floor
 - Upper Roof
 - 3D Views
 - 1. Rock Profile
 - 2. Mini-piles
 - 3. Pile Caps & Footings
 - 4. Tie Beams**
 - 5. Columns & Walls (
 - 6. Slabs & Gd. Beams
 - 7. G/F
 - 8. UG/F & New Flat R
 - 9. Roof
 - 10. NW Exterior
 - 11. Pool Interior
 - (3D)
 - Elevations (Building Elev
 - Sections (Building Section
 - Legends
 - Schedules/Quantities
 - 2. Mini-Piles
 - 3. Pile Caps & Footings
 - 4. Tie Beams
 - 5a. Columns (Substructure
 - 5b. Bearing/Screen Walls
 - 6. Ground Beams
 - 7. Floor Material Takeoff
 - 8a. Beams (Superstructure
 - 8b. Columns (Superstruct
 - 9. Walls (Superstructure)
 - 10. Roof Material Takeof
 - 11. Ramp Schedule
 - 12. Stairs Material Takeof
 - Sheets (all)
 - Families
 - Groups

View

- Modelling
- Drafting
- Rendering
- Site







Basics

Modify

Wall

Door

Window

Component

Room

Roof »

Floor

Grid

Lines

Ref Plane

Dimension

Section

Level

Text

View

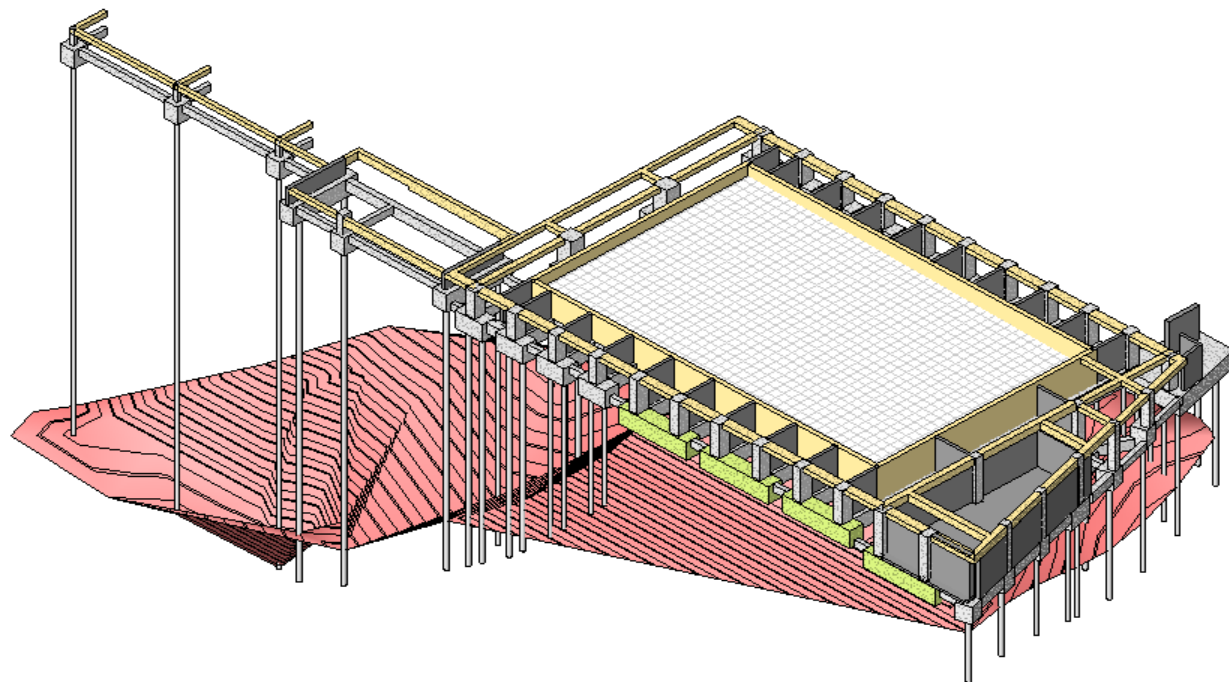
Modelling

Drafting

Rendering

Site

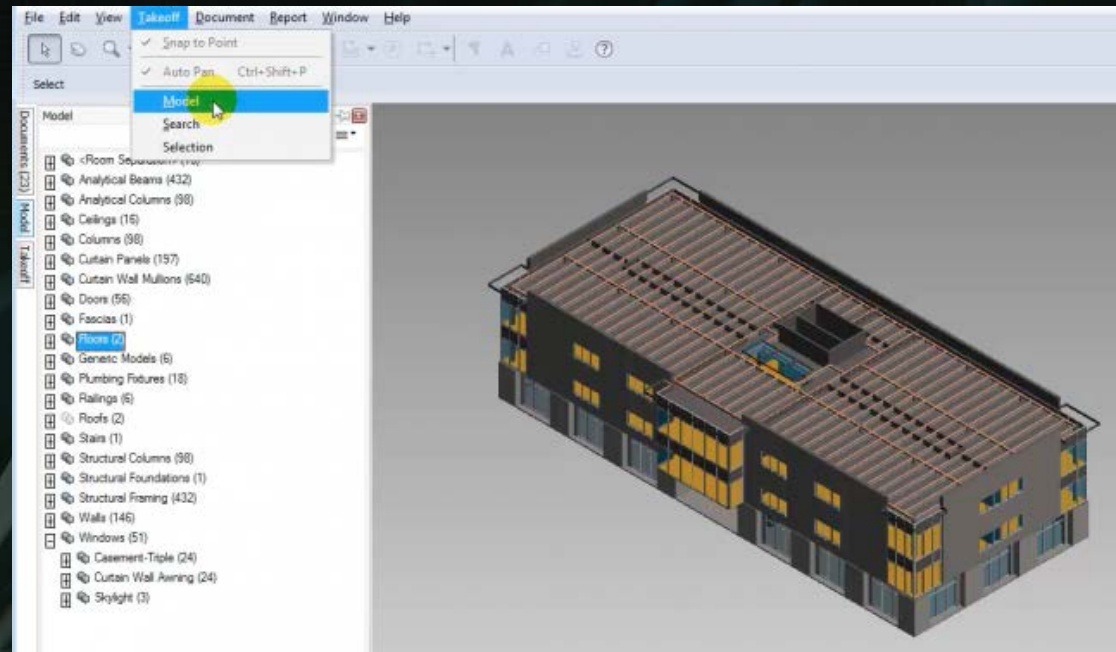
- Swimming Pool 11 Oct 06.rvt
- Views (all)
