



Aedas

Management of Building Information in Aedas

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Managing Director
Senior Associate, Head of BIM Division



Building Information

Graphical



Non-Graphical





Building Information

Graphical

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

Non-Graphical

Area Schedule
Finishing Schedules
Door/Window/Louvre Sch
Beam/Column Schedule
Equipment Schedule
Program
Specifications

Cost Estimate
Quantity Take Off
Bills of Quantities
Variation Assessments



Computerized Handling of Information

Graphical

CAD SYSTEMs

e.g. AutoCAD,
Microstation
2D & 3D

Non-Graphical

Word (Word Processing)

Excel (Spreadsheet)

Access (Data Base)

MS Project (Time)

BQ Software (\$\$\$)

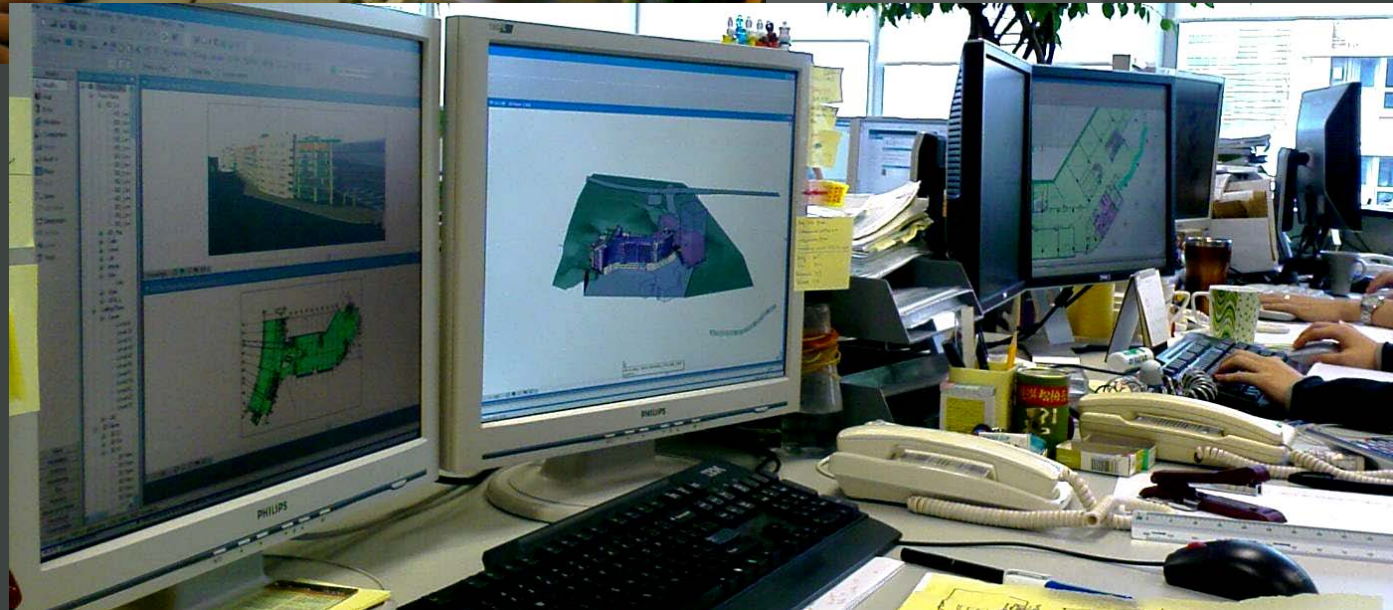
Electronic communications

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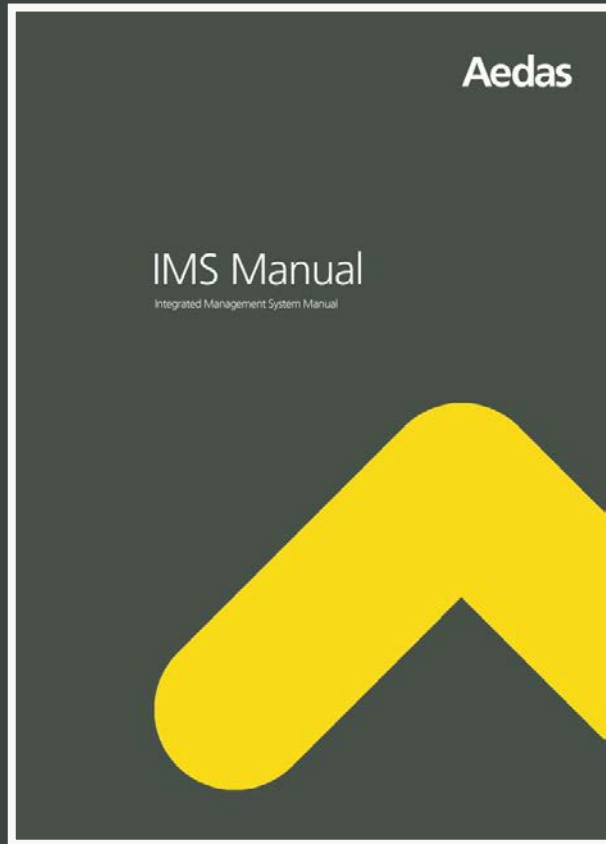
Computerized Information

Aedas

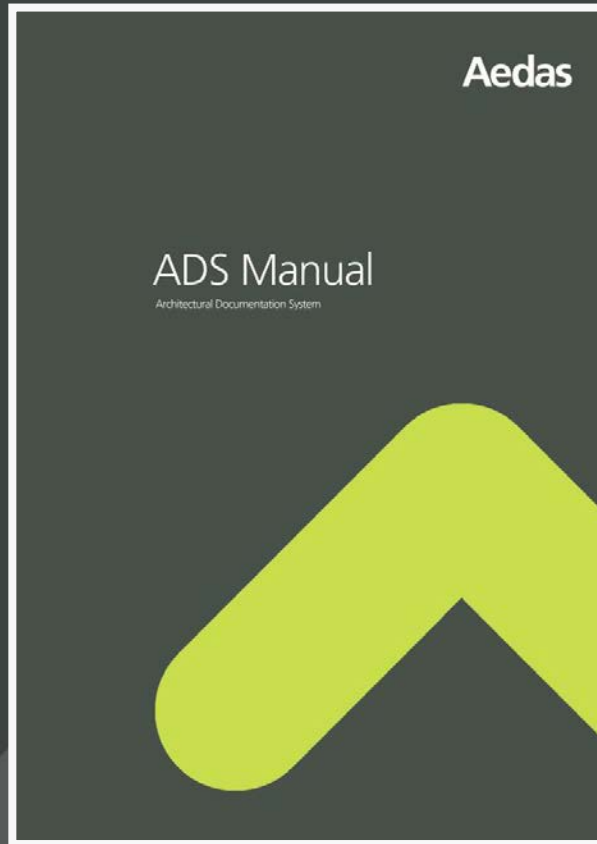




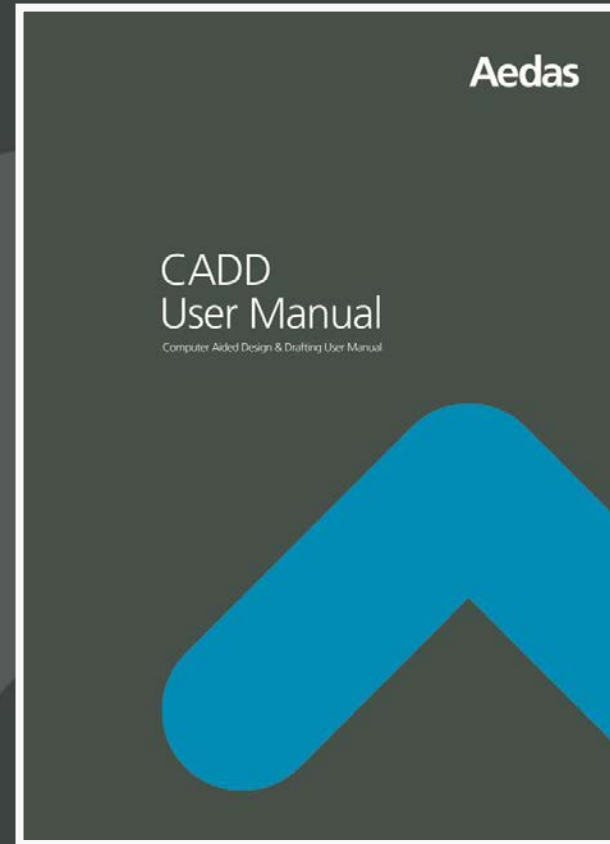
Aedas Base Systems



Integrated Management
System (IMS) Manual



Architectural Documentation
System (ASD) Manual



Computer Aided Design &
Drafting User (CADD) Manual



Integrated Management System (IMS)



Integrated Management System (IMS)
Manual

Controls:

1. Project Initiation

Information Gathering

2. Project Control -

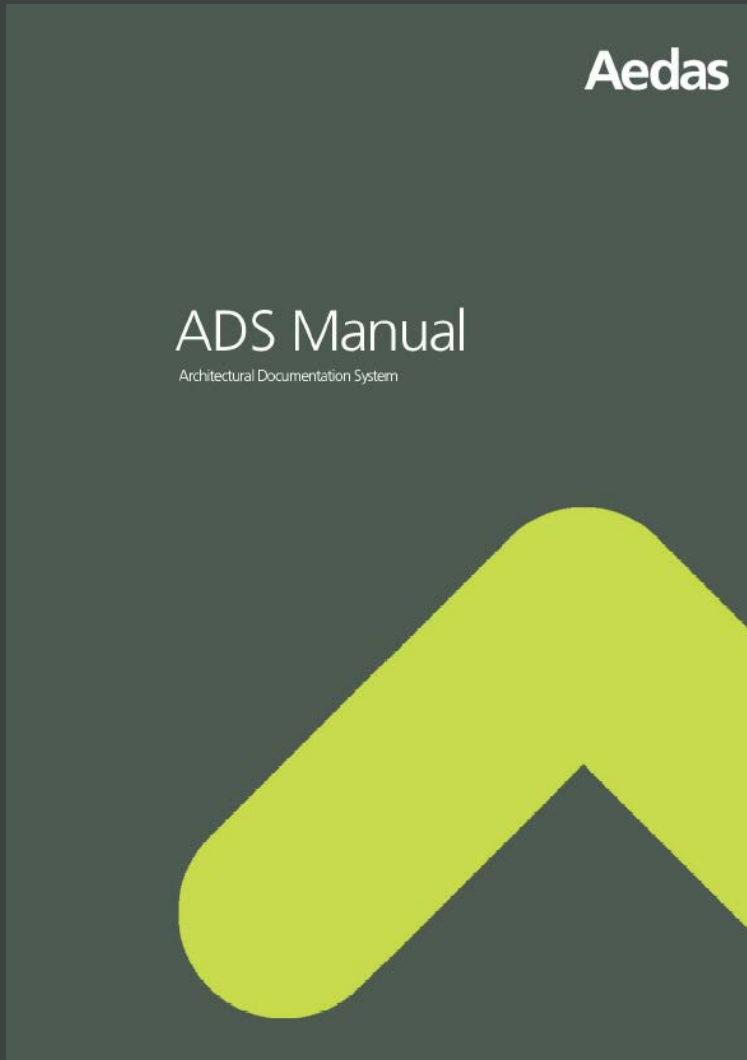
Design Review

Project Administration

3. Document Control



Architectural Documentation System (ADS)



Controls Documentation:

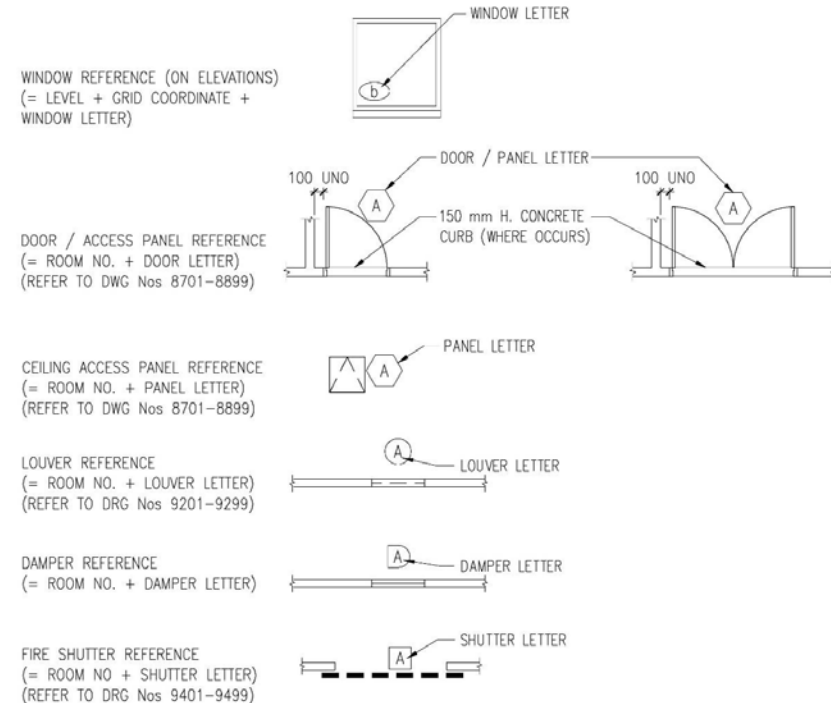
1. Program Resources
2. Co-ordinates Information
3. Optimize Information
4. Avoid Duplication



3.0 DRAWING NUMBERING SYSTEM

Variation to this Aedas system is only acceptable where required specifically by the Client.

Dwg No.	Description of Category	Suitable scales	
000-009	Cover sheet, Drawing lists & Code-symbols.	As applicable	A - GENERAL ARRANGEMENTS
E01-E99	Existing, Survey info. floor plans, sections, elevations & location plans.	1:1000, 1:500, 1:200	
010-059 060-099	Floor plans, general arrange. Reflected ceiling plans.	1:200, 1:100	
100-149 150-199	Elevations Sections	1:200, 1:100	
200-299	Detailed sections and elevations.	1:50, 1:20	B - DETAILED PLANS & SECTIONS & ELEVATIONS
300-349 350-399	Detailed floor plans & ceiling plans i.e. core plans, lobby areas etc. Stair plans, sections, elevations & details.	1:100, 1:50, 1:20, 1:10, 1:5	
400-449 450-499	Toilet plans, sections, elevations & details Kitchen, pantry, cold store plans, sections, elev. & details.	1:50, 1:20, 1:5, 1:2	
500-599	External envelope details, i.e. walls, floor, roof, metal work & interface with internal elements.	1:10, 1:5, 1:2	C - ASSEMBLY DETAILS
600-699	Internal details, i.e. floor, walls, ceiling, joinery & interface with external elements.	1:10, 1:5, 1:2	
700-749 750-799	External works - landscape plans, sections, elev. & details. Spare	1:200, 1:100, 1:50, 1:10, 1:5	
800-824 825-849 850-874 875-899	Door schedules & details. Window schedules & details. Louvre schedules & details. Shutter schedules & details.	1:50, 1:20 elves, 1:10, 1:5, 1:2 & 1:1	
900-924 925-949 950-974 975-999	Service Cpd. Fire hose reel Cpd. Et. Schedule s& details. Access panel schedules and details. Finishes schedules and details. Other schedules - sanitary fittings, ironmongery, furniture etc.	1:50, 1:20, 1:10, 1:5, 1:2 & 1:1	



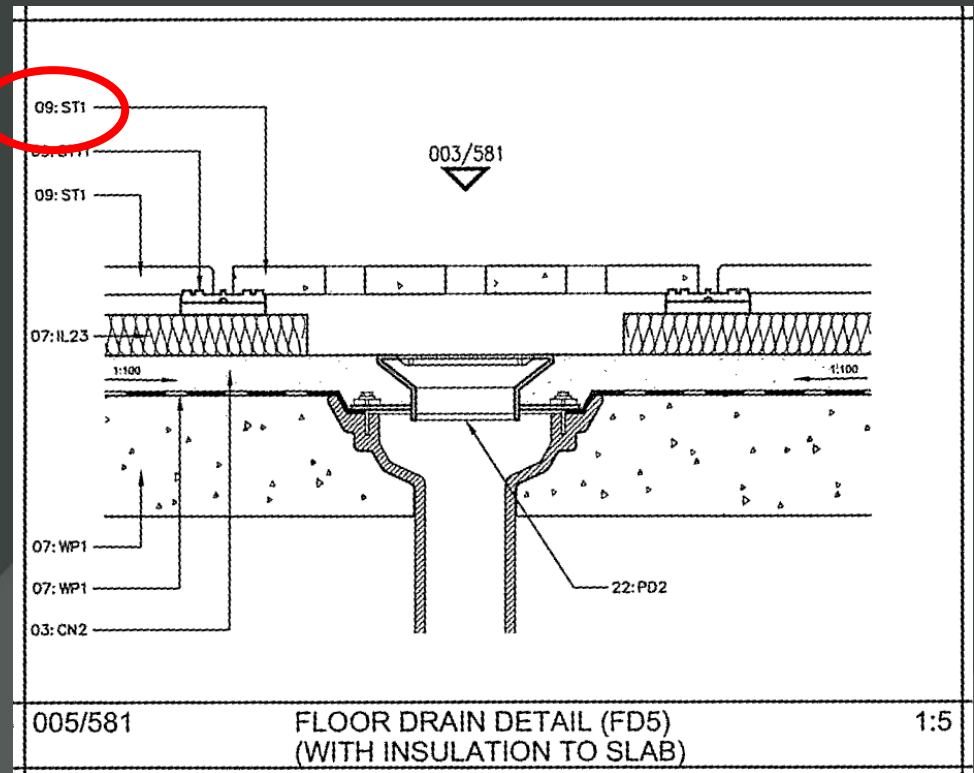


Material Codes Referencing Drawings to Specifications

Alphanumeric
w/ CSI Spec
Division

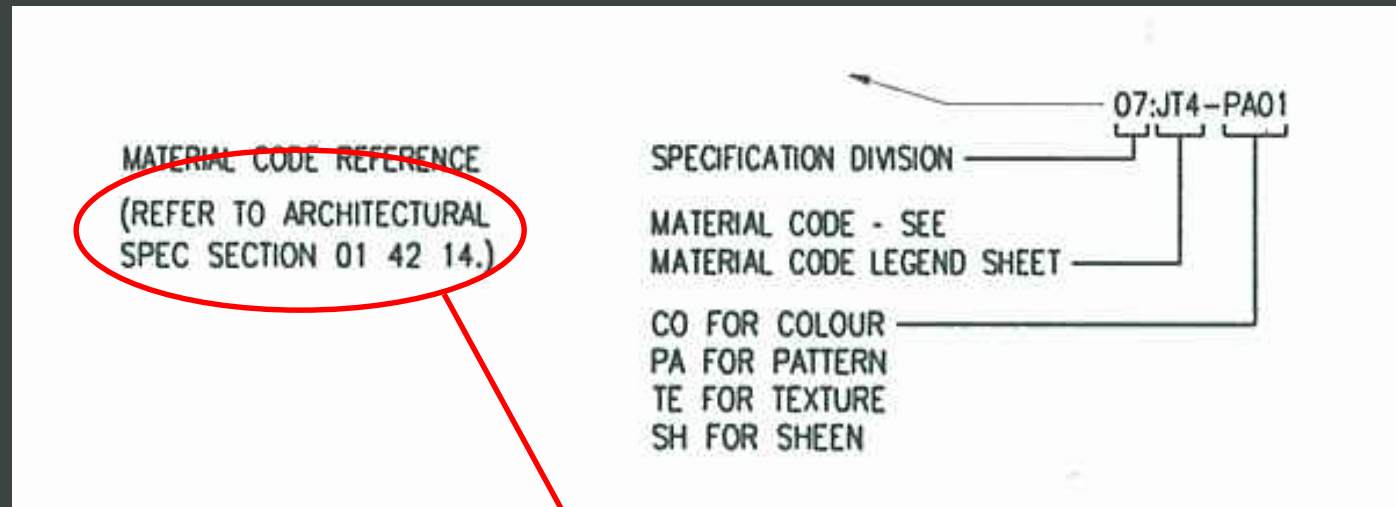
e.g. **09:ST1**

(Division **09**;
Stone Type 1)





Material Codes Referencing Drawings to Specifications



The **Symbol Legend** tells the reader where to look



Material Codes

Cotai Parcel 2/5/6

PROJECT WIDE
VERSION

Architectural Specification

Section 01 42 14

MATERIAL CODES

22 September 2006

AED570_PW_MS-014214

“Material Codes”
are in Specification
Section 01 42 14

Rev	Date	Description	By	Checked
a	30 June 2006	First Issue	MF	
b	15 July 2006	Add Podium ABWF Codes	MF	
c	19 July 2006	Add Hotel/Casino ABWF Codes	MF	
d	21 July 2006	Revise Concrete Codes	MF	
e	1 August 2006	Codes for New Spec Sections	MF	
f	10 August 2006	Codes for Floating Floor & Finishes	MF	
g	31 August 2006	Textured Finishes	MF	
h	22 September 2006	Revise Painting Codes	MF	