 - Floor Plans
 - Cap Level 63.5
 - G/F
 - New Cover for Flat R
 - New Flat Roof
 - R/F
 - Site
 - Top of Fencing
 - UG Floor
 - Upper Roof
 - 3D Views
 - 1. Rock Profile
 - 2. Mini-piles
 - 3. Pile Caps & Footings
 - 4. Tie Beams
 - 5. Columns & Walls (
 - 6. Slabs & Gd. Be**
 - 7. G/F
 - 8. UG/F & New Flat R
 - 9. Roof
 - 10. NW Exterior
 - 11. Pool Interior
 - (3D)
 - Elevations (Building Elev
 - Sections (Building Section
 - Legends
 - Schedules/Quantities
 - 2. Mini-Piles
 - 3. Pile Caps & Footings
 - 4. Tie Beams
 - 5a. Columns (Substructure
 - 5b. Bearing/Screen Walls
 - 6. Ground Beams
 - 7. Floor Material Takeoff
 - 8a. Beams (Superstructure
 - 8b. Columns (Superstruct
 - 9. Walls (Superstructure)
 - 10. Roof Material Takeof
 - 11. Ramp Schedule
 - 12. Stairs Material Takeof
 - Sheets (all)
 - Families
 - Groups



3. Collaboration

Accurate
Quantity calculation

Reduce Surplus Materials



Takeoff

WBS

WBS	Description	Type	Length	Area
New Group_4	Analytical Columns (98)			
New Group_5	Ceilings (16)			
New Group_6	Columns (98)			

Workbook

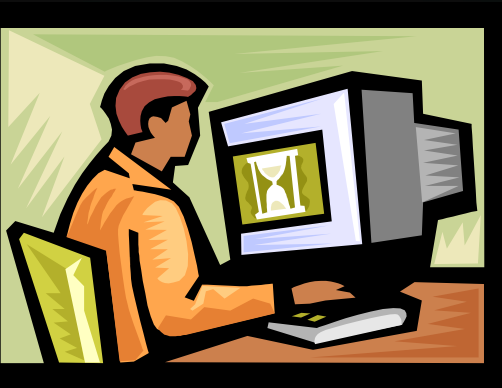
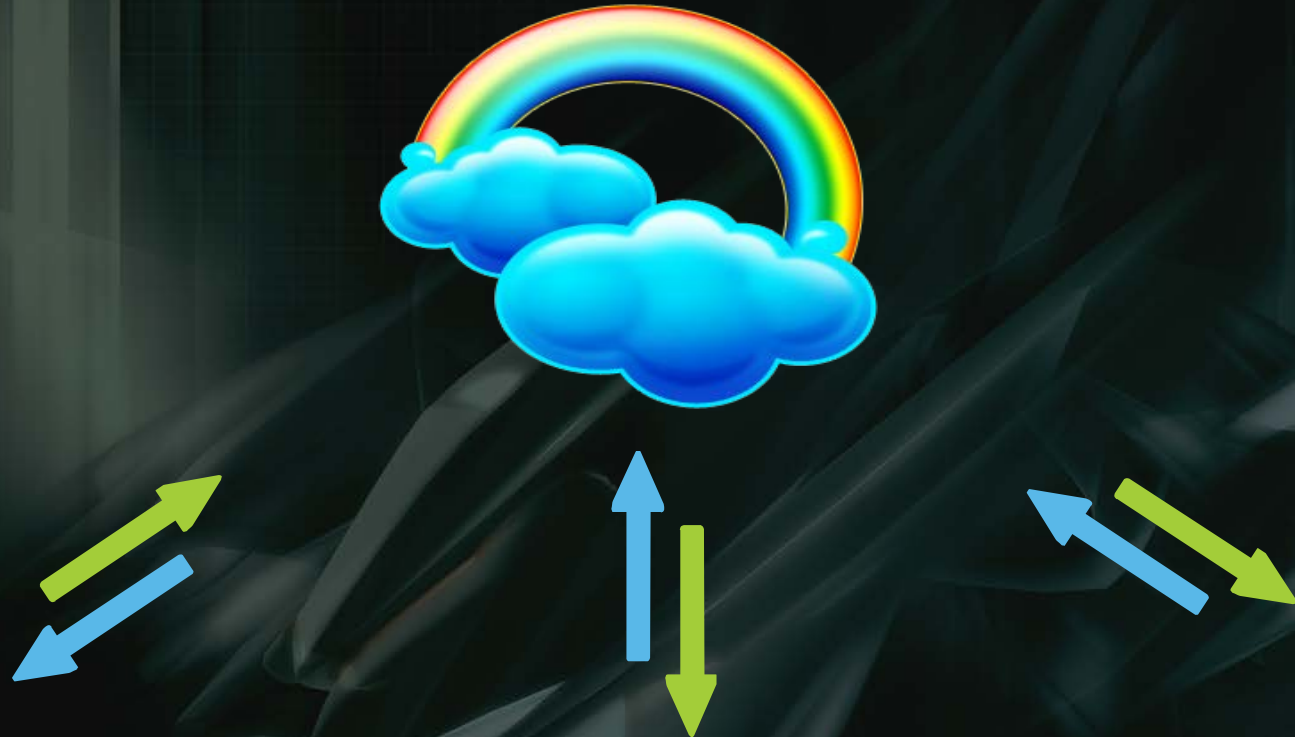
3D View: (3D)

New Group_2.New Gr: 3244.690081

	WBS	Description	Quantity	Unit	Labor Cost		Material Cost		Subcontractor Cost		Total Cost
					Unit cost	Total	Unit cost	Total	Unit cost	Total	
	New Group_2.New	Curtain Wall Old Glass	5,000	ea	250.00	1,250.00	850.00	4,250.00	0.00	0.00	5,500.00
	New Group_2.New	Double Glass 1				0.00		0.00	0.00	0.00	0.00
	New Group_2.New	Floor				0.00		0.00	0.00	0.00	0.00
	New Group_2.New	Roof				0.00		0.00	0.00	0.00	0.00
	New Group_2.New	LW Concrete on Metal Deck	19,247.801	ft²		0.00		0.00	0.00	0.00	0.00
	New Group_2.New	Railings				5,302.17		10,710.45	0.00	0.00	16,012.61
	New Group_2.New	Railings				5,302.17		10,710.45	0.00	0.00	16,012.61
	New Group_2.New	Guardrail - Pipe	67.870	ft	50.00	3,393.52	110.00	7,465.75	0.00	0.00	10,859.27
	New Group_2.New	Handrail - Pipe	38.173	ft	50.00	1,908.65	85.00	3,284.75	0.00	0.00	5,193.34
	New Group_2.New	Walls				347,704.08		440,067.96	0.00	0.00	787,772.03
	New Group_2.New	Basic Wall				347,704.08		440,067.96	0.00	0.00	787,772.03
	New Group_2.New	Interior - Core Walls	2,963.206	ft²	25.00	103,712.20	25.00	74,080.14	0.00	0.00	177,792.34
	New Group_2.New	Bathroom Partitions	361.563	ft²		0.00		0.00	0.00	0.00	0.00
	New Group_2.New	Exterior - EIFS on Mt. Stud	8,133.083	ft²	30.00	243,991.88	45.00	365,975.81	0.00	0.00	609,967.69
	New Group_2.New	Exterior - EIFS on Mt. Stud - P...	3,996.310	ft²		0.00		0.00	0.00	0.00	0.00
	New Group_2.New	Interior - 4 7/8" Partition (1st)	10,383.747	ft²		0.00		0.00	0.00	0.00	0.00