Aedas



DIVISION 9 - FINISHES

PC	0	FABRICATED INTERIOR PANEL CLADDING SYSTEM	09 42 63
PC	1	FABRICATED INTERIOR PANEL CLADDING SYSTEM (ALUM HONEYCOMB PANEL)	09 42 63
PC	2	FABRICATED INTERIOR PANEL CLADDING SYSTEM (ALUM PANEL COUNTERTOP)	09 42 63
PC	3	FABRICATED INTERIOR PANEL CLADDING SYSTEM (ANCHORAGE SYSTEM)	09 42 63
ST	0	STONE TILING AS INDICATED ON DRAWINGS AND IN SCHEDULES	09 30 33
ST	1	STONE TILING 1 (GOLDEN GRANITE) SEE EXTERNAL WORKS DRAWINGS	09 30 33
ST	2	STONE TILING 2 (DARK GRANITE) SEE INT DES DRAWINGS	09 30 33
ST	3	STONE TILING 3 (MARBLE) SEE INT DES DRAWINGS	09 30 33
ST	4	STONE TILING 4 (LIMESTONE) SEE INT DES DRAWINGS	09 30 33
ST	5	STONE TILING 5 (RECONSTITUTEDCAST STONE) SEE INT DES DRAWINGS	09 30 33
ST	6	STONE TILING 6 (GRANITE) SEE INT DES DRAWINGS	09 30 33
ST	7	STONE TILING 7 (ONYX) SEE INT DES DRAWINGS	09 30 33
ST	8	STONE TILING 8 (ONYX)OTHER SEE INT DES DRAWINGS	09 30 33
ST	20	STONE TILING (MARBLE - ANTIQUE TRAVERTINE)	09 30 33
ST	21	STONE TILING (MARBLE - ROJOALICANTE)	09 30 33
ST	22	STONE TILING (MARBLE - MING)	09 30 33
ST	23	STONE TILING (MARBLE - IRISH GREEN)	09 30 33
ST	24	STONE TILING (MARBLE - RAINFOREST)	09 30 33
ST	25	STONE TILING ((MARBLE -GALLAS SERIES 5)	09 30 33
ST	26	STONE TILING (MARBLE - CREMA MARFIL)	09 30 33
ST	40	STONE TILING (LIMESTONE - INCA GOLD) SEE INT DES DRAWINGS	09 30 33
ST	60	DRY FIXED STONE TILING (STONE - GOLDEN TRAVERTINE)	09 30 33
ST	61	STONE TILING (STONE - GOLDEN TRAVERTINE - HONED)	09 30 33
ST	62	STONE TILING (STONE - GOLDEN SIENNA)	09 30 33
T	0	CERAMIC TILE - REFER TO INT. DES. DRAWINGS	09 30 13
T	1	CERAMIC TILE - TYPE 1 (GLAZED, GLOSS)	09 30 13
T	2	CERAMIC TILE - TYPE 2 (HOMOGENOUS, MATTE)	09 30 13
T	3	CERAMIC TILE - TYPE 3 (HOMOGENOUS, ABRASIVE)	09 30 13
T	4	CERAMIC TILE - TYPE 4 (NON-SLIP NOSING FOR STEPS)	09 30 13
T	11	QUARRY TILE	09 30 16
T	12	QUARRY TILE - COVE BASE (SKIRTING)	09 30 16
T	21	THIN BRICK VENEER	09 30 00
T	31	CONCRETE PAVERS	09 30 00
T	32	GLAZED PAVER TILE	09 30 13
T	41	GLASS TILE - TYPE 1 (MOOSAIC)	09 30 23
T	42	GLASS TILE - TYPE 2 (MOOSAIC)	09 30 23

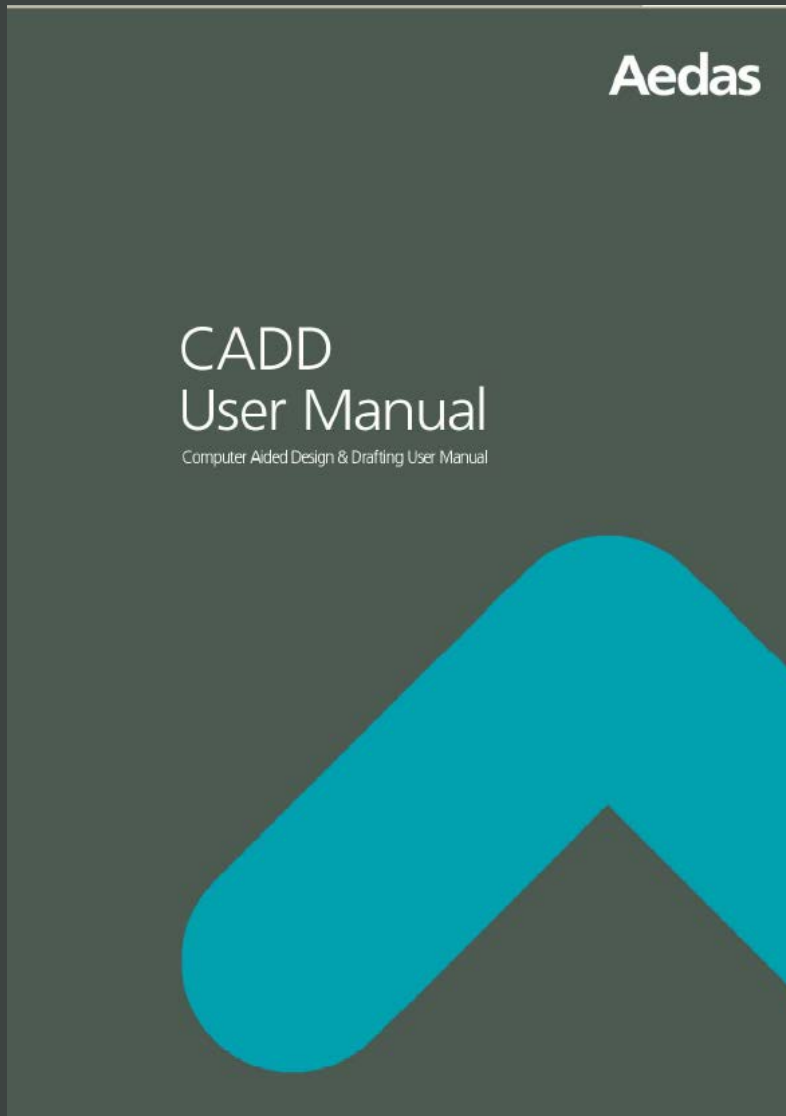
Material Codes

Find **ST1** code under
Division **09**

Note Spec Section
09 30 33 on the right.



CAD System



Controls: Use of CAD

Adopts CSWP

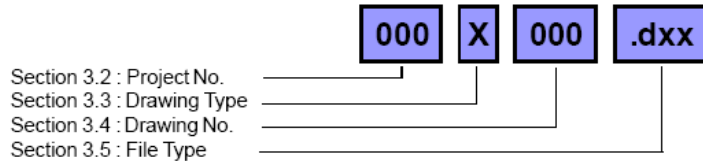
Same system as most major clients

Archiving



3.0 DRAWING FILE NAMING CONVENTION

3.1 Drawing Numbering Convention



3.2 Project Number

The last 3 digits of the 5 digit project number shall be used for the project number. For example, if the project number is 03123, only 123 shall be used and displayed. The year will be omitted.

3.3 Drawing Type

The "X" shall be replaced with a Drawing Type Code. "D" for Design, "K" for Submission.

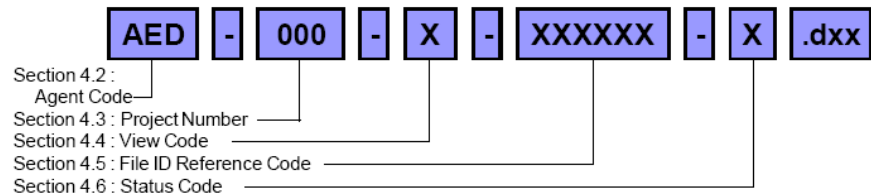
3.4 Drawing Number

Drg No.	Description of Category
000-009	Cover Sheet, Drawing Lists & Code Symbols
E01-E99	Existing, Survey Info. Floor Plans, Sections, Elevations & Location Plans
010-059	Floor Plans, General Arrangement.
060-099	Reflected Ceiling Plans
100-149	Elevations
150-199	Sections
200-299	Detailed Sections & Elevations
300-349	Detailed Floor Plans & Ceiling Plans i.e. Core Plans, Lobby Areas etc.
350-399	Stair Plans, Sections, Elevations & Details
400-449	Toilet Plans, Sections, Elevations & Details
450-499	Kitchen, Pantry, Cold Store Plans, Sections, Elevations & Details
500-599	External Envelope Details, i.e. Walls, Floors, Roof, Metal Work & Interface with Internal Elements
600-699	Internal Details i.e. Floor, Walls Ceiling, Joinery & Interface with External Elements
700-749	External Elements - Landscape Plans, Sections, Elevations & Details

4.0 MODEL FILE NAMING CONVENTION

4.1 Model File Naming Convention

Model (Reference Files or XRef's) File naming shall follow the example below:



4.2 Agent Code

The Agent Code "AED" will be used for all Aedas Drawing Model Files.

4.3 Project Number

The project number will be incorporated into the filename to ensure that each file has a unique filename. Only the last 3 digits of the 5 digit project number will be used. The year will be omitted.

4.4 View Code

The view code will represent the content of the file.

View Code	Description	Folder Location
D	Detail	\\CADD \\ MODEL \\ DETAIL
E	Elevation	\\CADD \\ MODEL \\ ELEVATION
G	General (Grid, Title Sheet)	\\CADD \\ MODEL \\ PROJ_DATA
I	Isometric / 3D	\\CADD \\ MODEL \\ 3D
K	Sketch	\\CADD \\ MODEL \\ SK
O	Others (Cover Sheet, Schedule)	\\CADD \\ MODEL \\ OTHERS
P	Plan	\\CADD \\ MODEL \\ PLAN
S	Section	\\CADD \\ MODEL \\ SECTION



5.0 LAYER NAMING SYSTEM

5.1 Layer Naming System

This will be in accordance with the CSWP (CAD Standard for Works Projects) from the Government of Hong Kong.

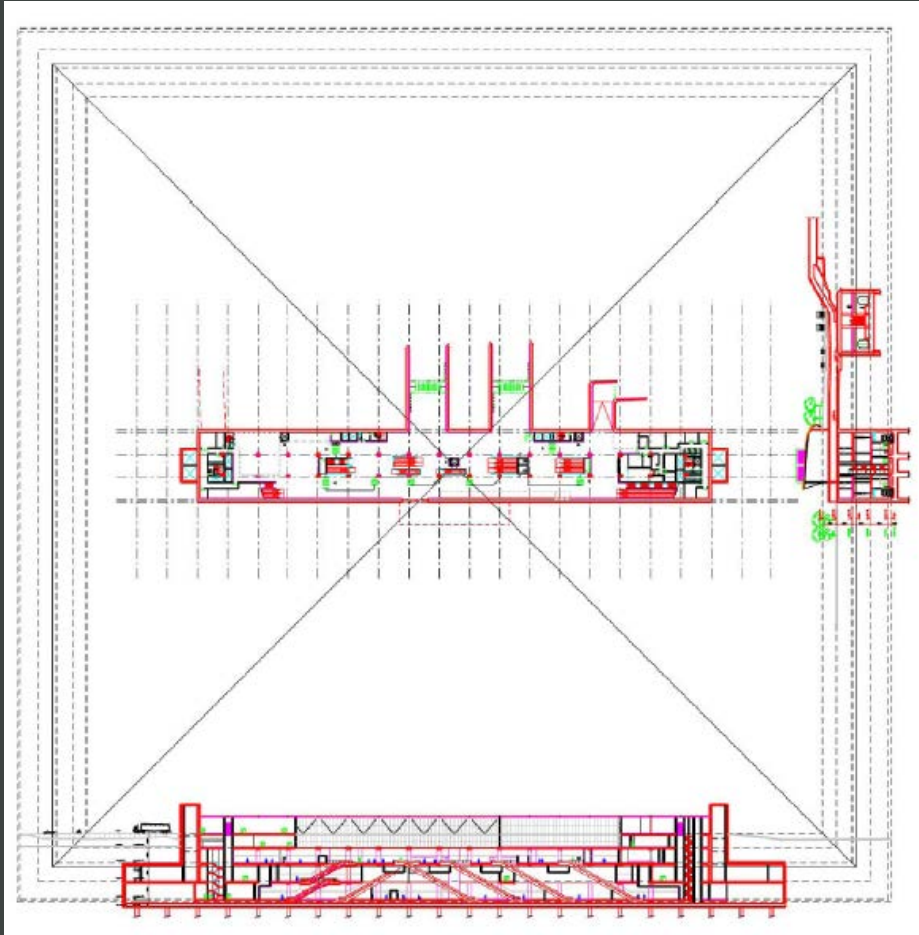
CLASSES 000 - 099 : GENERAL

000 - 009	VACANT	
000		
001		
002		
003		
004		
005		
006		
007		
008		
009		
010 - 019	TITLES AND FRAMES	
010	Titles and Frames (Grouped)	
011	Frame	
012	Drawing Number	
013	Drawing Title	
014	Drawing creation information	
015	QA data e.g. automatic time/date/username ref.	
016	Scale	
017	Drafting Body	
018	Copyright	
019		
020 - 029	GRIDS	
020	Grids (Grouped)	
021	National grid	
022	National grid text	
023	Site grid	
024	Site grid text	
025	Building / structure grid	
026	Building / structure grid text	
027	Geodetic Datum	
028	Setting Out Lines	
029		
030 - 039	DIMENSIONS	
030	Dimensions (Grouped)	
031	Dimensions	
032	Place levels	
033	Chainage	
034	Setting out tables	
035	Coordinates	
036		
037		
038		
039		
040 - 049	TEXT (XXX1 ENGLISH, XXX2 CHINESE)	
040	Text (Grouped)	
041	Titles	
042	Signs	
043	Descriptions	
044	Notes	
045	Schedules	
046	Legends	

TEXT
文字

CLASSES 100 - 199 : GROUND, SUB-STRUCTURE

100 - 109	VACANT	
100		
101		
102		
103		
104		
105		
106		
107		
108		
109		
110 - 119	GROUND	
110	Ground (Grouped)	
111	Ground relief	
112	Geological boundaries and features	
113	Ground composition	
114	Ground water	
115	Instrumentation	
116	Ground Samples e.g. borehole strips	
117	Settlement	
118	Geological Contours/Isopachs	
119	Parts and accessories	
120 - 129	EARTHWORKS	
120	Earthworks (Grouped)	
121	Ground profiling	
122	Ground treatment	
123	Dredging	
124	Filling	
125	Slopes	
126	Berm	
127	Trench	
128	Reclamation	
129	Parts and accessories	
130 - 139	FLOOR BEDS	
130	Floor Beds (Grouped)	
131	Hard surfaces e.g. ground floors	
132		
133		
134	Soft surfaces e.g. planted, unplanted beds	
135		
136	Ground underwater e.g. pools	
137		
138	Other types of floor beds	
139	Parts and accessories	
140 - 149	TUNNELS	
140	Tunnels (Grouped)	
141	Tunnel walls	
142	Tunnel lining	
143	Portals	
144	Cross-passages	
145	Emergency passage	
146	Shafts	

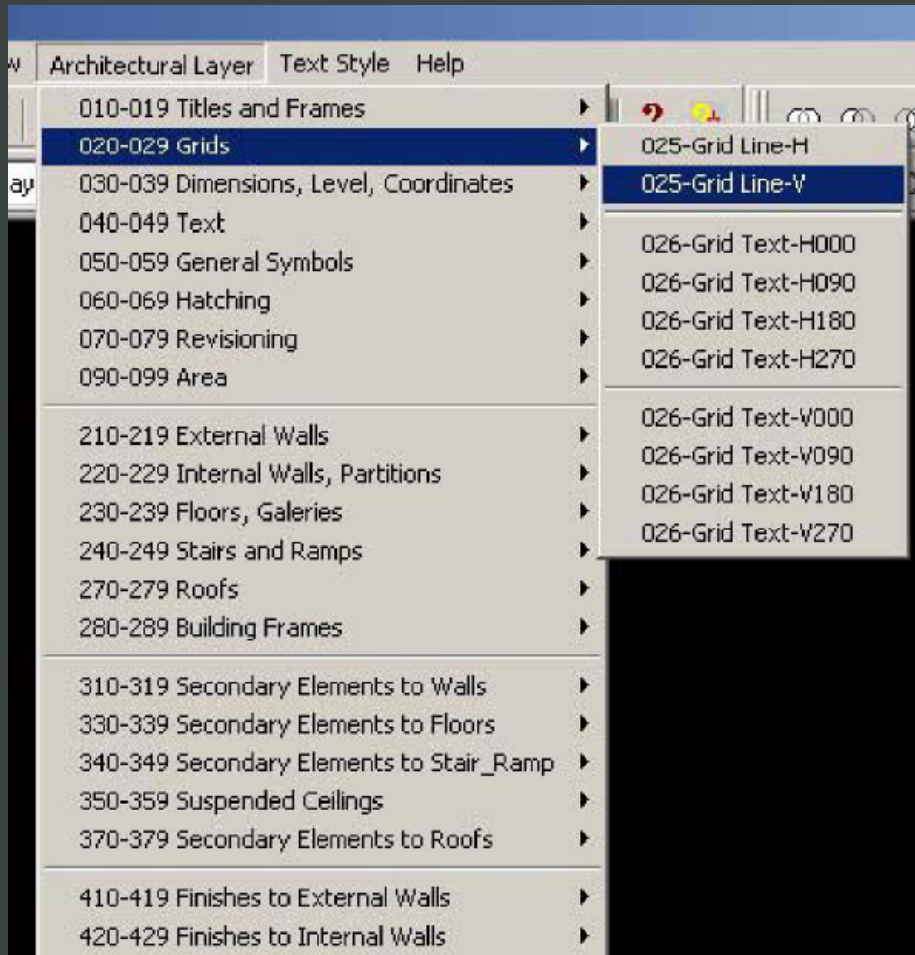


“Magic Square” Control

Structured CAD
information

Most efficient method

Referencing of
Graphical & Non-
graphical information



Automated CAD Usage

Pull down CSWP menu

Tally with
BD/LD/ArchSD system



Web-based Project Collaboration (Aconex)



Memorandum

☐ To:	Mr Tim Osborne - Urbis Hong Kong
☐ Cc:	Ms Jane Fare - Aedas Ltd. Mr Daniel Patzold - Aedas Ltd. Mr Marcus Swetnam - Aedas Ltd.
From:	Mr Goncalo Saldanha - Aedas Ltd.
Sent:	Wednesday, 11 October 2006 02:52:22 PM EST
Attribute:	Zone 5 - External Works
Status:	Responded
Response:	Your response is required by
Subject:	Fwd: 8140-EXT-MAT-061B (L14 lamp pole bracket mount Submission for External Feature Lighting and Street Light

Urbis

Your comment / approval please.

Regards

Goncalo Saldanha

Ocean Park Master Redevelopment Plan

Ocean Park
Aberdeen
- Hong Kong



In Ref To: L&B-TRANSMIT-000032

OPC-MEMO-000625

Memorandum

☐ To:	Mr Daniel Patzold - Aedas Ltd.(Confidential) Ms Chris Chan - Ocean Park Corporation(Confidential)
☐ Cc:	Ms Lisa Cheung - Aedas Ltd.(Confidential) Mr Christopher Kretowicz - Aedas Ltd.(Confidential) Mr Peter Smulders - Attractions International(Confidential)
From:	Mr Edward Fung - Ocean Park Corporation(Confidential)
Sent:	Monday, 28 May 2007 06:41:30 PM HKT
Attribute:	CI07-AC - Aqua City Main Works
Secondary Attribute:	172 - Cost Estimates
Status:	N/A
Subject:	Re: Auqa City - 90% DD Estimate

Daniel,

For the current over-budget amount, which is probably less than 1% of the budget, there is no need to do any cost reduction designs. Besides, only Ocean Park can authorize any change in scope - additions or deletions.

Edward

From: Daniel Patzold
Sent: 28/05/2007 05:54:20 PM HKT
To: Chris Chan, Edward Fung ; Lisa Cheung, Christopher Kretowicz
Mail Number: AED-TRANSMIT-000165
Subject: Fwd: Auqa City - 90% DD Estimate

Dear Edward,



Computerized Handling of Information

Graphical

CAD SYSTEMs

e.g. AutoCAD,
Microstation
2D & 3D

Non-Graphical

Word (Word Processing)

Excel (Spreadsheet)

Access (Data Base)

MS Project (Time)

BQ Software (\$\$\$)

Electronic communications

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As a result.....

Inefficiencies, mistakes and delays account for \$200 billion of the \$650 billion spent on construction in America every year.

New wiring, The Economist, January 13th, 2000

In the UK alone, the annual cost of rectifying construction defects caused by poorly detailed drawings and operatives being given incorrect instructions has been put at £1bn (≈\$1.66bn).

IT Construction Best Practice service, <http://www.itcbp.org.uk>

The process of construction is itself repeated in its essentials from project to project. Indeed, research suggests that up to 80% of inputs into buildings are repeated.