Summary | New Group_2 | New Group

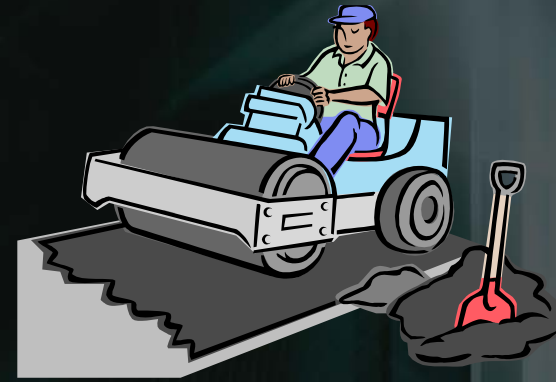
3. Collaborations – Cloud Based



OFFICE



COLLABORATION



SITE

3. Collaborations – Cloud Based

Autodesk Design Review

Local Storage

 Sample Document >

 Recent Documents >

Autodesk Cloud

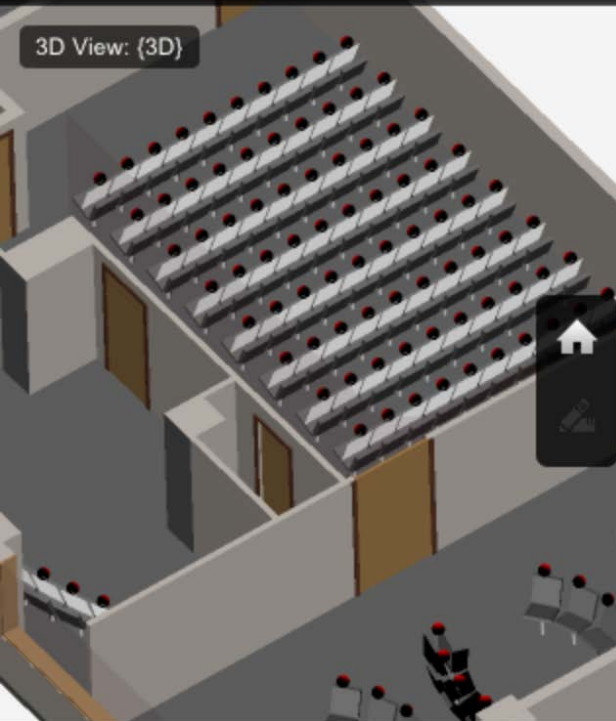
 Documents >

Help

 Using Design Re... >

Files 3D dwf without be...

3D View: {3D}





 Properties

Files 3D dwf without be...

Properties

Base Constraint
3/F

Base Offset
0

Room Bounding
Yes

Top Constraint
CEILING SOFFIT

Top Offset
0

Unconnected Height
3340

Construction

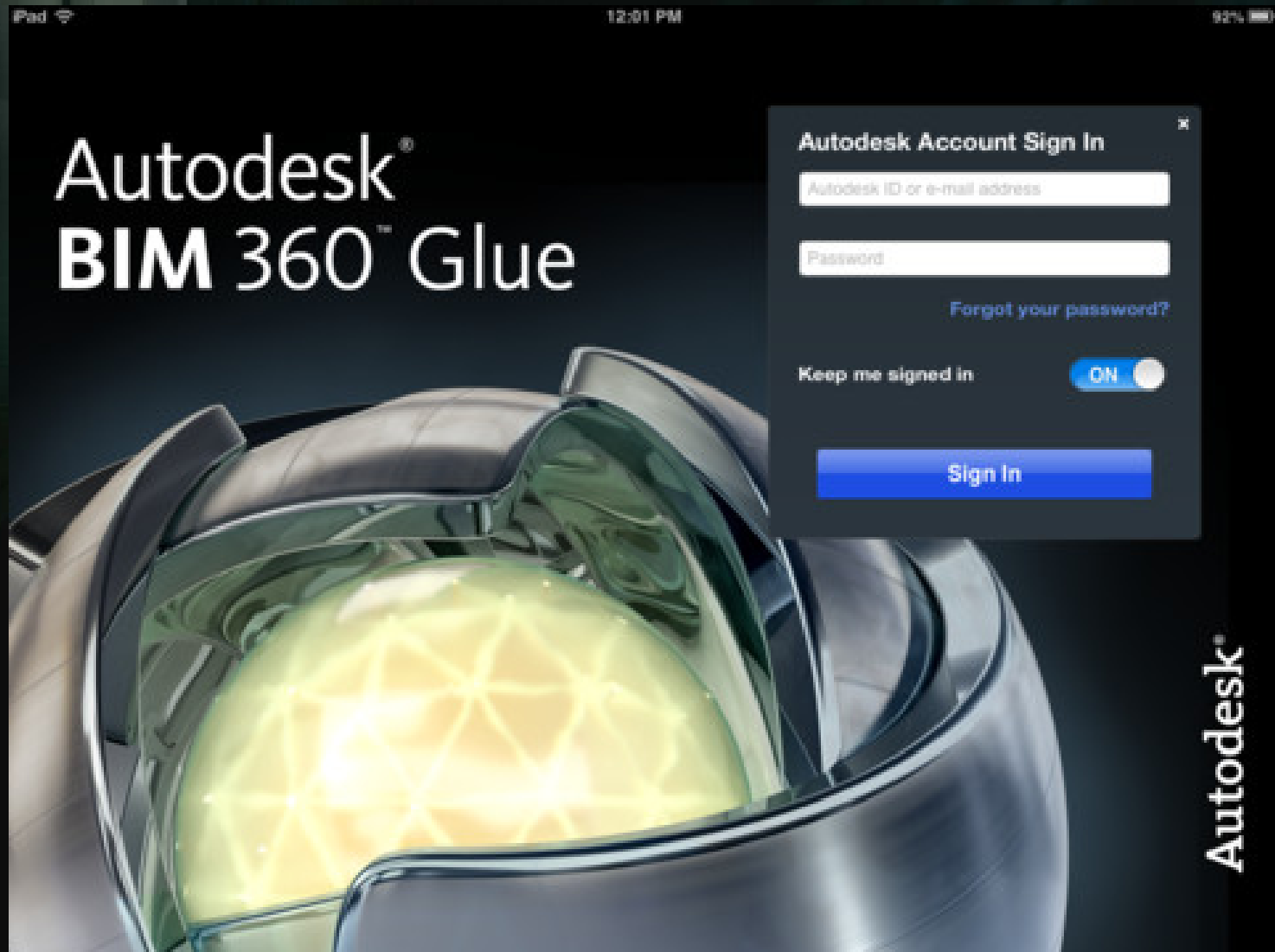


 Properties

3. Collaborations – Cloud Based



3. Collaborations – Cloud Based



3. Collaborations

Autodesk® BIM 360 Glue

[View More By This Developer](#)

By Autodesk Inc.

Open iTunes to buy and download apps.



[View In iTunes](#)

Free

Category: Productivity
Released: Oct 08, 2012
Version: 1.0
Size: 59.4 MB
Language: English
Seller: Autodesk
© Autodesk Inc.
Rated 4+

Requirements: Compatible with iPad. Requires iOS 4.3 or later.

Customer Ratings

Current Version:
★★★★☆ 10 Ratings

More iPad Apps by Autodesk Inc.