M4i, <http://www.m4i.org.uk>



Information

Graphical

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

BIM

Non-Graphical

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

Building Information Modeling

信息化建筑模型



Building Information Modeling (BIM)

信息化建築模型

Definition:

BIM is an **innovative** approach to **architectural design** and **documentation** supporting all phases of design and all the architectural **drawings** and **schedules** required for the design, construction and management of a building project.



Building Information Modeling (BIM)

Misconceptions:

1 BIM



3D CAD

Architectural Desktop (Autodesk)

Revit (Autodesk)

ArchiCAD (Graphsoft)

Triforma (Bentley)

Digital Project (Gehry Technology)

AutoCAD (Autodesk)

Microstation (Bentley)

2 BIM

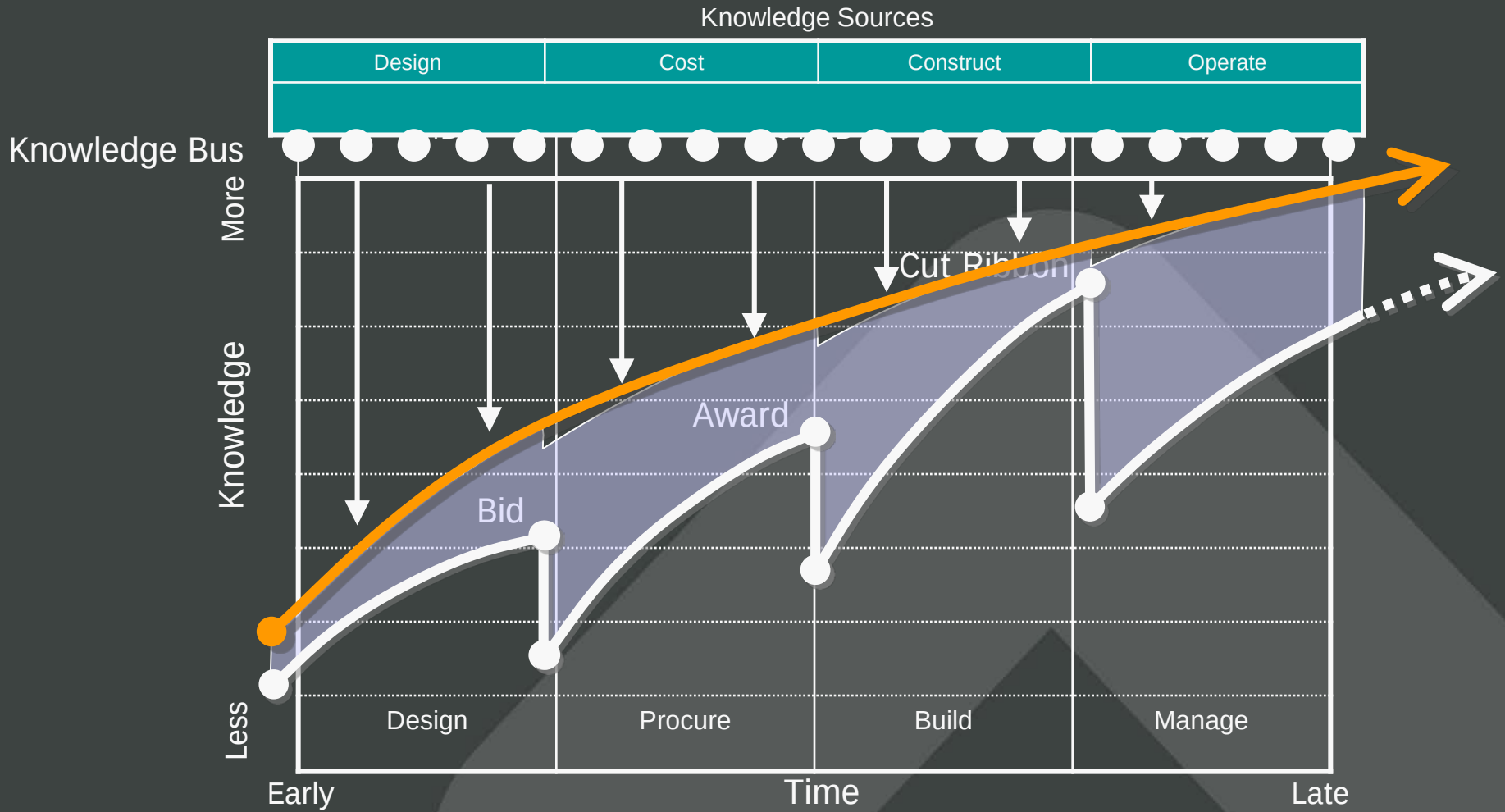


Clash Analysis only



Information “Backflow”

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Building Information Model

Aedas

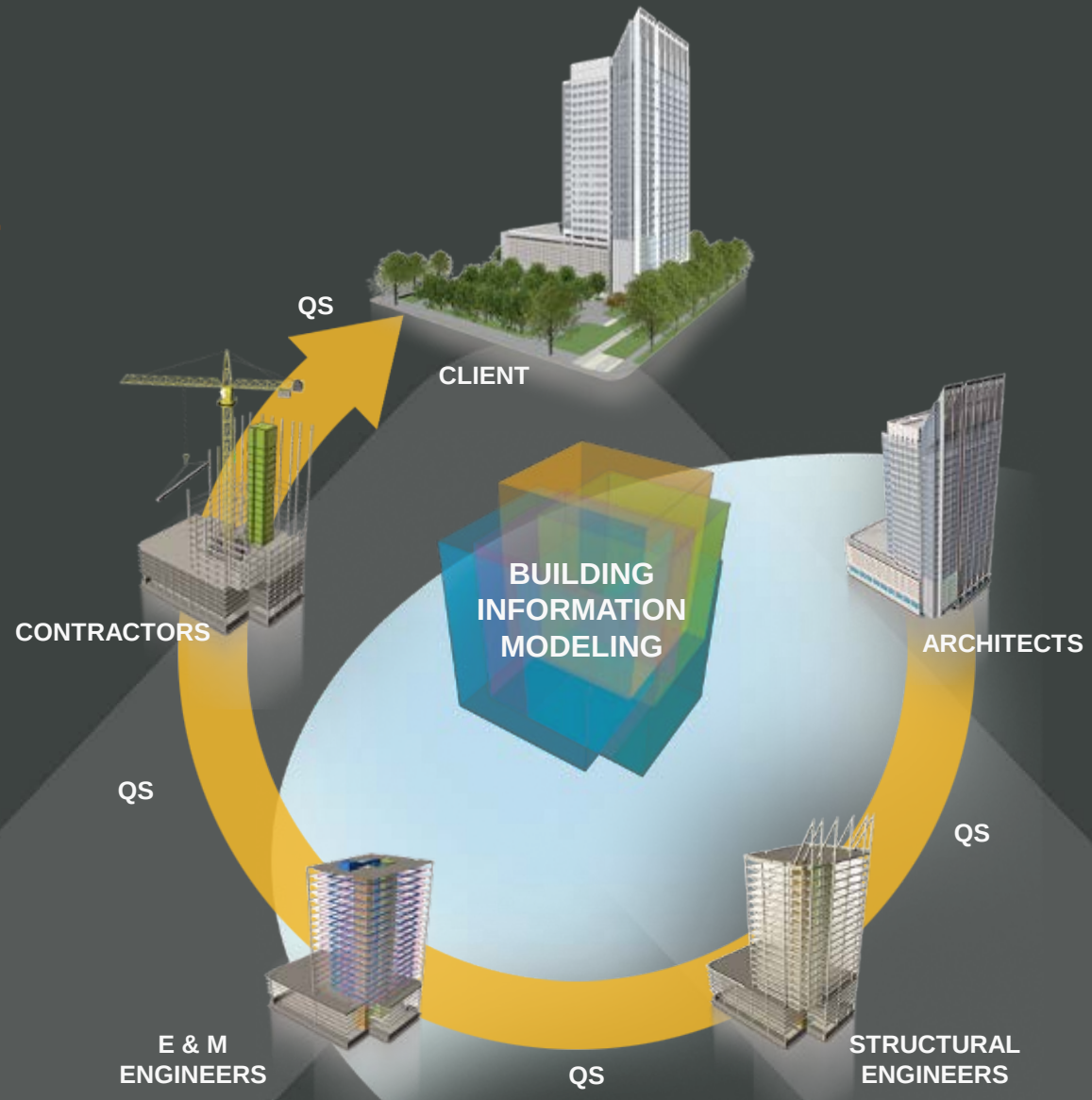
Graphical Data

+

Non-Graphical
Data

+

New workflow





Use of Building Information Modeling (BIM)

- 1 Visualization
- 2 Production
- 3 Co-ordination/ Collaboration
- 4 Quantity Taking & BQ
- 5 Statutory submission
- 6 Analysis
- 7 Supply Chain Integration

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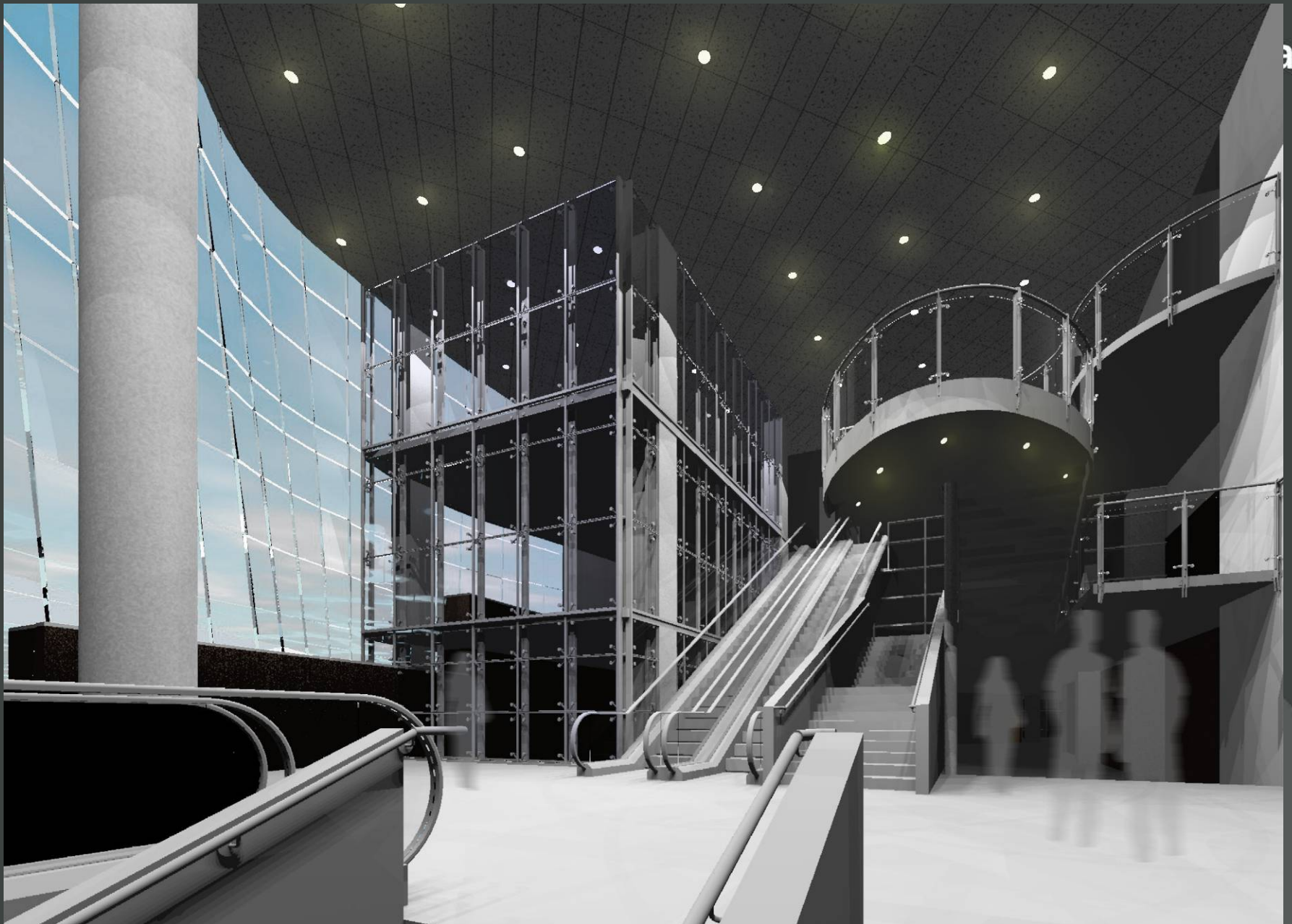


PERSPECTIVE



CUT AWAY SECTIONS





AS

3D DESIGN





Aedas

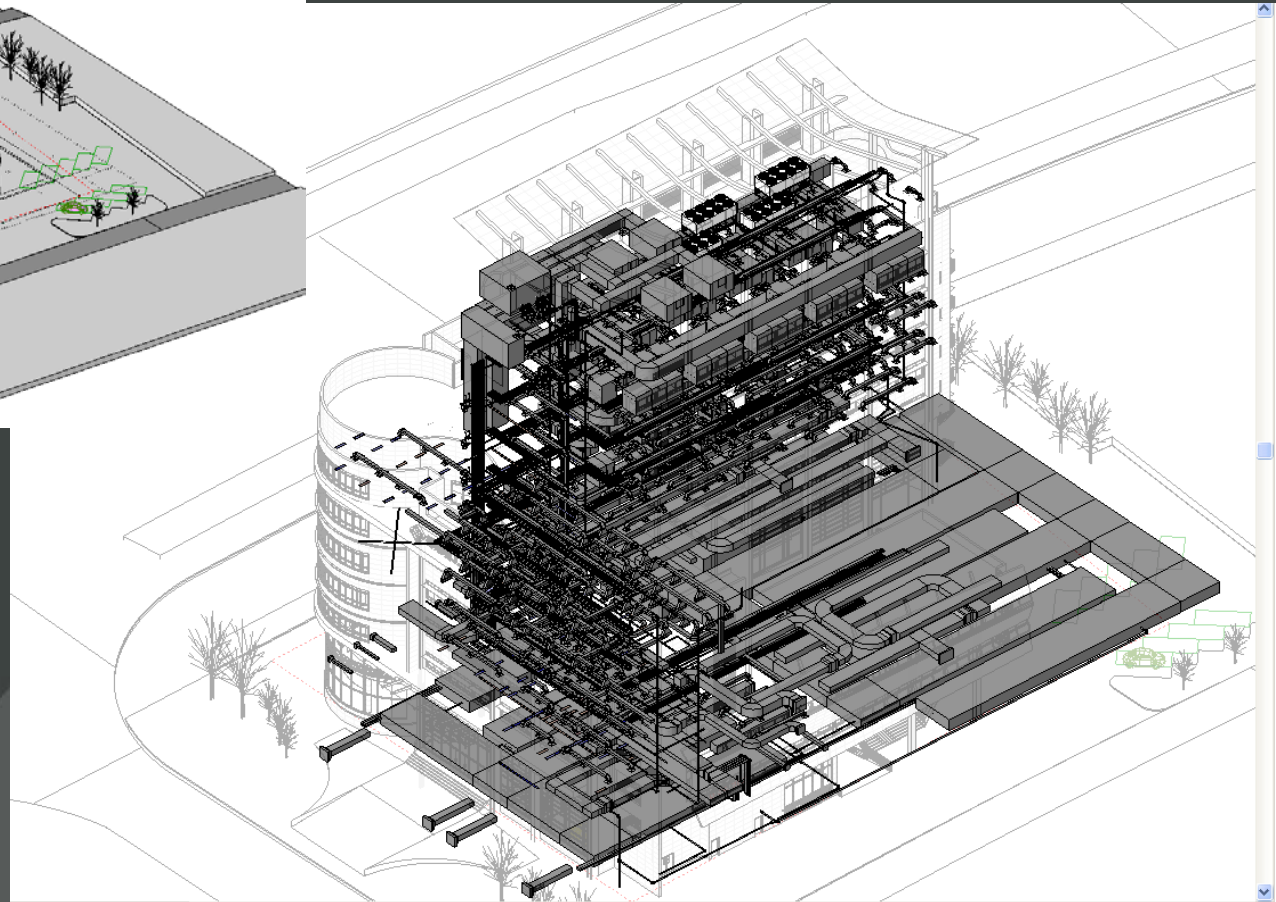
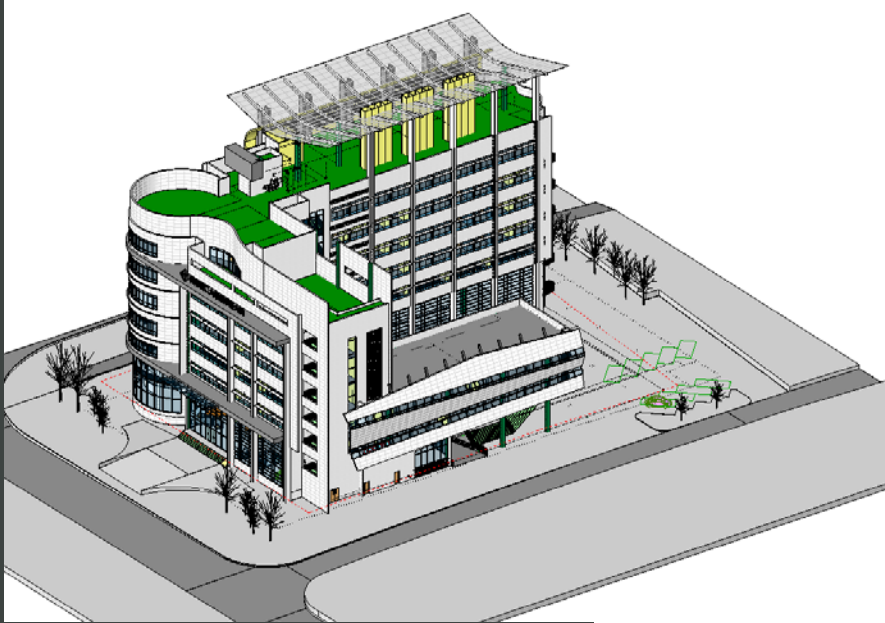