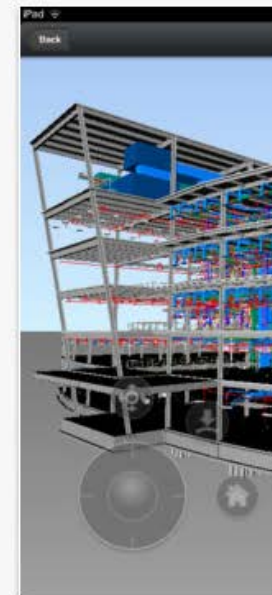
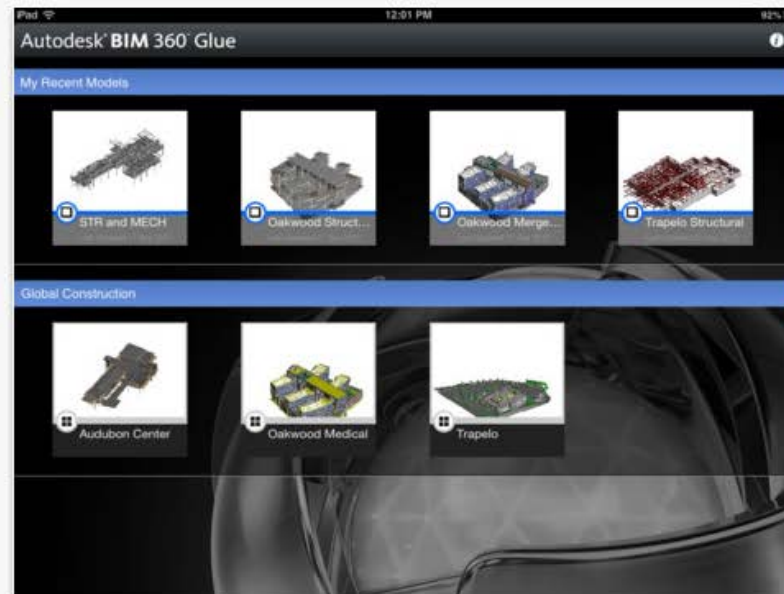
Description

The Autodesk® BIM 360™ Glue mobile app enables BIM 360 Glue users to more securely access Building Information Modeling (BIM) projects from anywhere, at any time. Building, infrastructure, design, and construction professionals can access and intuitively explore multi-disciplinary models online or offline, access all saved views, and review

[Autodesk® BIM 360 Glue Support](#) ▶ [Application License Agreement](#) ▶

[...More](#)

iPad Screenshots



3. Collaborations

GLUE

OBJECTS

Models

Merged

+

Save

👁

View

↺

Refresh

↕

More

🖨

Clear

☑

Merged Models

▶

☑

Clash Reports

▲

☑

bldg all for review

☑

ARC ALL

☑

HVAC ALL

☑

STR ALL

▶

☑

first tw levels arc

▶

☑

hospital

☑

hospital three levels

☑

oakwoodall

COLLABORATE

EXCHANGE

🌀 Orbit

👁 Look

👉 Pan

⬆ Straighten

🚶 Walk

🖨 Plan View

Navigate

🔍 Dynamic

🔍 Window

🔍 See All

Zoom

📍 Click

📍 Window

📍 Isolate

Selection

📷 Screenshot

📷 Hide/Show

📷 Transparent

Visual

Variations

Animations

Views

Selections

+

Save

🏠

Publish

📄

UnPublish

✖

Delete

▶

Standard Views

☑

Private Views

▲

☑

Global Views

☑

Closed issues

☑

RFI clarifications

▶

☑

RFI questions

▶

☑

HVAC ALL

Markups

☐ Rectangle

◯ Circle

🖋 Freehand

📄 Text

✖ Clear

Draw Markup

+

Save

🔴

Color

📄

Rename

✖

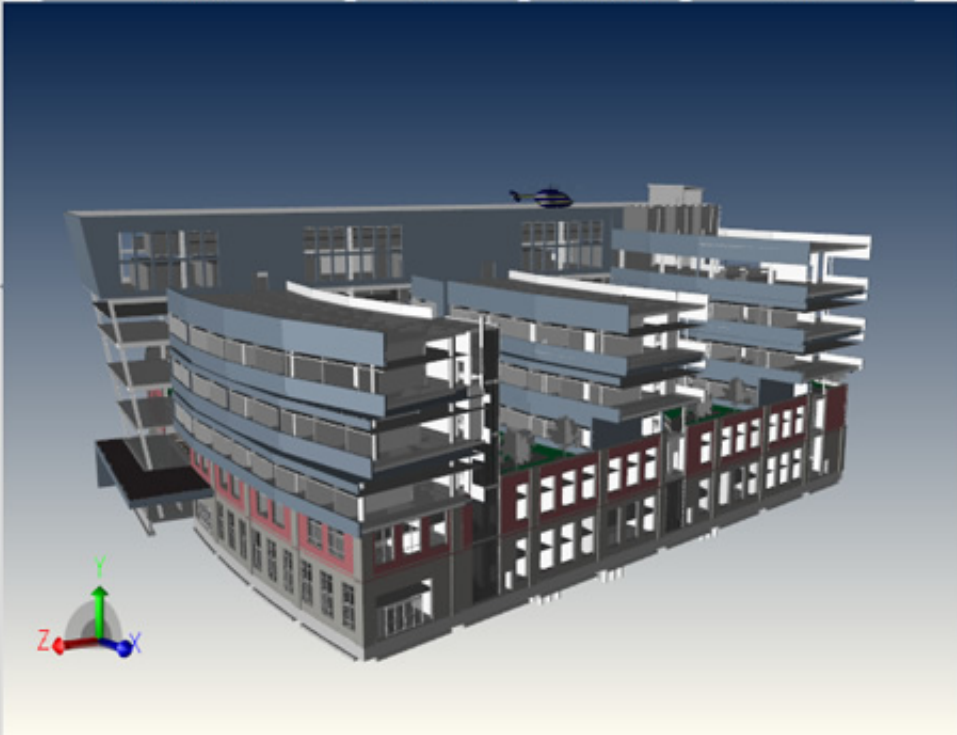
Delete

REVIEW

TRANSFORM

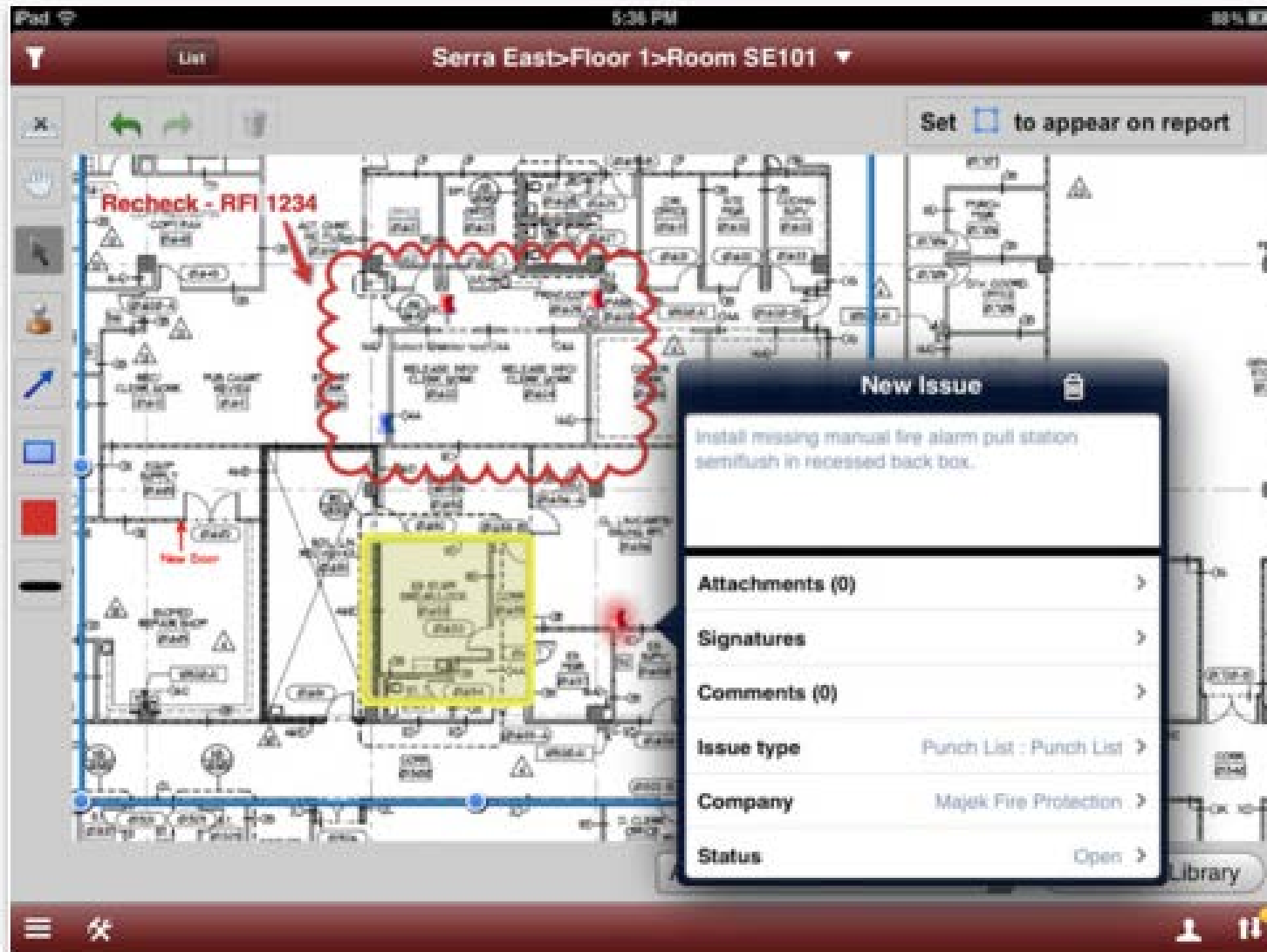
SECTION

SEARCH



3. Collaborations

iPad Screenshots



4. BEAM Plus Recognition Project

BEAM Plus

New Buildings

Version 1.2
(2012.07)