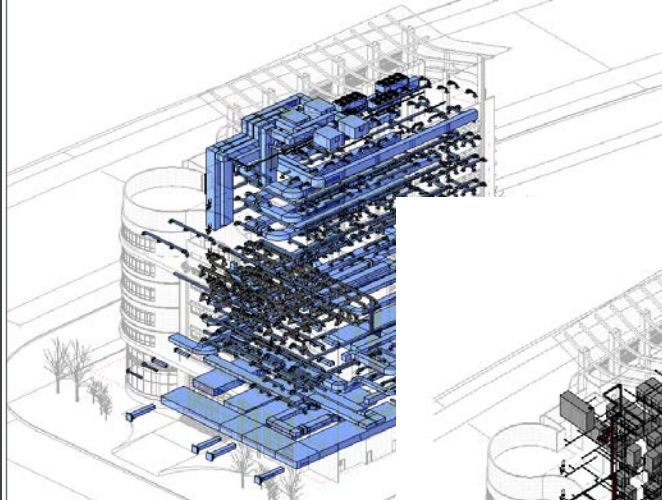
CO-ORDINATION / COLLABORATION

Work Flow – Establish BIM Models

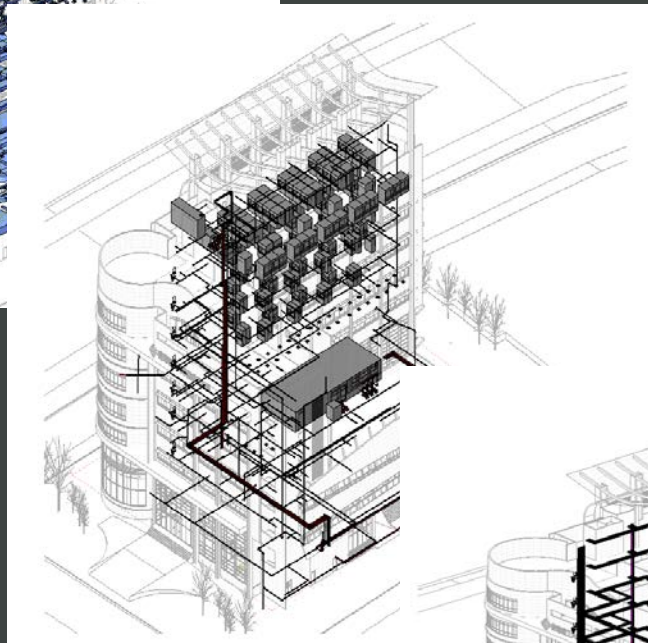




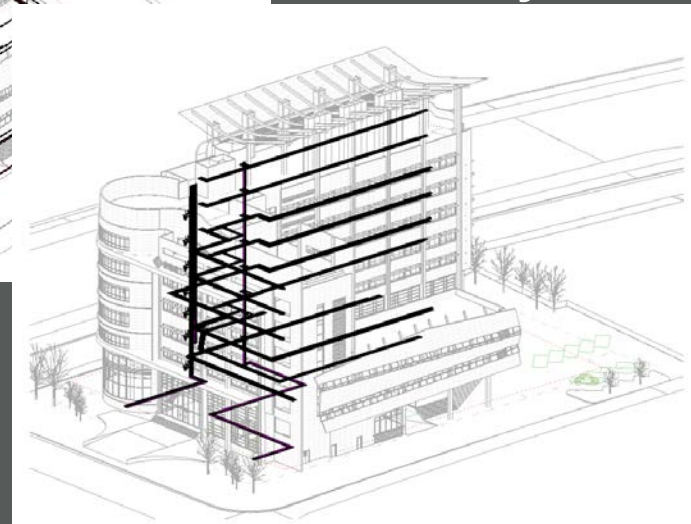
HVAC Installation



Fire Services Installation

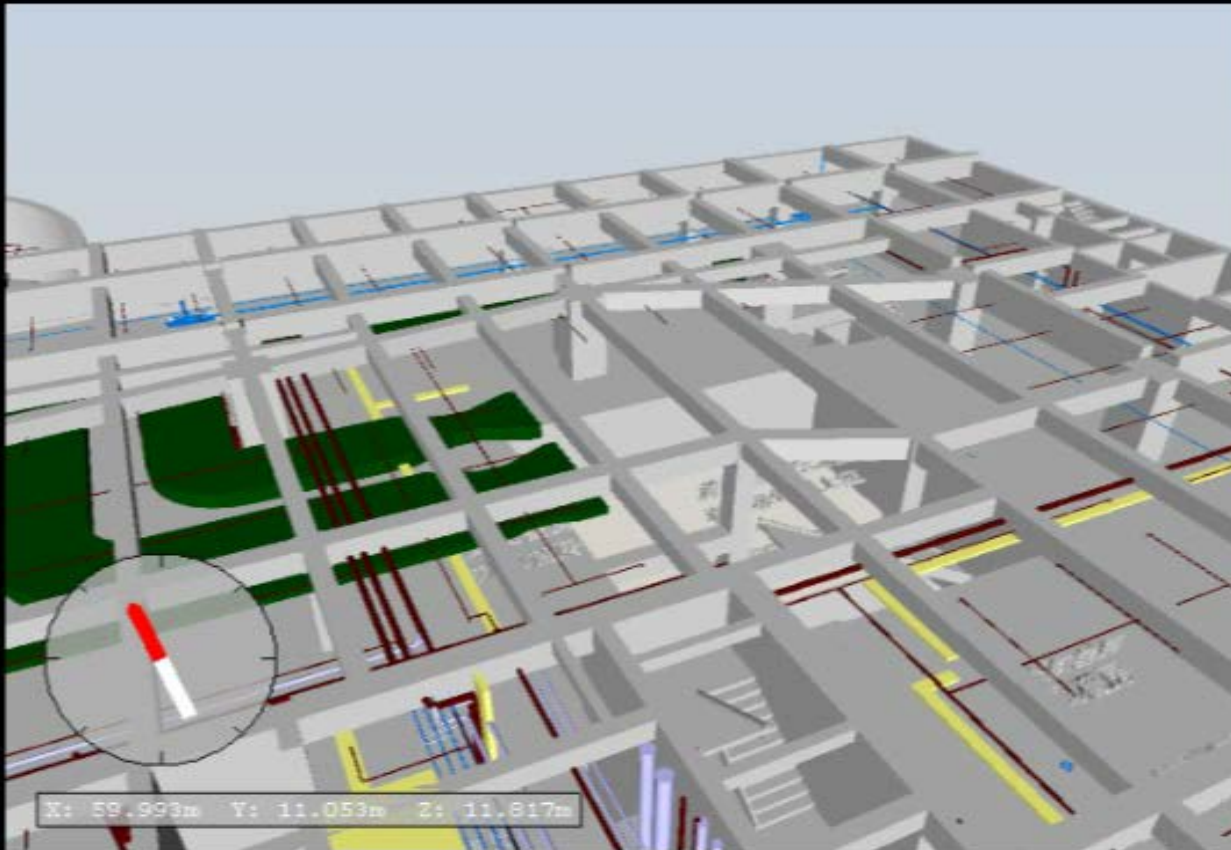


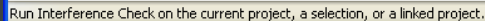
Electricity Installation





Work Flow - Clashes Identification Processes





Work Flow – Clashes Report

Aedas

The screenshot displays the Autodesk Revit Systems 2 interface. The main window shows a 3D view of a building's mechanical system, specifically a fan coil unit (M_Fan Coil Unit) with a horizontal basic concealed plenum (M_02). The model is rendered in blue and white, showing various pipes, ducts, and structural elements. A red line highlights a specific pipe in the model.

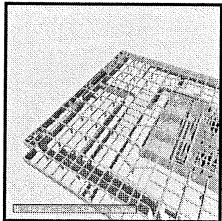
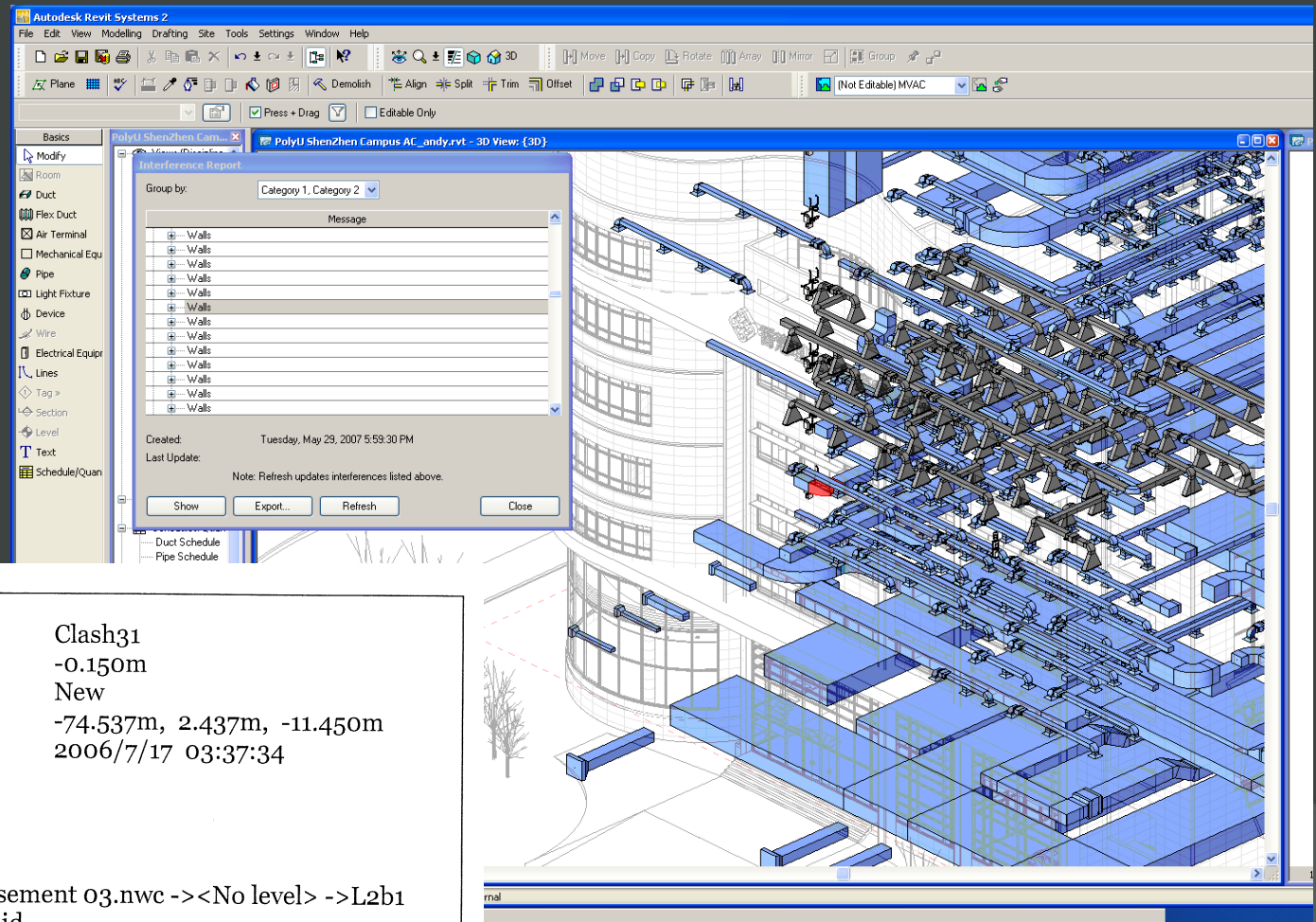
An "Interference Report" dialog box is open in the foreground. It has a "Group by:" dropdown set to "Category 1, Category 2". The "Message" list contains 14 entries, all labeled "Pipes". The "Created:" field shows "Tuesday, May 29, 2007 6:13:54 PM". The "Last Update:" field is empty. A note below the fields states: "Note: Refresh updates interferences listed above." The dialog box has four buttons: "Show", "Export...", "Refresh", and "Close".

The left sidebar shows the "Basics" tab selected. The "Modify" panel is active, showing options for Room, Duct, Flex Duct, Air Terminal, Mechanical Equ, Pipe, Light Fixture, Device, Wire, Electrical Equip, Lines, Tag, Section, Level, Text, and Schedule/Quantities. The "View" panel shows options for Architectural, Drafting, Mechanical, Piping, and Plumbing. The "Schedule/Quantities" panel shows options for Duct Schedule, Pipe Schedule, Room Schedule, and Wall Schedule. The "Families" panel shows options for Air Terminals, Annotation Symbols, Ceilings, Basic Ceiling, Generic, and Plaster.

The status bar at the bottom indicates the current view is "3D View: {3D}" and the scale is "1:150". The page number is "Page 4", and the section is "Sec 1". The current location is "4/4 At 3.1cm Ln 2 Col 2". The status bar also shows "REC TRK EXT OVR English (U.S.)".

Work Flow – Clashes Report

Aedas



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

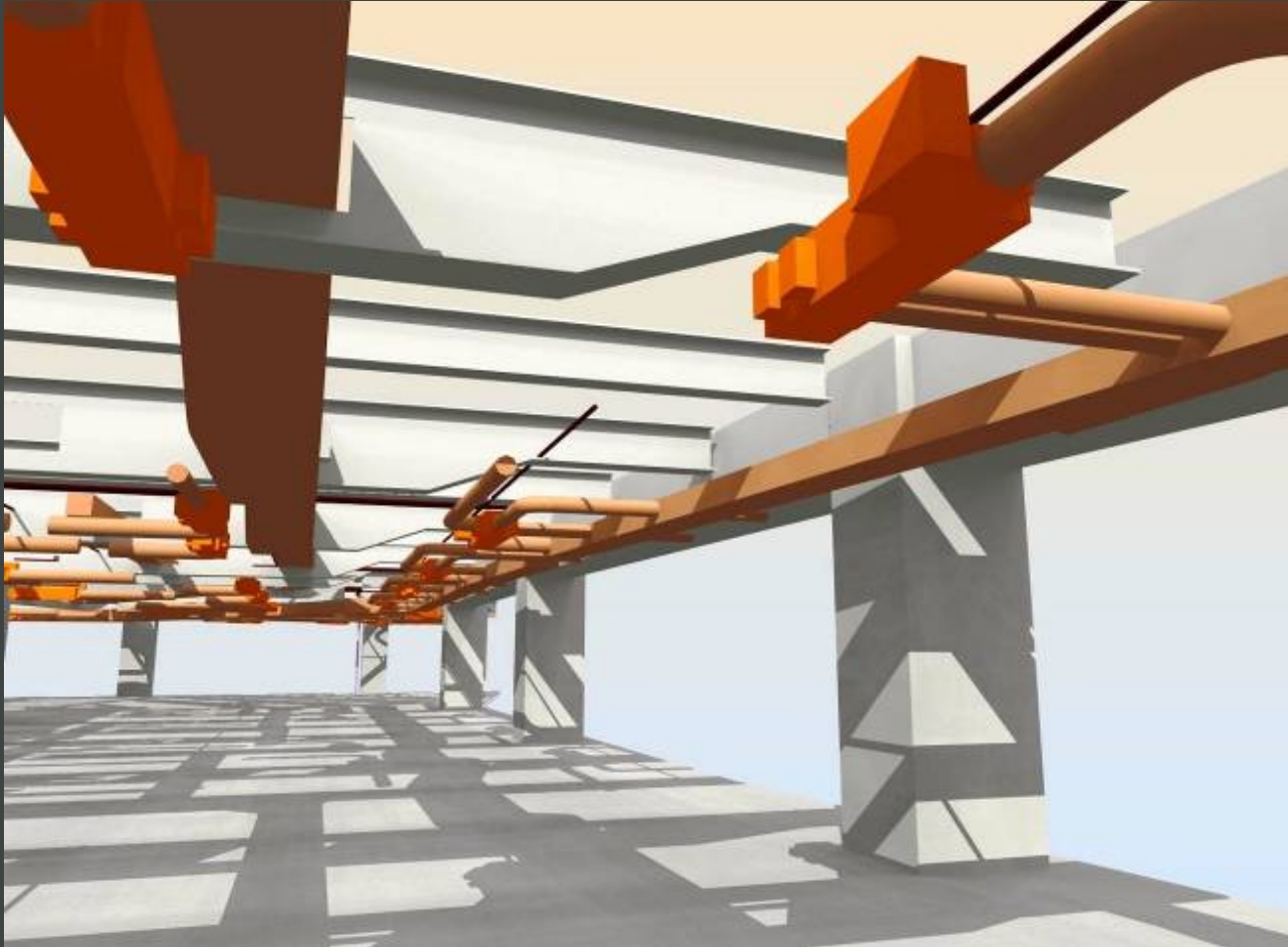
Path File ->File ->Basement 03.nwc -><No level> ->L2b1
 500 x 700 ->L2b1 500 x 700 ->Solid

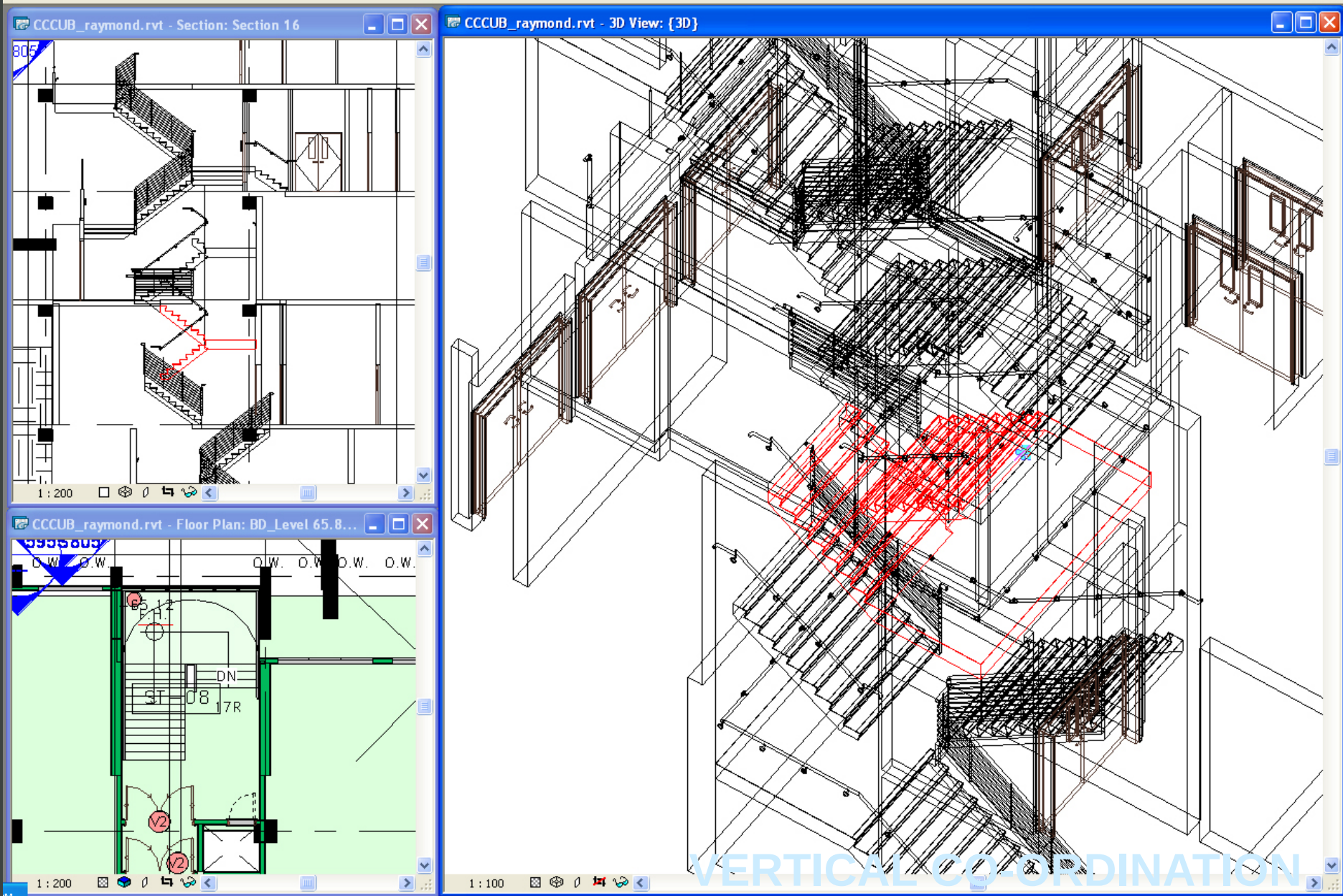
Item 2

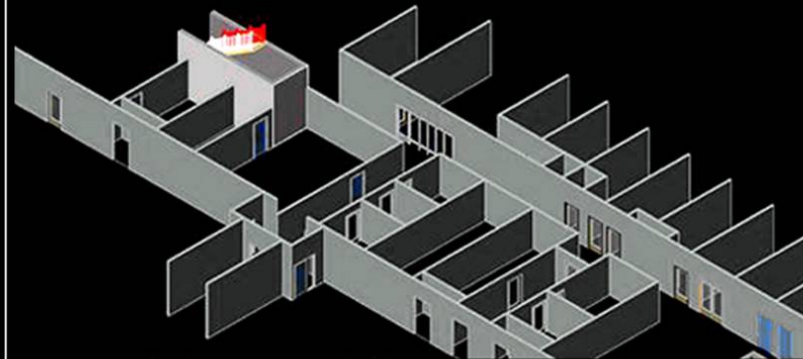
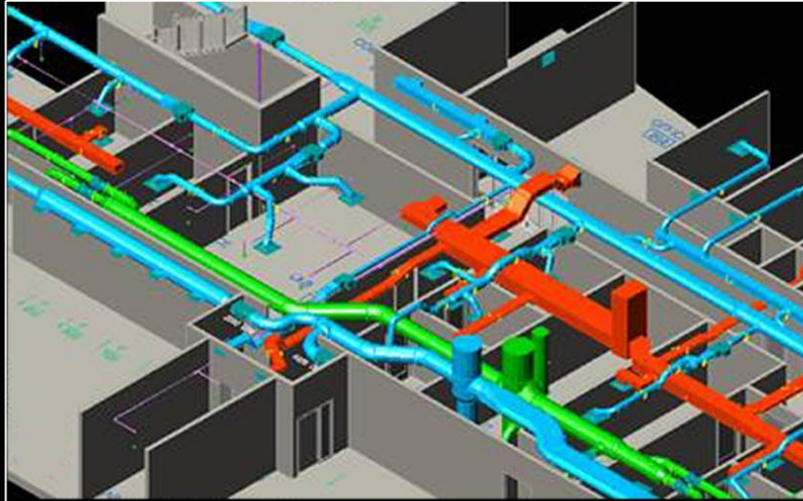
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 >Duct