BEAM
建築環保評估協會

BEAM Plus

Existing Buildings

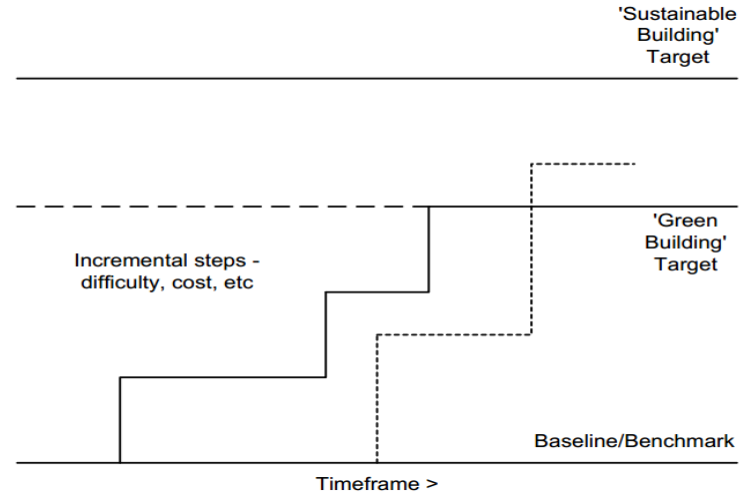
Version 1.2
(2012.07)



BEAM
建築環保評估協會

4. BEAM Plus Certification

RAISING STANDARDS



Category	Weighting (%)
Site Aspects (SA)	25
Materials Aspects (MA)	8
Energy Use (Eu)	35
Water Use (Wu)	12
Indoor Environmental Quality (IEQ)	20
	100

(IA). The award classifications are:

	<u>Overall</u>	<u>SA</u>	<u>Eu</u>	<u>IEQ</u>	<u>IA</u>	
Platinum	75%	70%	70%	70%	3 credits	(Excellent)
Gold	65%	60%	60%	60%	2 credits	(Very Good)
Silver	55%	50%	50%	50%	1 credit	(Good)
Bronze	40%	40%	40%	40%	-	(Above Average)

4. BEAM Plus Certification

BEAM PLUS FOR NEW BUILDINGS
VERSION 1.2

FRAMEWORK

1.5 SUMMARY OF CREDITS

	Section:	Credit Requirement:	Exclusions	Credits	Target
2	SITE ASPECTS (SA)			22+3B	
SA P1	MINIMUM LANDSCAPE AREA	Demonstrate appropriate planting on site equivalent to at least 20% of the site area.	Buildings or sites not for residential use; or residential sites less than or equal to 1,000m ² .	Required	
SA 1	CONTAMINATED LAND	1 BONUS credit for conducting a site contamination assessment and implementing measures for rehabilitation, and/or proper preparation of sites and structures adjacent to landfill sites.	Building developments on Greenfield sites and where the site contamination/ landfill gas hazard assessment and mitigation measures are statutory requirements of the project.	1B	
SA 2	LOCAL TRANSPORT	1 credit where parking capacity does not exceed the minimum requirement from government and parking is provided for carpools or shuttle service vehicles. 2 credits where no car parking is provided other than provisions intended for use by disabled persons and/or shuttle service vehicles.	None.	2	
		1 credit for availability of convenient pedestrian access to mainstream public transport.		1	
SA 3	NEIGHBOURHOOD AMENITIES	1 credit where at least 10 different basic services are located within 500m walking distance from the Site and pedestrian access to the services is available for the Site.		1	
		1 credit where at least 2 different recreational facilities are located within 500m walking distance from the Site and pedestrian access to the facilities is available for the Site.	Emergency Service Premises (e.g. fire station, power substation, etc.)	1	
		1 credit where at least 2 different recreational facilities or at least 5 different basic services are located within the Site and will be made available for public use.		1	

BIM & LEED - Project Chicago

BIM & SUSTAINABILITY

1. Development Control and Development potential
2. Analytical approach
3. Collaborations
4. Hong Kong BEAMPLUS platinum project

*BIM facilitates **better Informed decision making,
better analysis &
better Access to Current Information***



Thank You!