Work Flow – BIM Model Revision

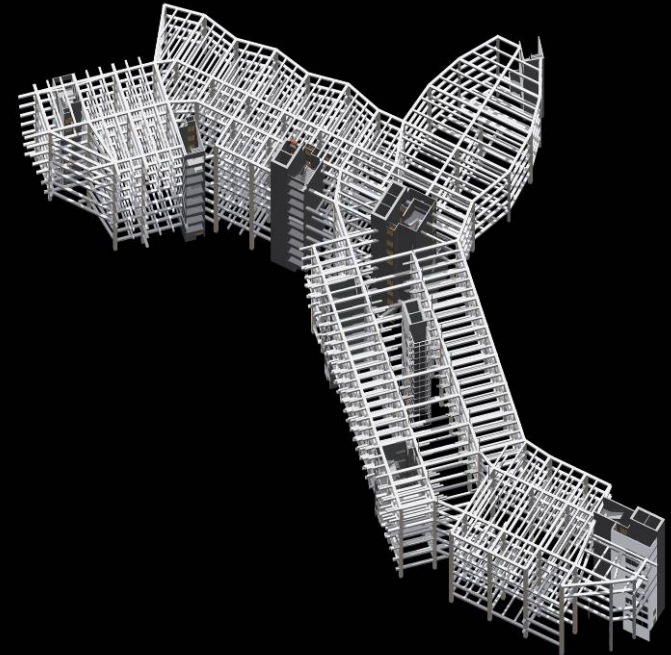
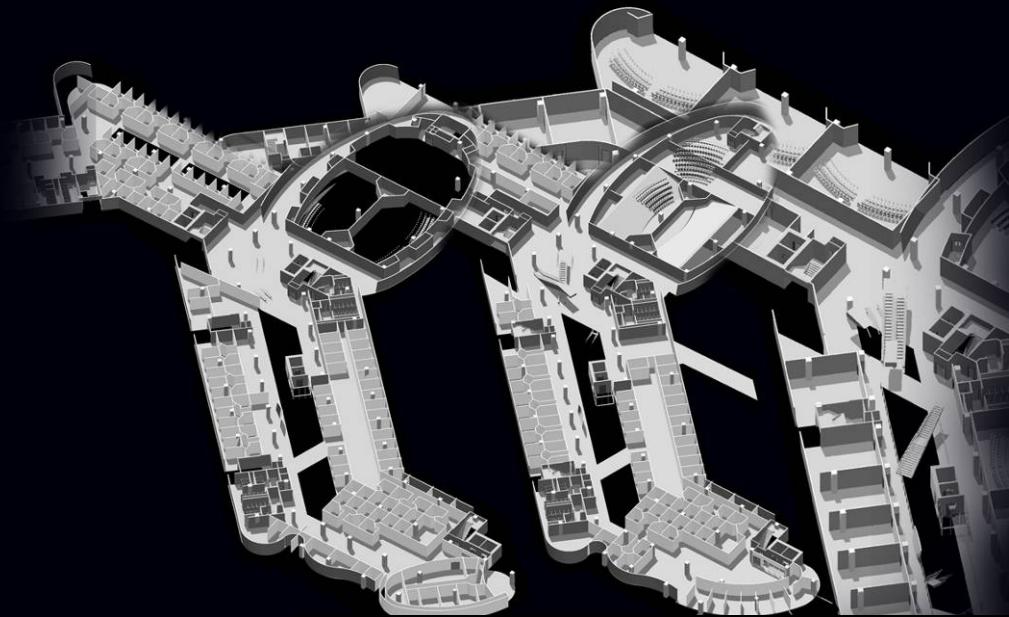




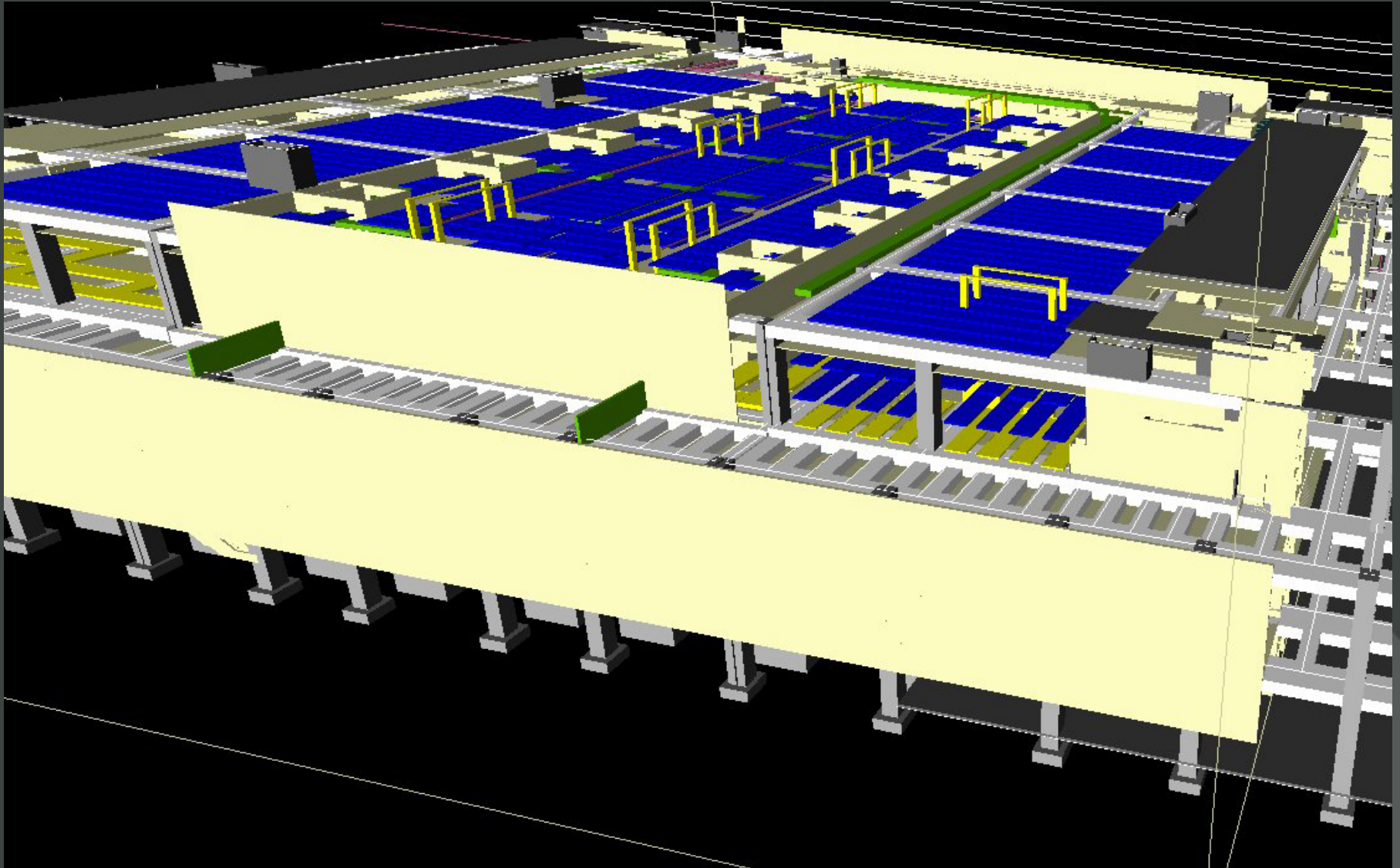


Clash Analysis
Full set of construction
Combined Services Drawings
produced

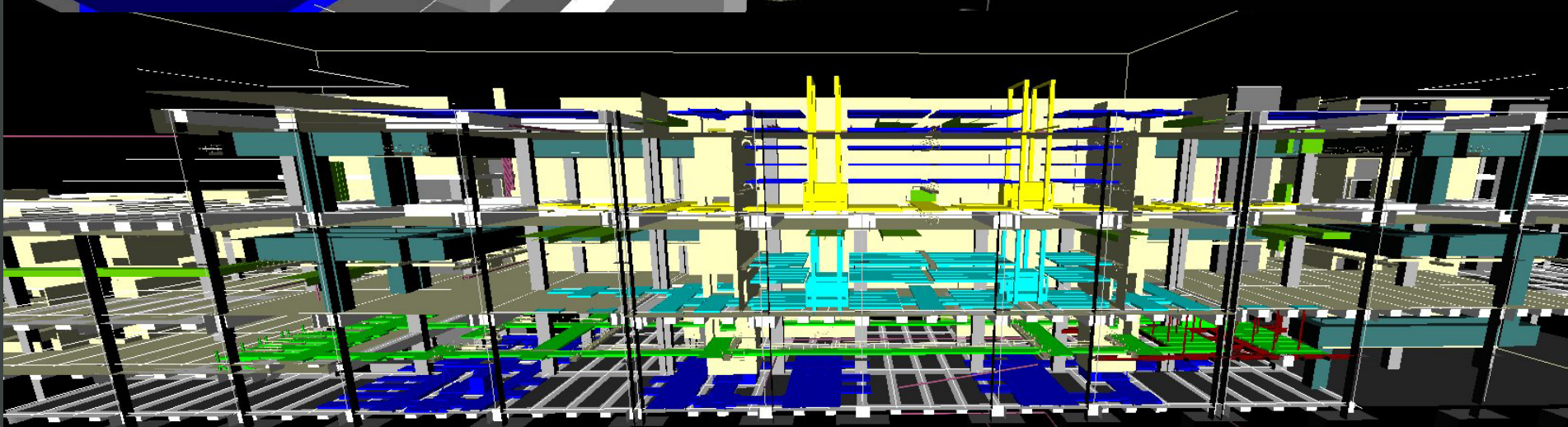
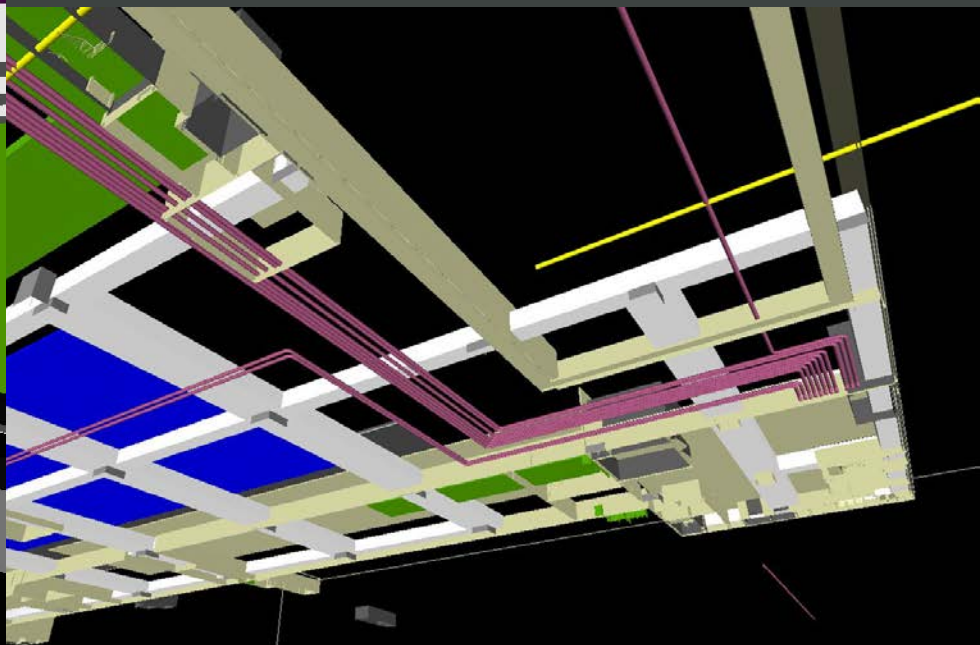
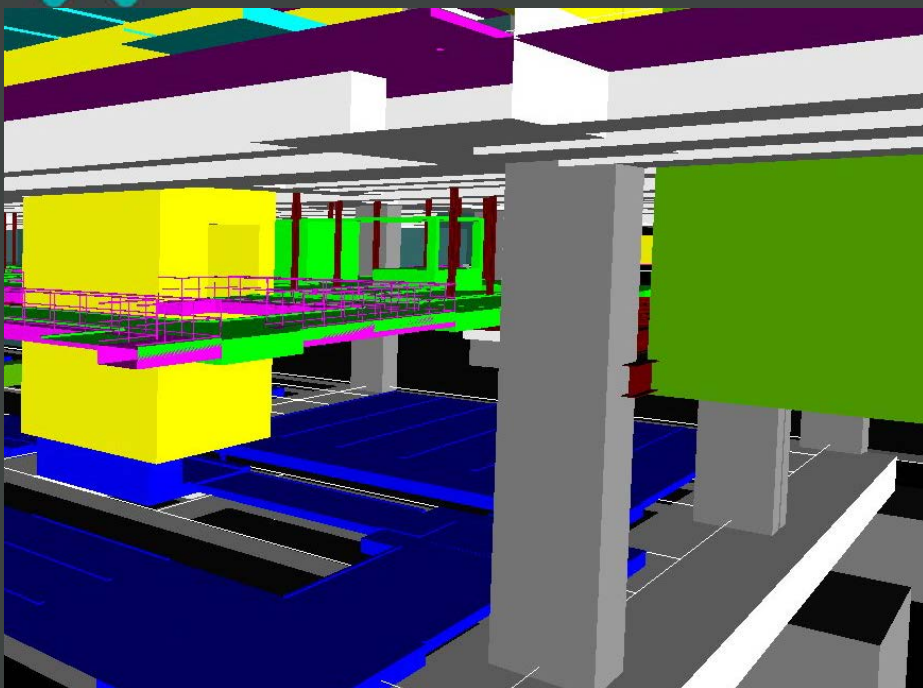
Close-up collaboration



DISCIPLINES COLLABORATION



DISCIPLINES COLLABORATION



物流大樓項目

DISCIPLINES COLLABORATION

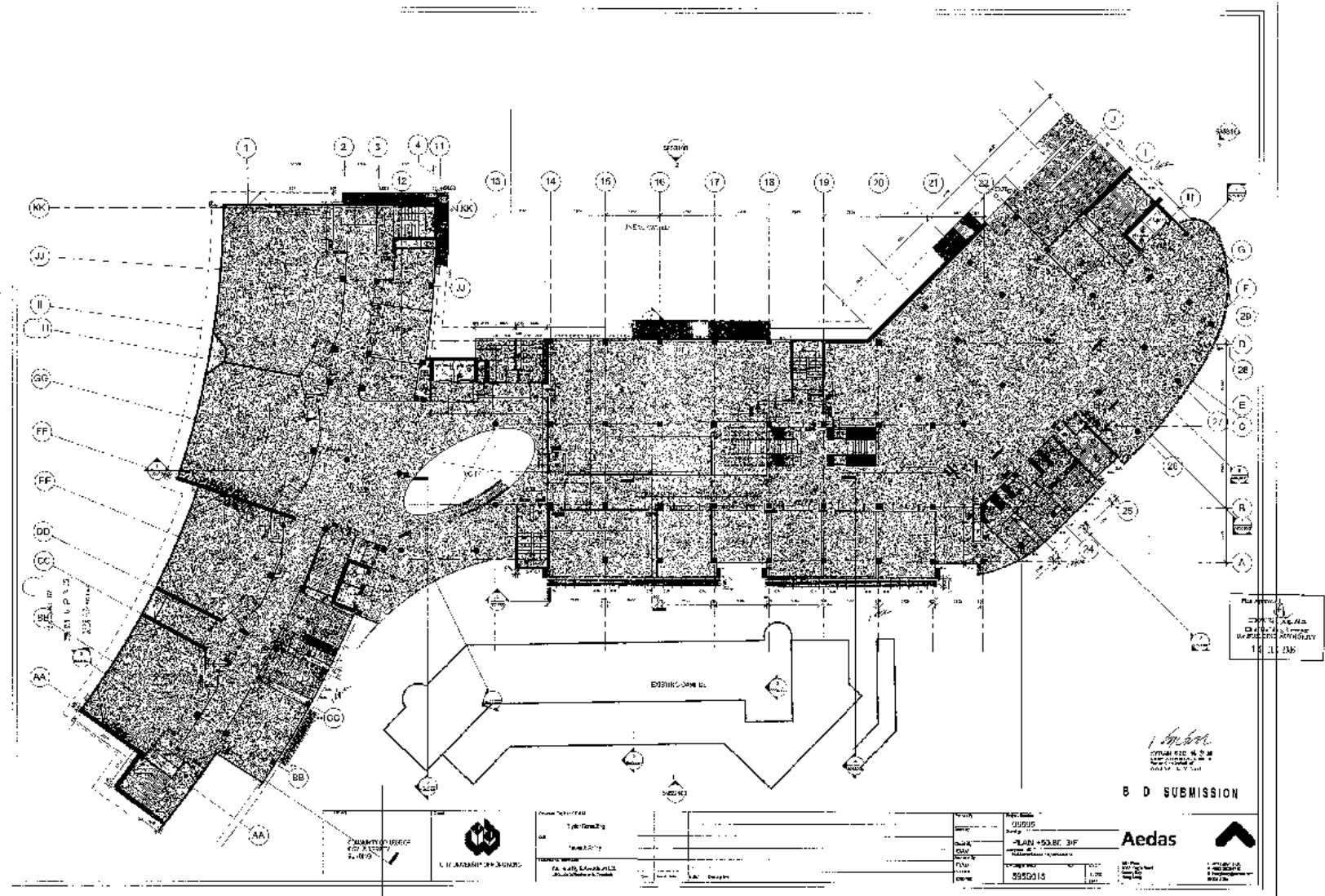


Wall Schedule							
Family	Family and Type	Length	Width	Count	Area	Volume	Aedas
Basic Wall: AED-Concrete - 50mm + Render One sides							
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.548 m2	0.027 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.548 m2	0.027 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.548 m2	0.027 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.548 m2	0.027 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.548 m2	0.027 m3	
0.548 m2: 5		1000		5	2.738 m2	0.137 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
0.578 m2: 6		1200		6	3.465 m2	0.173 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.608 m2	0.030 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.608 m2	0.030 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.608 m2	0.030 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.608 m2	0.030 m3	
0.608 m2: 4		800		4	2.430 m2	0.122 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.638 m2	0.032 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.638 m2	0.032 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.638 m2	0.032 m3	
0.638 m2: 3		600		3	1.913 m2	0.096 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	250	50	1	0.730 m2	0.037 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	250	50	1	0.730 m2	0.037 m3	
0.730 m2: 2		500		2	1.460 m2	0.073 m3	

DISCIPLINES COLLABORATION



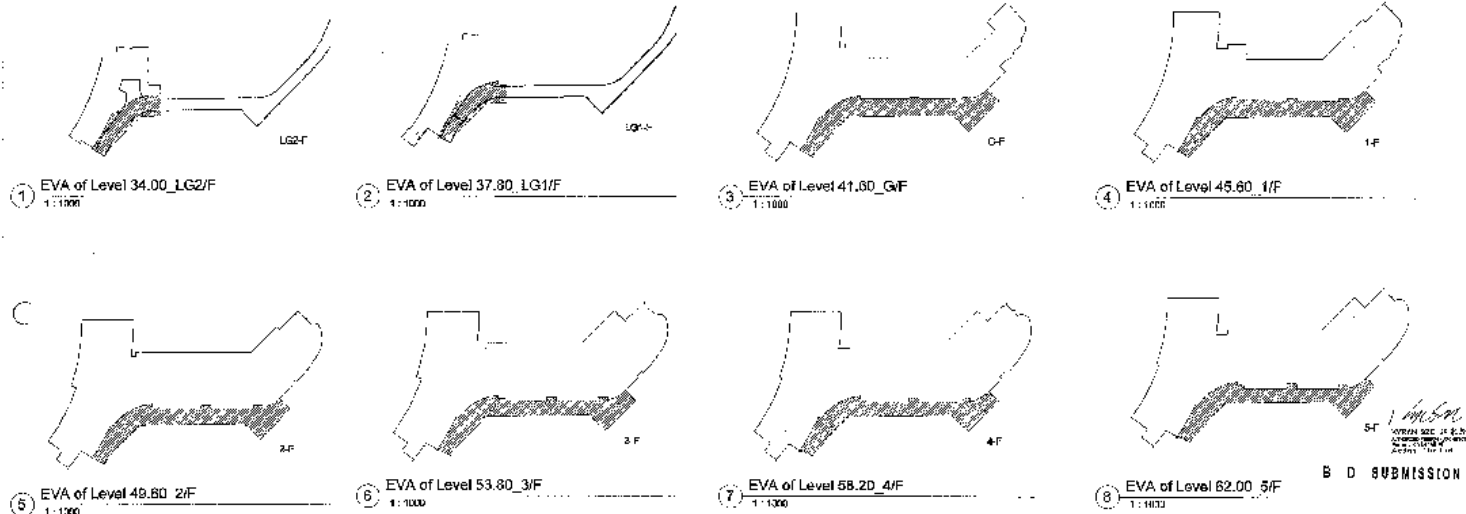
Aedas



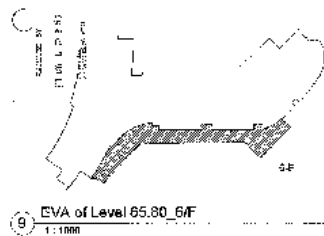


STATUTORY SUBMISSION

Aedas



B D SUBMISSION



*Hatch area represents the total length of the building facade served by the EVA

CALCULATION ON TOTAL LENGTH OF BUILDING FACADE TO BE SERVED BY EVA AND PERCENTAGE OF SUCH LENGTH OVER THE TOTAL LENGTH OF ALL THE PERIMETER WALLS OF THE BUILDING

CALCULATION ON TOTAL LENGTH OF BUILDING FACADE TO BE SERVED BY EVA AND PERCENTAGE OF SUCH LENGTH OVER THE TOTAL LENGTH OF ALL THE PERIMETER WALLS OF THE BUILDING									
FLOOR	LEVEL	AREA (sqm)	PERIMETER (m)	EVA (sqm)	PERCENTAGE (%)	FLOOR	LEVEL	AREA (sqm)	PERIMETER (m)
LG2/F	34.00	1,100.00	100.00	1,100.00	100.00	2/F	49.80	1,100.00	100.00
LG1/F	37.80	1,100.00	100.00	1,100.00	100.00	3/F	53.80	1,100.00	100.00
G/F	41.60	1,100.00	100.00	1,100.00	100.00	4/F	58.20	1,100.00	100.00
1/F	45.80	1,100.00	100.00	1,100.00	100.00	5/F	62.00	1,100.00	100.00
2/F	49.80	1,100.00	100.00	1,100.00	100.00	6/F	65.80	1,100.00	100.00
3/F	53.80	1,100.00	100.00	1,100.00	100.00				
4/F	58.20	1,100.00	100.00	1,100.00	100.00				
5/F	62.00	1,100.00	100.00	1,100.00	100.00				
6/F	65.80	1,100.00	100.00	1,100.00	100.00				

CALCULATION ON TOTAL LENGTH OF BUILDING FACADE TO BE SERVED BY EVA AND PERCENTAGE OF SUCH LENGTH OVER THE TOTAL LENGTH OF ALL THE PERIMETER WALLS OF THE BUILDING									
FLOOR	LEVEL	AREA (sqm)	PERIMETER (m)	EVA (sqm)	PERCENTAGE (%)	FLOOR	LEVEL	AREA (sqm)	PERIMETER (m)
LG2/F	34.00	1,100.00	100.00	1,100.00	100.00	2/F	49.80	1,100.00	100.00
LG1/F	37.80	1,100.00	100.00	1,100.00	100.00	3/F	53.80	1,100.00	100.00
G/F	41.60	1,100.00	100.00	1,100.00	100.00	4/F	58.20	1,100.00	100.00
1/F	45.80	1,100.00	100.00	1,100.00	100.00	5/F	62.00	1,100.00	100.00
2/F	49.80	1,100.00	100.00	1,100.00	100.00	6/F	65.80	1,100.00	100.00
3/F	53.80	1,100.00	100.00	1,100.00	100.00				
4/F	58.20	1,100.00	100.00	1,100.00	100.00				
5/F	62.00	1,100.00	100.00	1,100.00	100.00				
6/F	65.80	1,100.00	100.00	1,100.00	100.00				

CALCULATION ON TOTAL LENGTH OF BUILDING FACADE TO BE SERVED BY EVA AND PERCENTAGE OF SUCH LENGTH OVER THE TOTAL LENGTH OF ALL THE PERIMETER WALLS OF THE BUILDING									
FLOOR	LEVEL	AREA (sqm)	PERIMETER (m)	EVA (sqm)	PERCENTAGE (%)	FLOOR	LEVEL	AREA (sqm)	PERIMETER (m)
LG2/F	34.00	1,100.00	100.00	1,100.00	100.00	2/F	49.80	1,100.00	100.00
LG1/F	37.80	1,100.00	100.00	1,100.00	100.00	3/F	53.80	1,100.00	100.00
G/F	41.60	1,100.00	100.00	1,100.00	100.00	4/F	58.20	1,100.00	100.00
1/F	45.80	1,100.00	100.00	1,100.00	100.00	5/F	62.00	1,100.00	100.00
2/F	49.80	1,100.00	100.00	1,100.00	100.00	6/F	65.80	1,100.00	100.00
3/F	53.80	1,100.00	100.00	1,100.00	100.00				
4/F	58.20	1,100.00	100.00	1,100.00	100.00				
5/F	62.00	1,100.00	100.00	1,100.00	100.00				
6/F	65.80	1,100.00	100.00	1,100.00	100.00				

The Applicant
CITYVIEW DEVELOPMENT
CITYVIEW DEVELOPMENT
1/F, 1/F, 1/F

DESIGNED BY CITYVIEW DEVELOPMENT 1/F, 1/F, 1/F	APPROVED BY CITYVIEW DEVELOPMENT 1/F, 1/F, 1/F	REVIEWED BY CITYVIEW DEVELOPMENT 1/F, 1/F, 1/F	DATE 1/F, 1/F, 1/F	SCALE 1/F, 1/F, 1/F	PROJECT CITYVIEW DEVELOPMENT 1/F, 1/F, 1/F	LOCATION CITYVIEW DEVELOPMENT 1/F, 1/F, 1/F	STATUS CITYVIEW DEVELOPMENT 1/F, 1/F, 1/F
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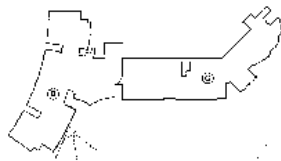
STATUTORY SUBMISSION

Aedas

LG/5/F (+37.82) COMPARTMENT CALCULATION



G/F (+41.80) COMPARTMENT CALCULATION



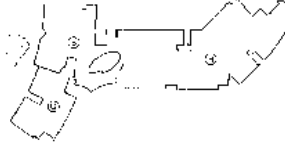
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2/F (+49.80) COMPARTMENT CALCULATION



3/F (+53.80) COMPARTMENT CALCULATION



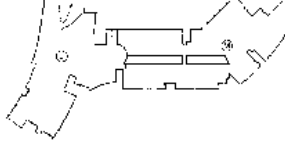
4/F (+58.20) COMPARTMENT CALCULATION



5/F (+62.00) COMPARTMENT CALCULATION



6/F (+65.80) COMPARTMENT CALCULATION



COMPARTMENT OF FLOOR				
NO.	AREA (sq.m)	NO. OF PERSONS	AREA (sq.m)	NO. OF PERSONS
1	100.00	100	100.00	100
2	100.00	100	100.00	100
3	100.00	100	100.00	100
4	100.00	100	100.00	100
5	100.00	100	100.00	100
6	100.00	100	100.00	100
7	100.00	100	100.00	100
8	100.00	100	100.00	100
9	100.00	100	100.00	100
10	100.00	100	100.00	100

Total Capacity of COQUE				
Location	Use	Area	Factor	Total Capacity
LG/5/F	Office	275.442	9	31
G/F	Shop	54.208	3	19
G/F	Office	412.213	9	46
3/F	Restaurant	118.334	1	118
3/F	Kitchen	481.136	4.5	107
5/F	Office	212.144	9	294
6/F	Office	2031.235	9	226
6/F	Restaurant	178.557	1	177
6/F	Kitchen	166.561	4.5	42
6/F	Exhibition hall	704.334	2	353
Total number of students				6000
Total				8148

SCHEDULE 1: MINIMUM NUMBER & WIDTH OF EXIT ROUTES FOR EACH FLOOR									
LOCATION	FLOOR	SUBJECT	MIN. WIDTH OF EACH EXIT ROUTE			MIN. TOTAL WIDTH OF EXIT ROUTES			
			REAR	FRONT	EXIT	REAR	FRONT	EXIT	EXIT
LG/5/F	5	1	1000	1000	1000	1000	1000	1000	1000
LG/5/F	5	2	1000	1000	1000	1000	1000	1000	1000
LG/5/F	5	3	1000	1000	1000	1000	1000	1000	1000
LG/5/F	5	4	1000	1000	1000	1000	1000	1000	1000
LG/5/F	5	5	1000	1000	1000	1000	1000	1000	1000
LG/5/F	5	6	1000	1000	1000	1000	1000	1000	1000
LG/5/F	5	7	1000	1000	1000	1000	1000	1000	1000
LG/5/F	5	8	1000	1000	1000	1000	1000	1000	1000
LG/5/F	5	9	1000	1000	1000	1000	1000	1000	1000
LG/5/F	5	10	1000	1000	1000	1000	1000	1000	1000

THE RESISTANCE REQUIREMENTS FOR SUBSTRUCTURE OF CONSTRUCTION									
COMPONENT	CLASS	TOTAL	R.C. COLUMN		R.C. BEAM		R.C. SLAB		R.C. STAIR
			THK.	COVER	THK.	COVER	THK.	COVER	
1	CONCRETE	1000.000	100	20	100	20	100	20	100
2	STEEL	1000.000	100	20	100	20	100	20	100
3	STEEL	1000.000	100	20	100	20	100	20	100
4	STEEL	1000.000	100	20	100	20	100	20	100
5	STEEL	1000.000	100	20	100	20	100	20	100
6	STEEL	1000.000	100	20	100	20	100	20	100
7	STEEL	1000.000	100	20	100	20	100	20	100
8	STEEL	1000.000	100	20	100	20	100	20	100
9	STEEL	1000.000	100	20	100	20	100	20	100
10	STEEL	1000.000	100	20	100	20	100	20	100

1. Approved by the relevant authorities.
2. Approved by the relevant authorities.
3. Approved by the relevant authorities.

B D SUBMISSION

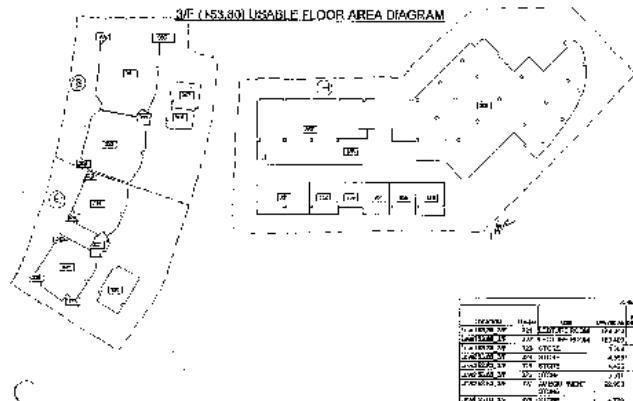
CITY OF HONG KONG

Aedas

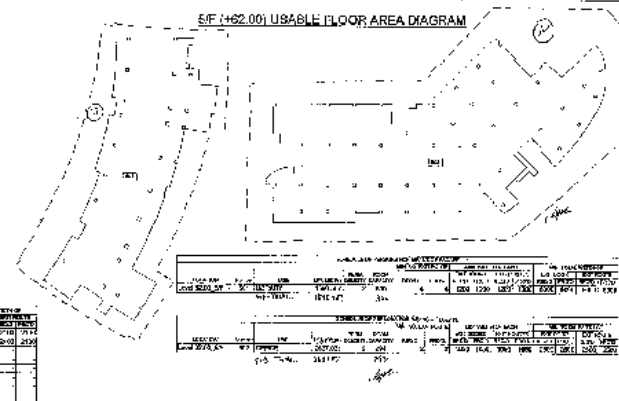
CITY OF HONG KONG

Aedas

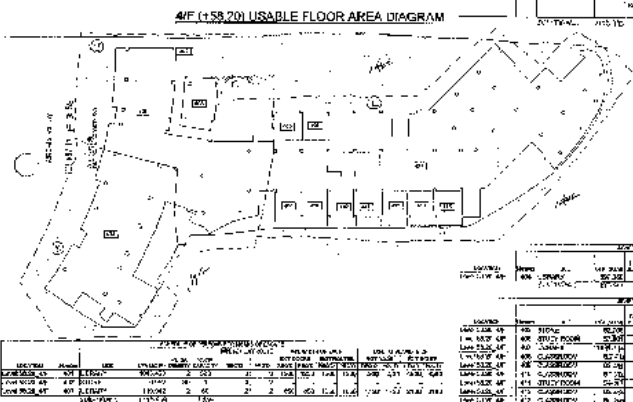
.. 3/F (153.80) USABLE FLOOR AREA DIAGRAM

[illegible]

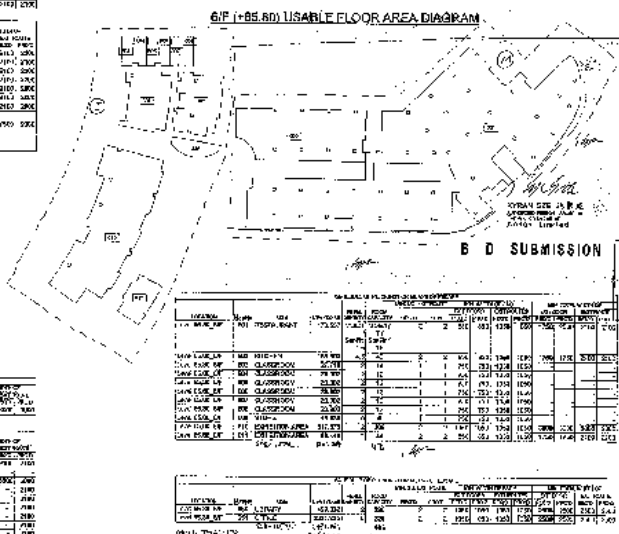
5/F (+62.00) USABLE FLOOR AREA DIAGRAM

[illegible]

4/F (+58.20) USABLE FLOOR AREA DIAGRAM

[illegible]

6/F (+85.80) USABLE FLOOR AREA DIAGRAM



FBI LABORATORY - IDENTIFICATION DIVISION												
LABORATORY	FILE NO.	DATE	TIME	BY	REMARKS	TESTS	RESULTS	REMARKS	TESTS	RESULTS	REMARKS	TESTS
1	WILLIAMS, R	001	750501-0001	M	W	5-7	150	B	B	F		
SEARCHED INDEXED SERIALIZED FILED												
MAY 1975 FBI - MEMPHIS												
LABORATORY												
1	WILLIAMS, R	001	750501-0001	M	W	5-7	150	B	B	F		
SEARCHED INDEXED SERIALIZED FILED												
MAY 1975 FBI - MEMPHIS												
LABORATORY												
1	WILLIAMS, R	001	750501-0001	M	W	5-7	150	B	B	F		
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MAY 1975 FBI - MEMPHIS												
LABORATORY												
1	WILLIAMS, R	001	750501-0001	M	W	5-7	150	B	B	F		
SEARCHED INDEXED SERIALIZED FILED												
MAY 1975 FBI - MEMPHIS												
LABORATORY												
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MAY 1975 FBI - MEMPHIS												
LABORATORY												
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MAY 1975 FBI - MEMPHIS												
LABORATORY												
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MAY 1975 FBI - MEMPHIS												
LABORATORY												
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LABORATORY												
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LABORATORY												
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LABORATORY												
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MAY 1975 FBI - MEMPHIS												
LABORATORY												
1	WILLIAMS, R	001	750501-0001	M	W	5-7	150	B	B	F		
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MAY 1975 FBI - MEMPHIS												
LABORATORY												
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MAY 1975 FBI - MEMPHIS												
LABORATORY												
1	WILLIAMS, R											

B D SUBMISSION

J. M. Applegate
 CHAIRMAN
 Board of Directors
 The University of North Carolina
 Chapel Hill, N. C. 27514

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SEMI-ANNUAL REPORT 2018

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2000年12月27日

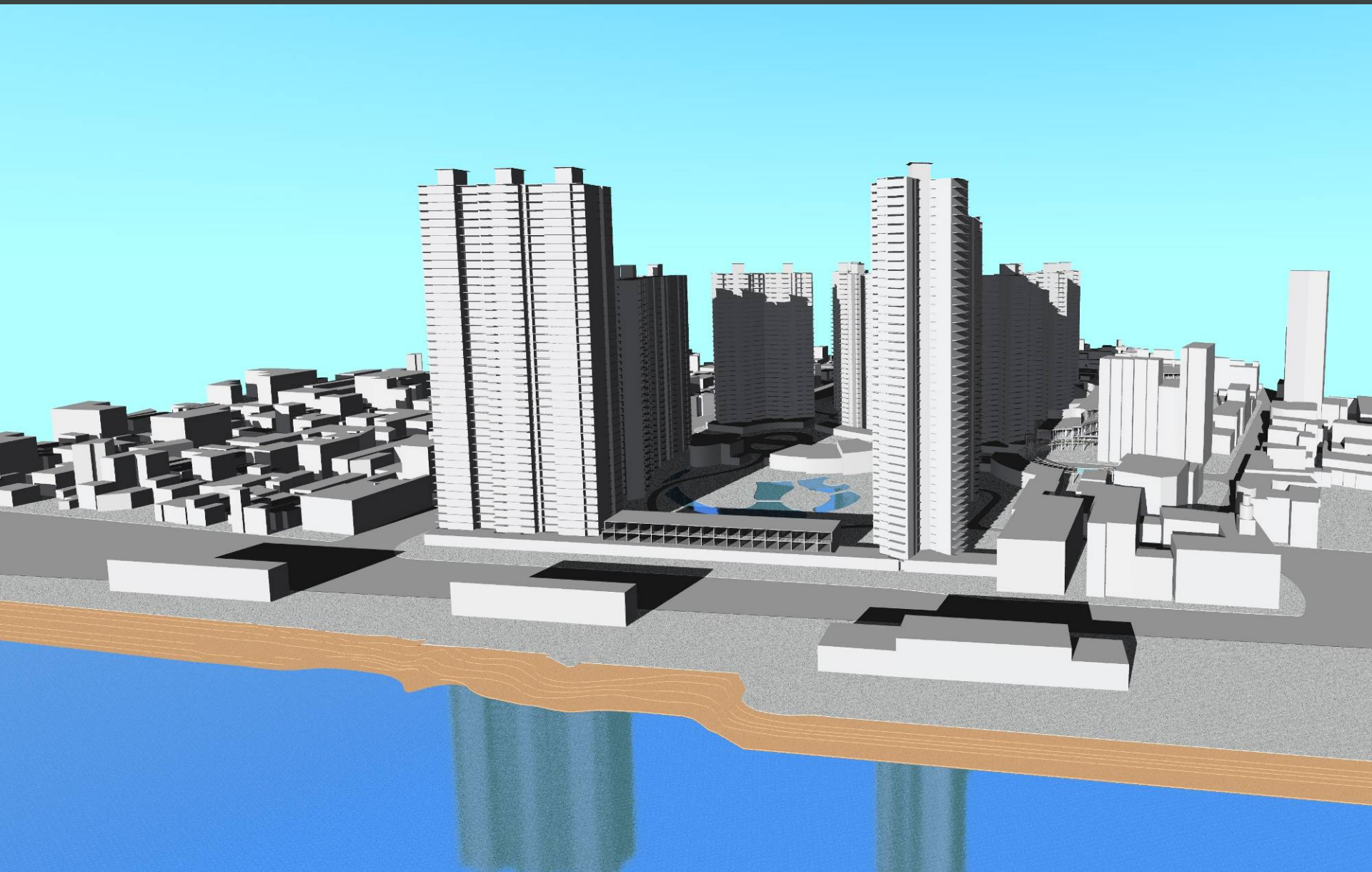
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DECS
CALLER
6969802

Aedas



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 2. 4000 x 200 x 100
 3. 4000 x 200 x 100

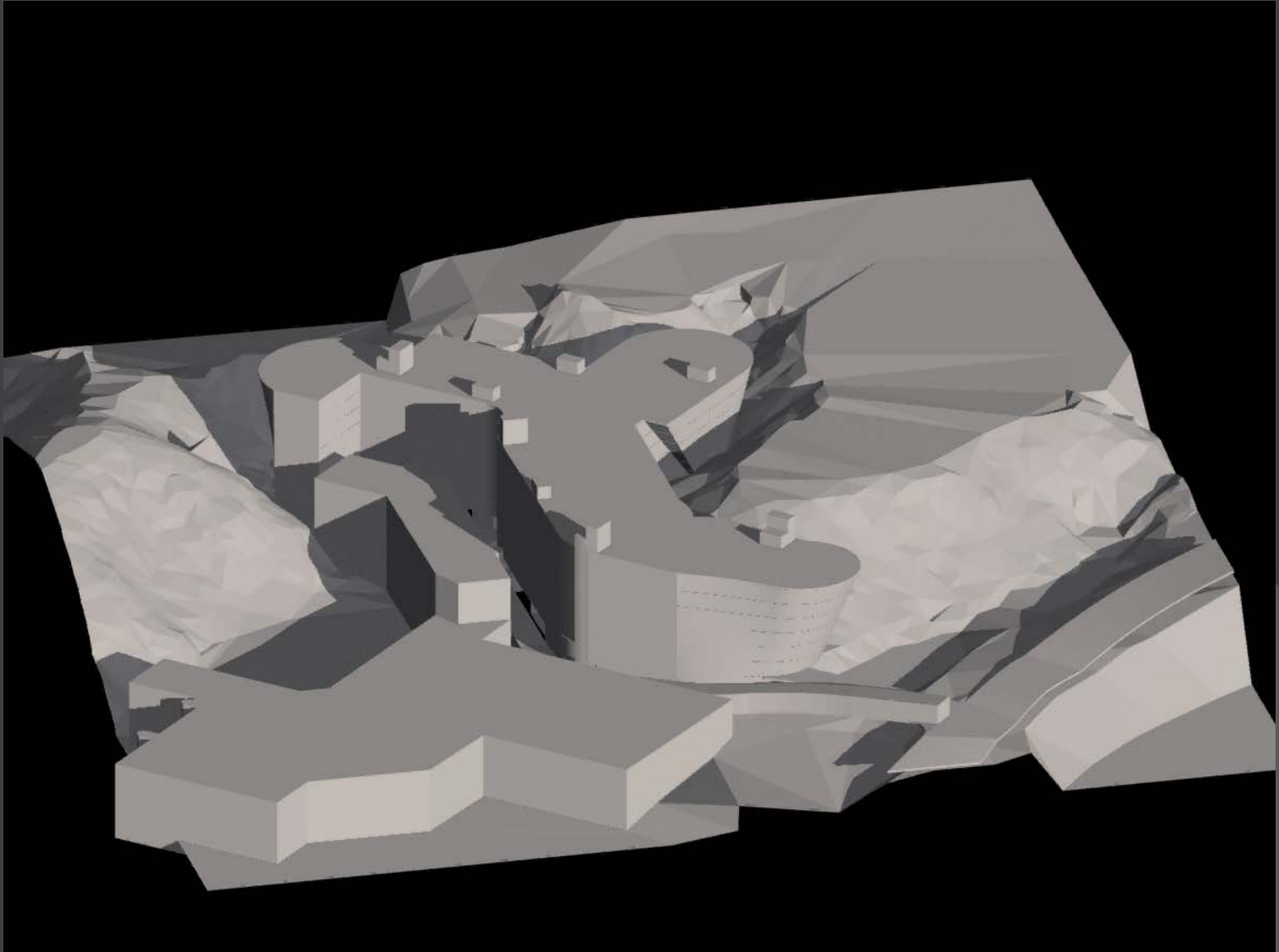


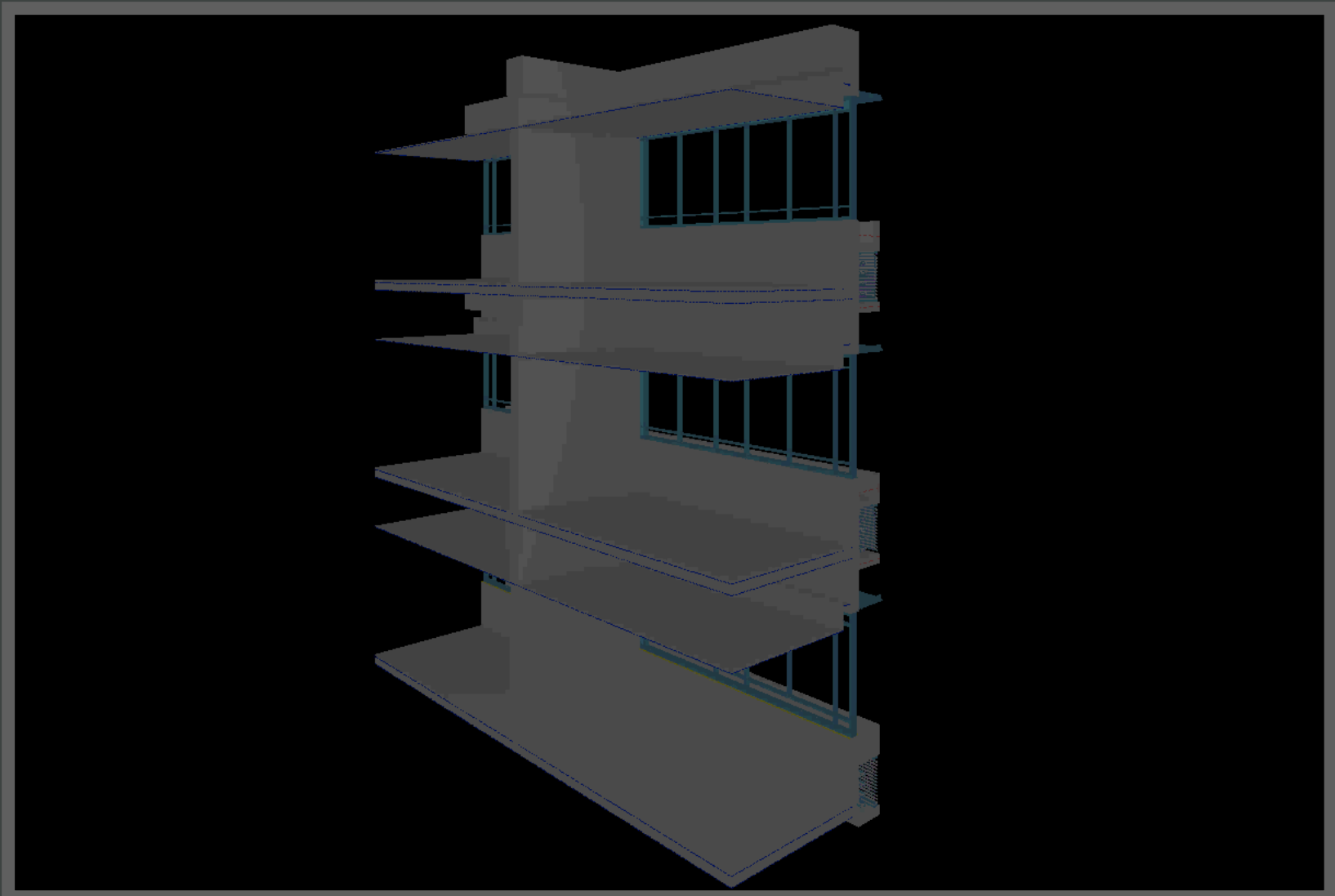


BUILDING IN GOOGLE EARTH

Aedas

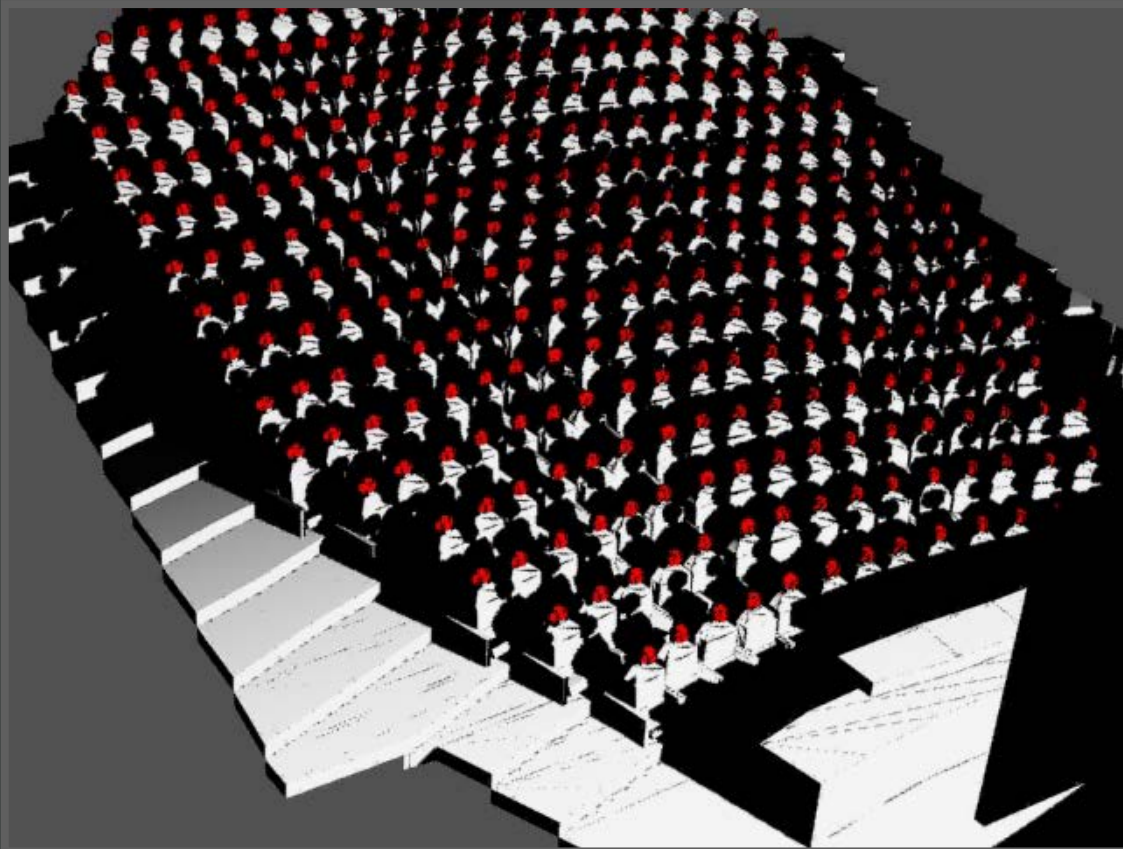




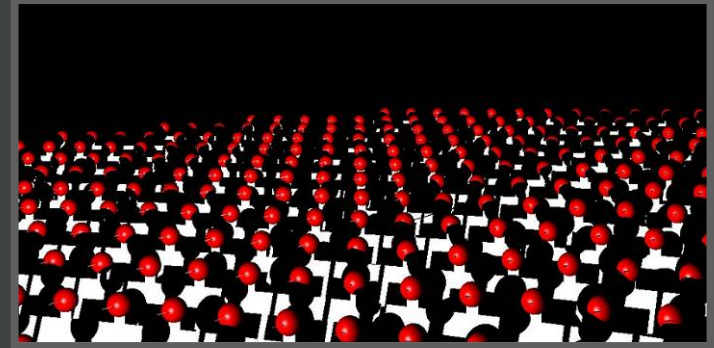


FAÇADE SOLAR STUDY

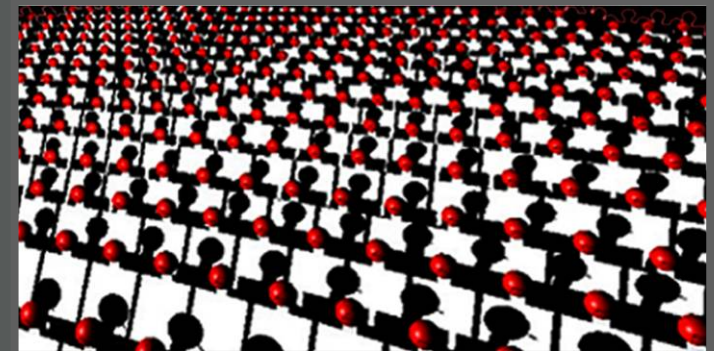
21/12/2006 7:00am – 6:00pm



Radiating Light Method

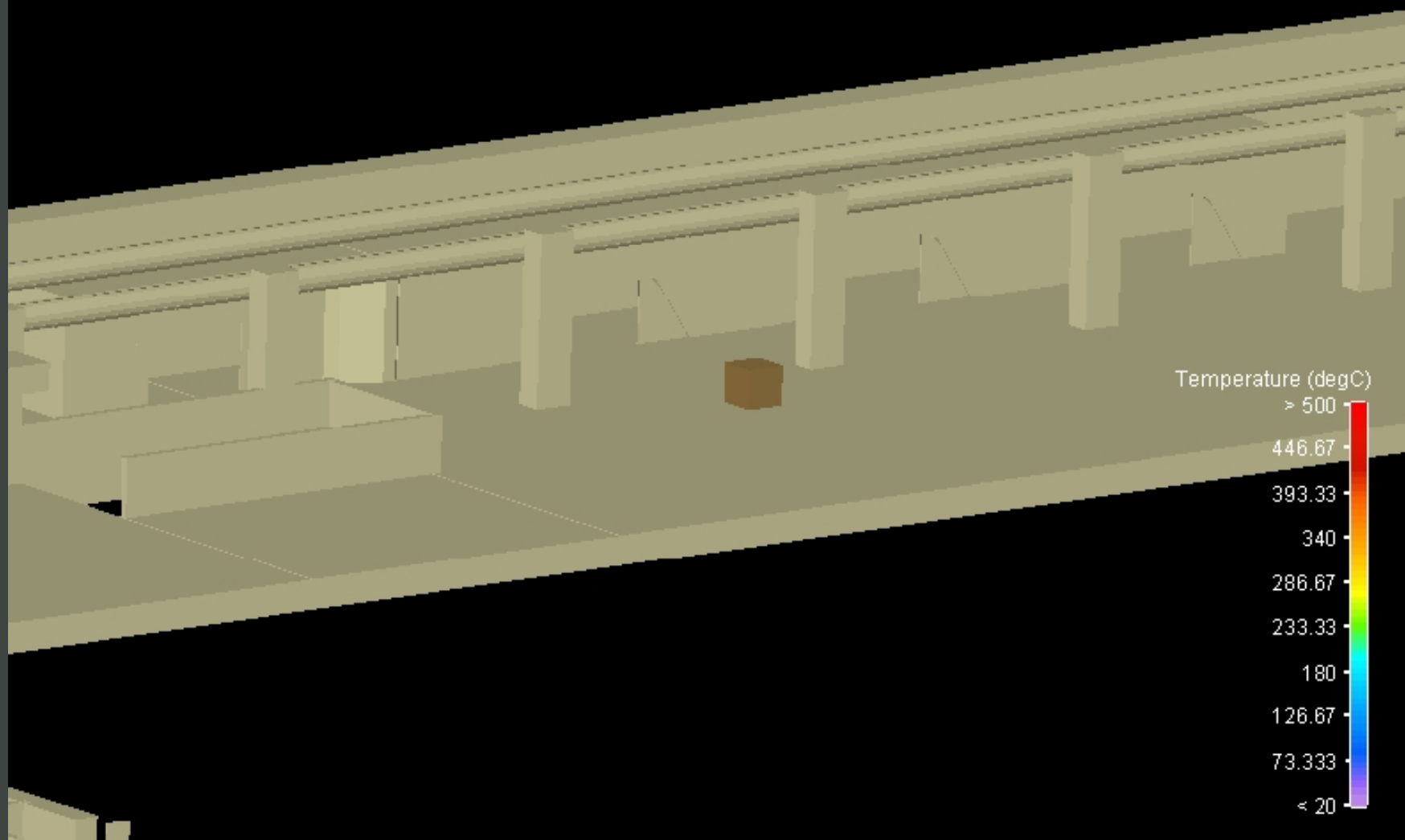


Unsatisfactory sightlines



Satisfactory sightlines

TST-4c
1.0000e+000 s



Temperature (degC)

> 500

446.67

393.33

340

286.67

233.33

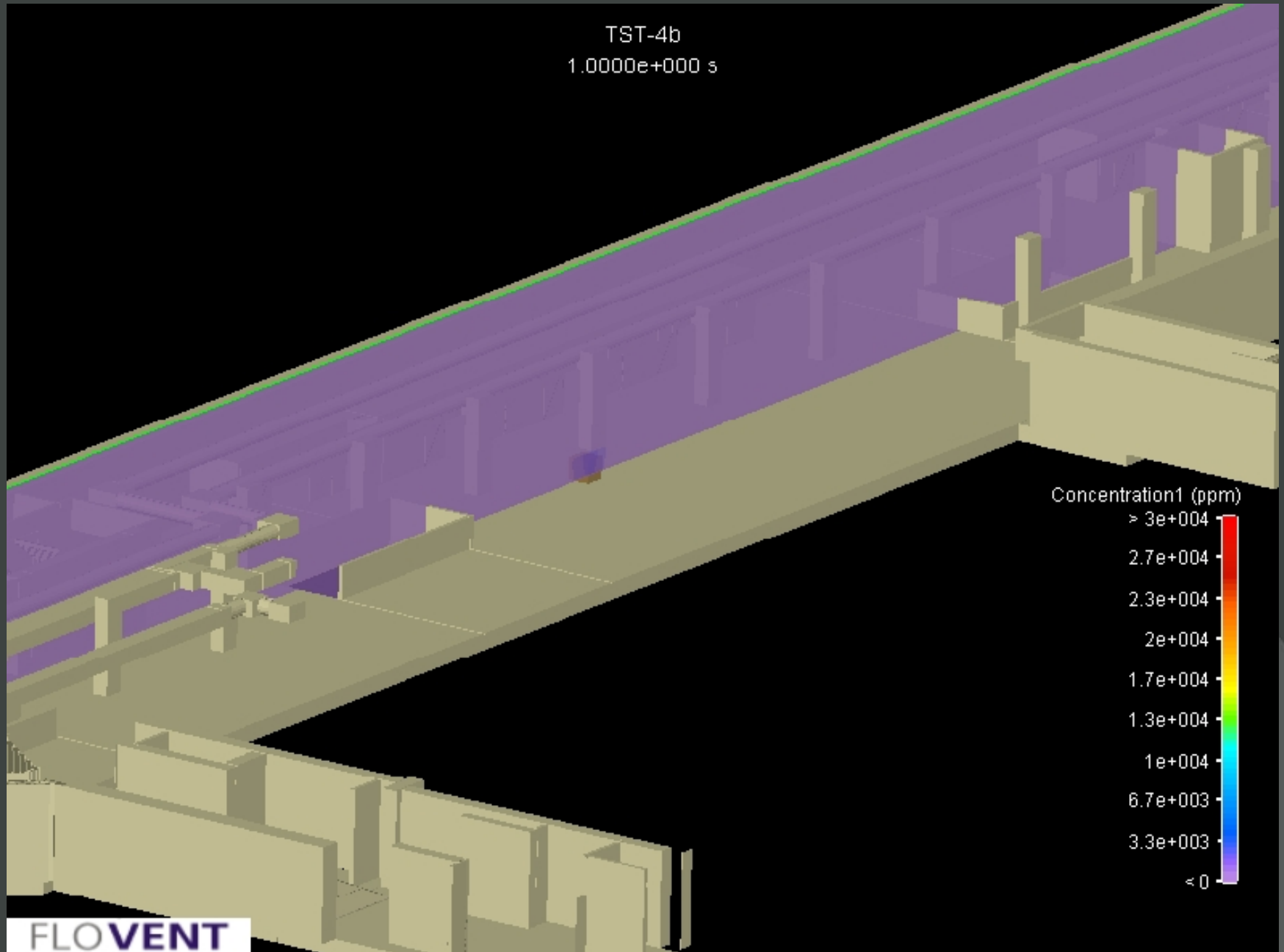
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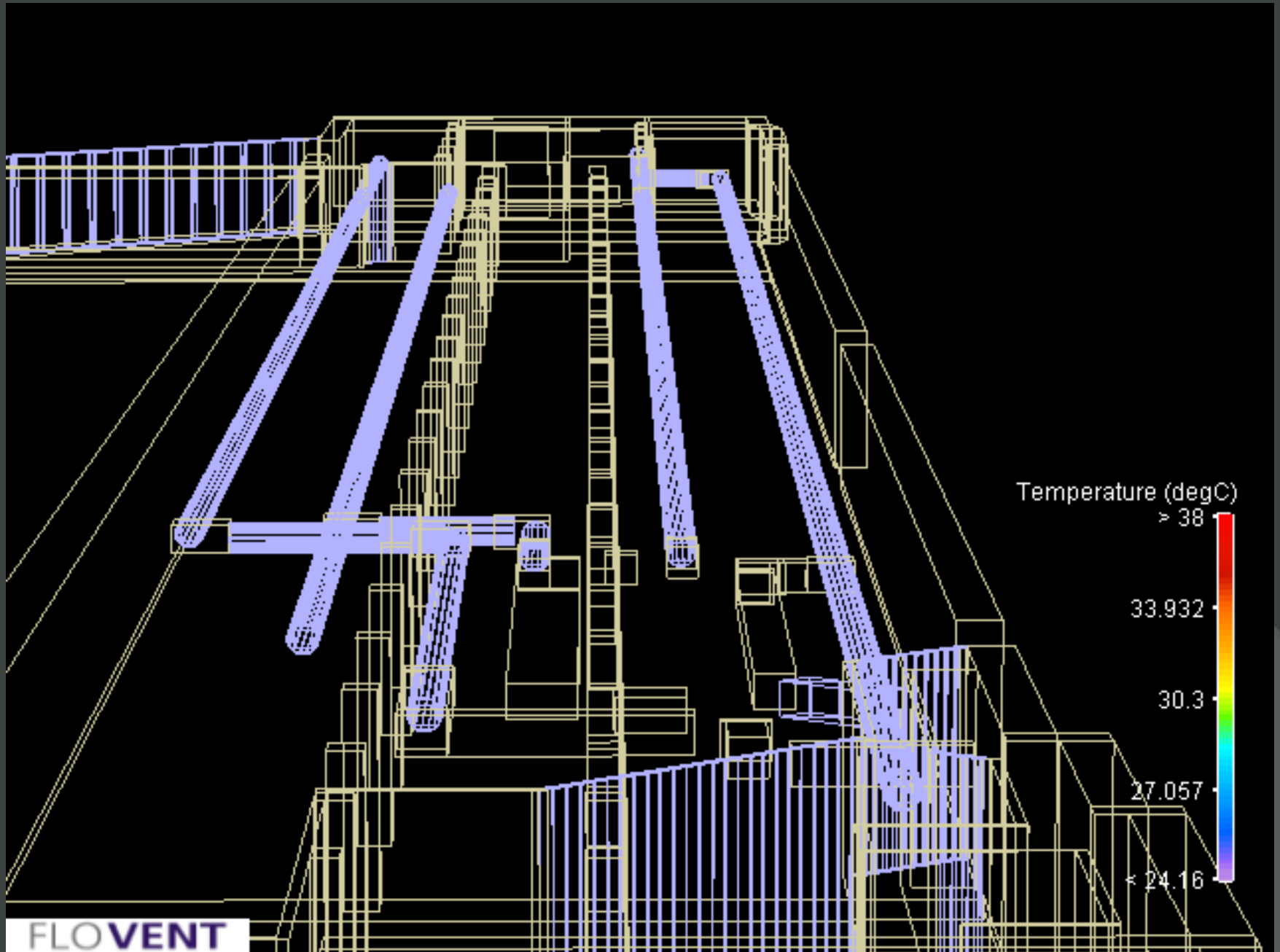
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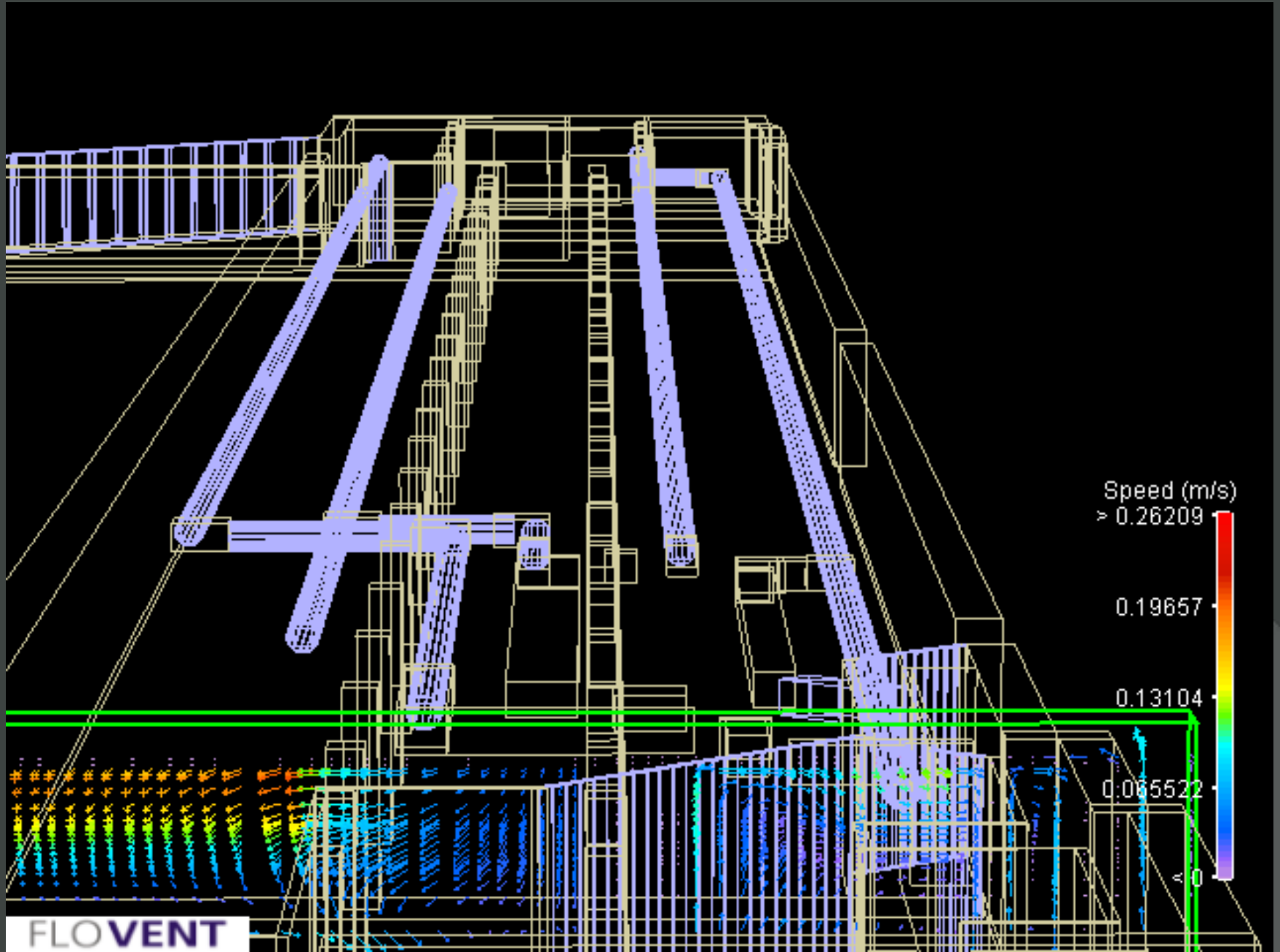
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TST-4b
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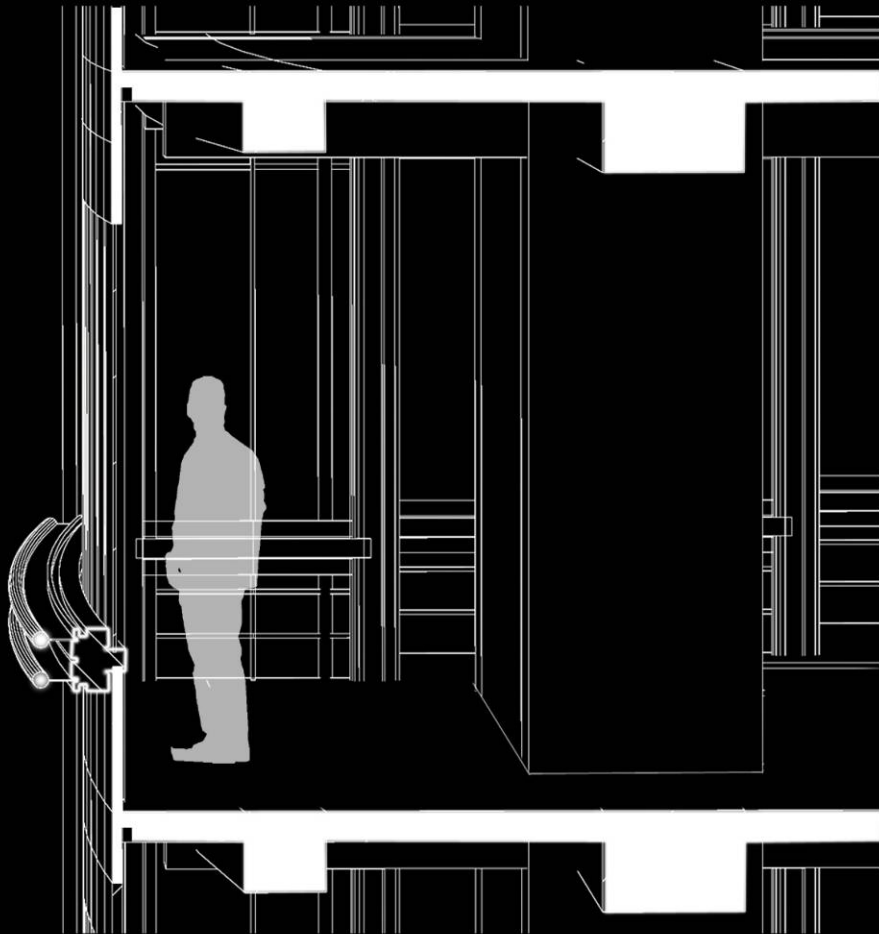




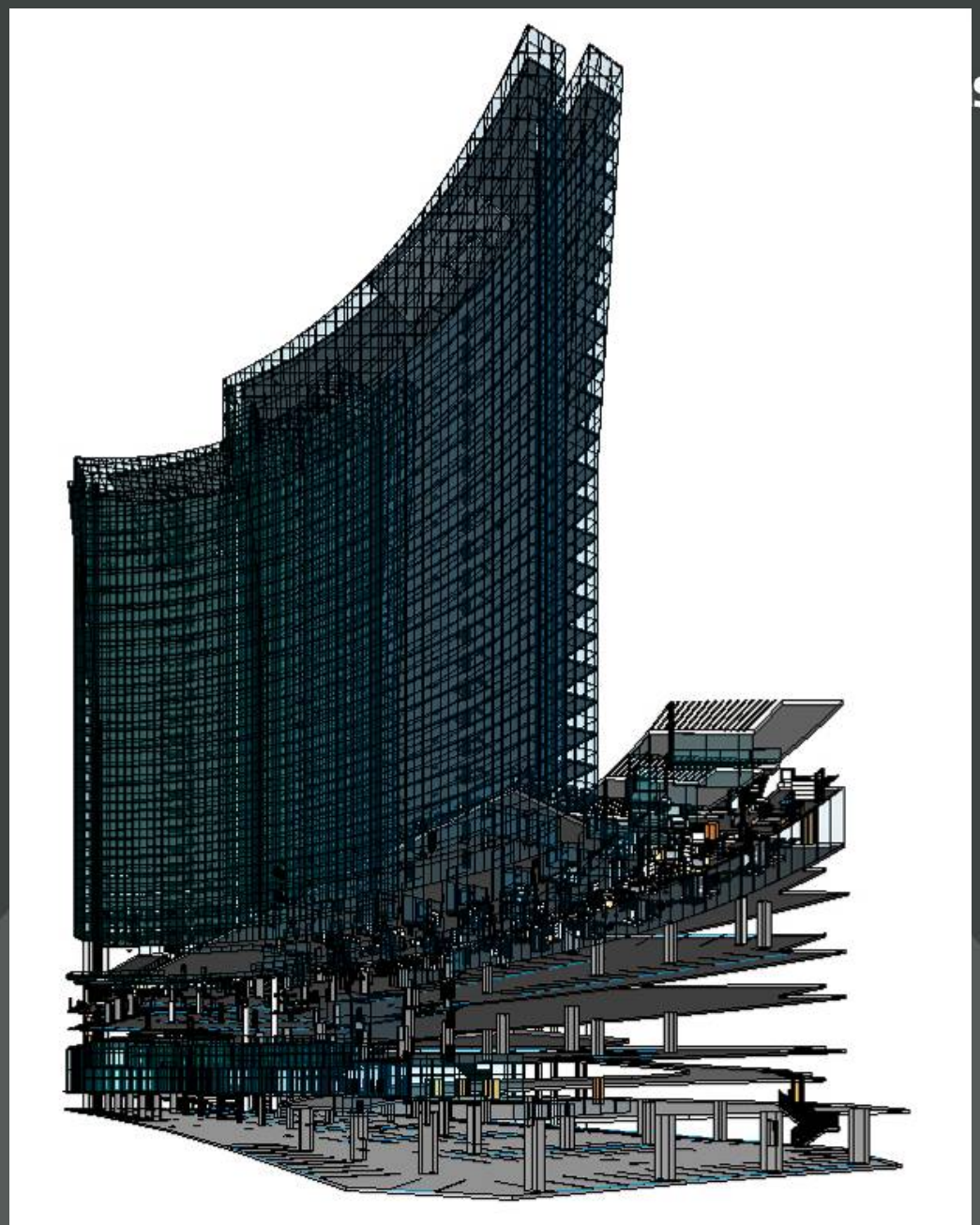




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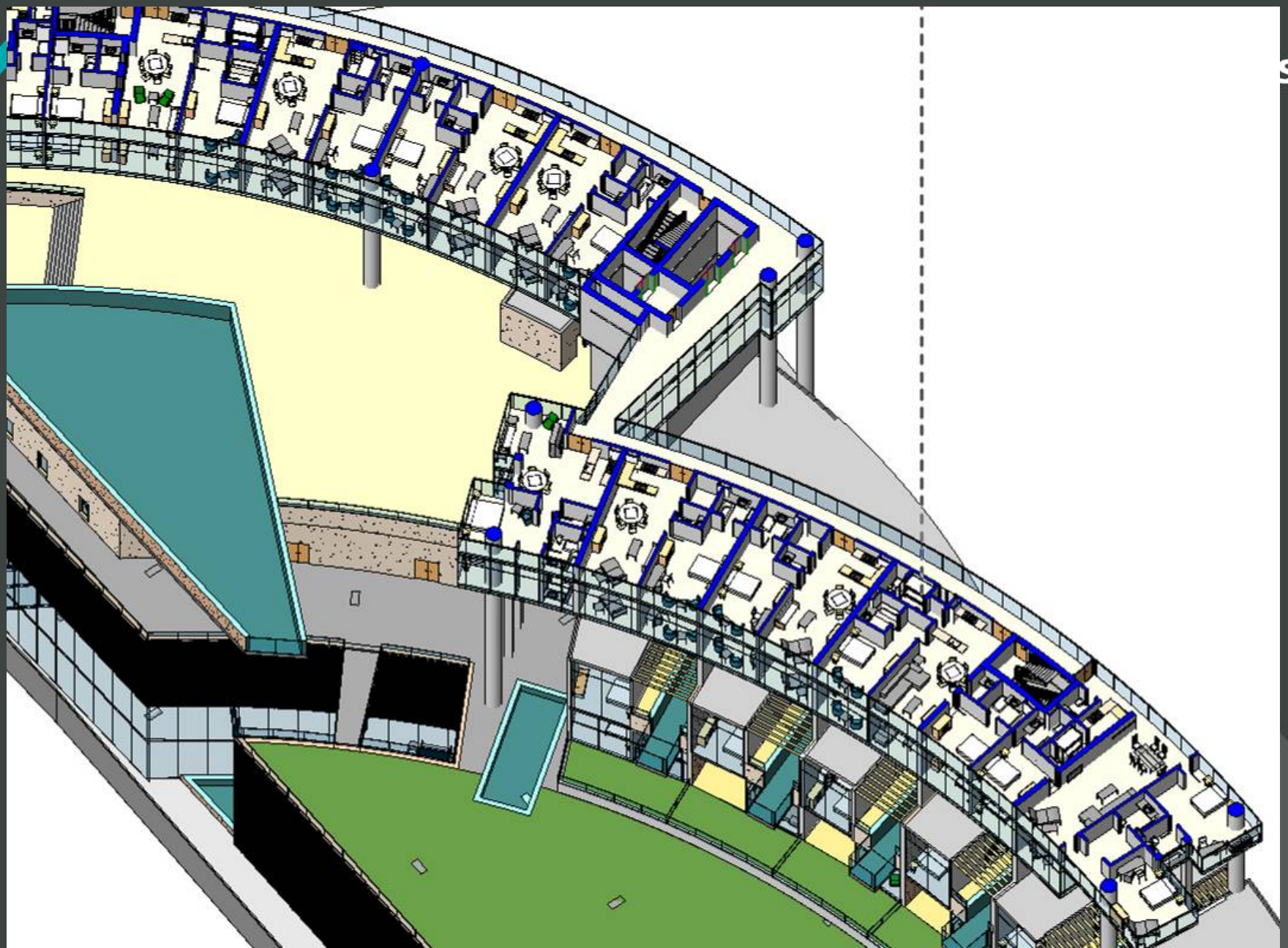


FAÇADE DESIGN and CO-ORDINATION



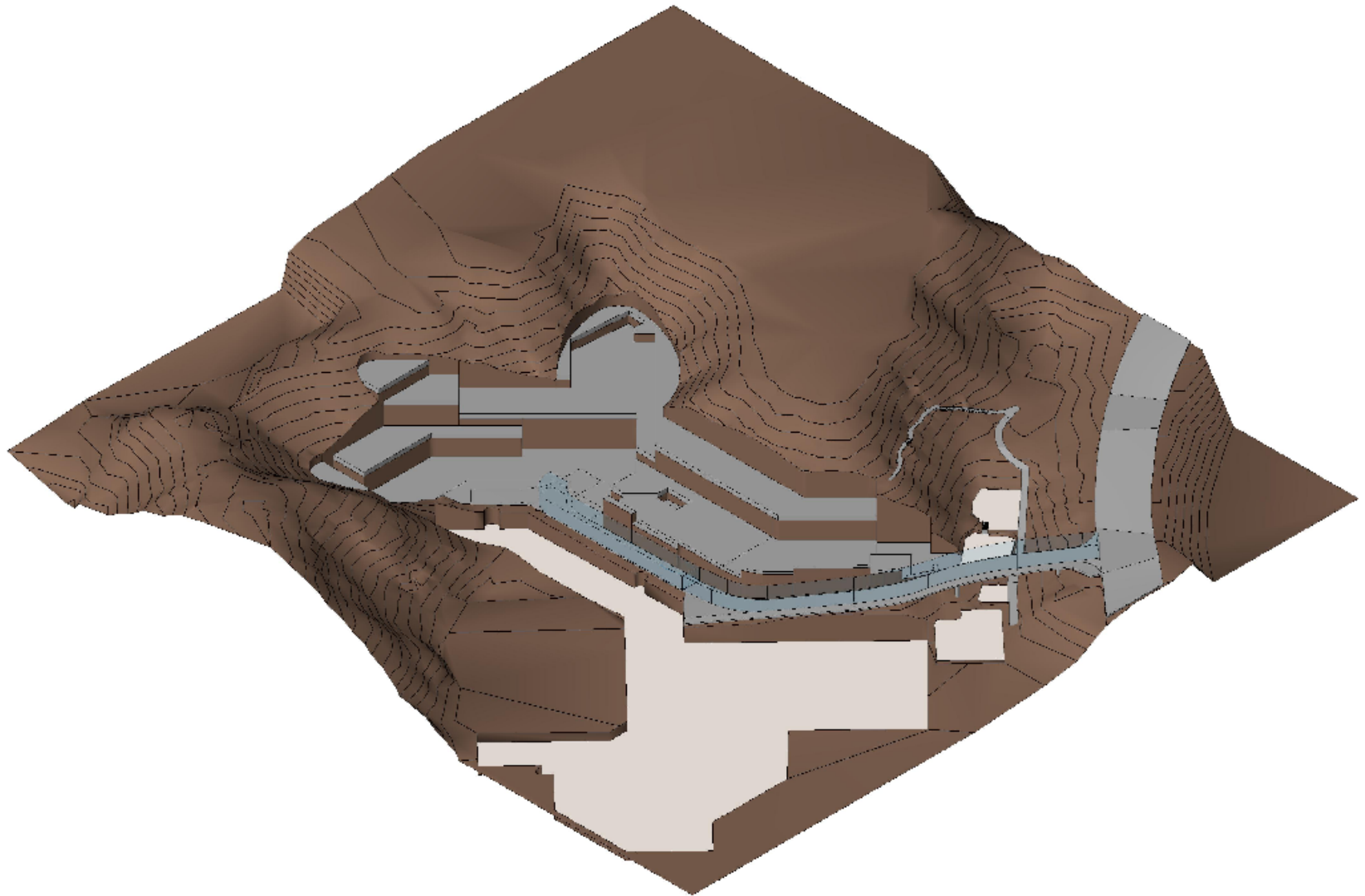
中東酒店項目

HORIZONTAL REPETITION / MODULARIZATION



中東酒店項目

MODULAR DESIGN

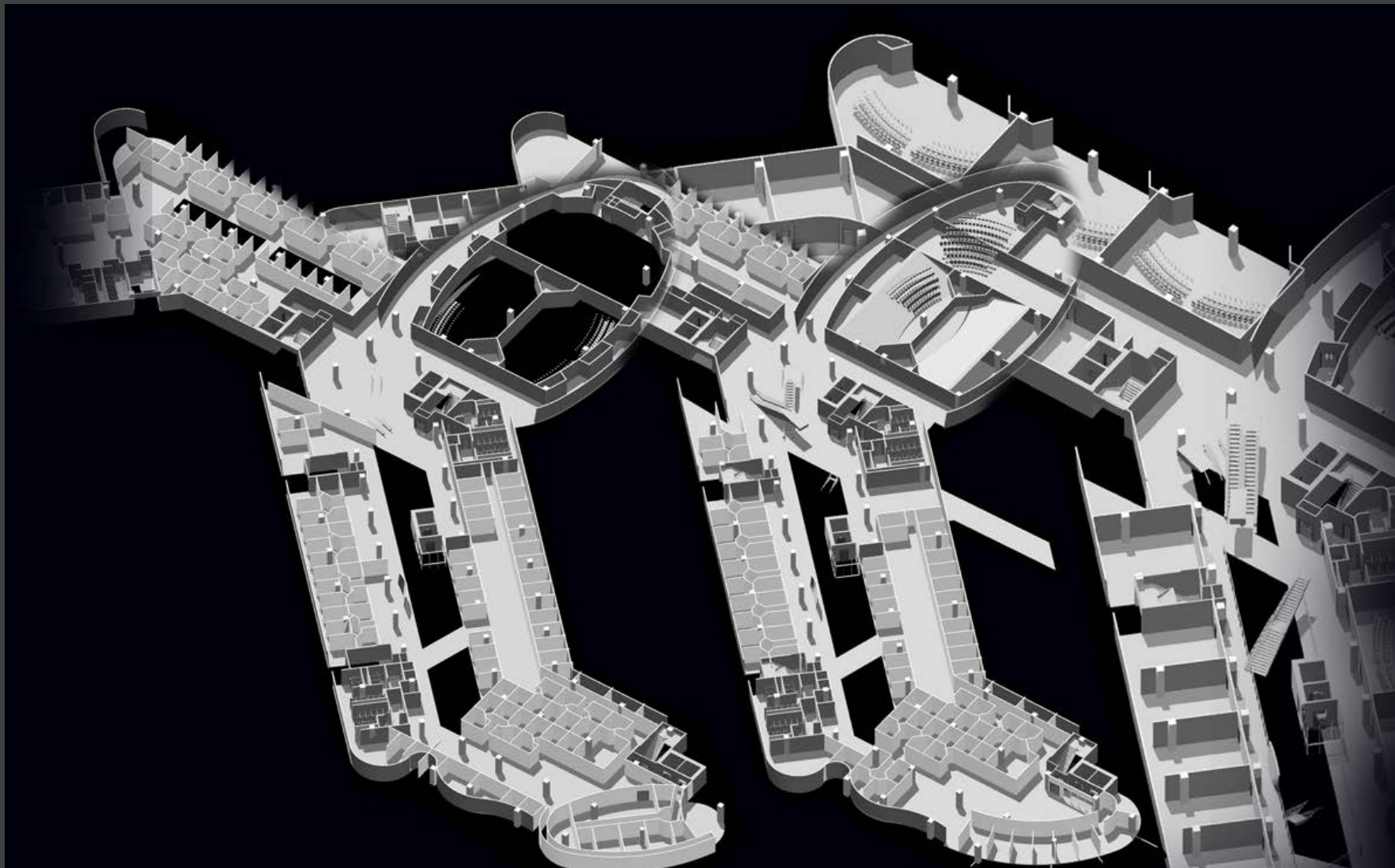


TYPOGRAPHY HANDLING

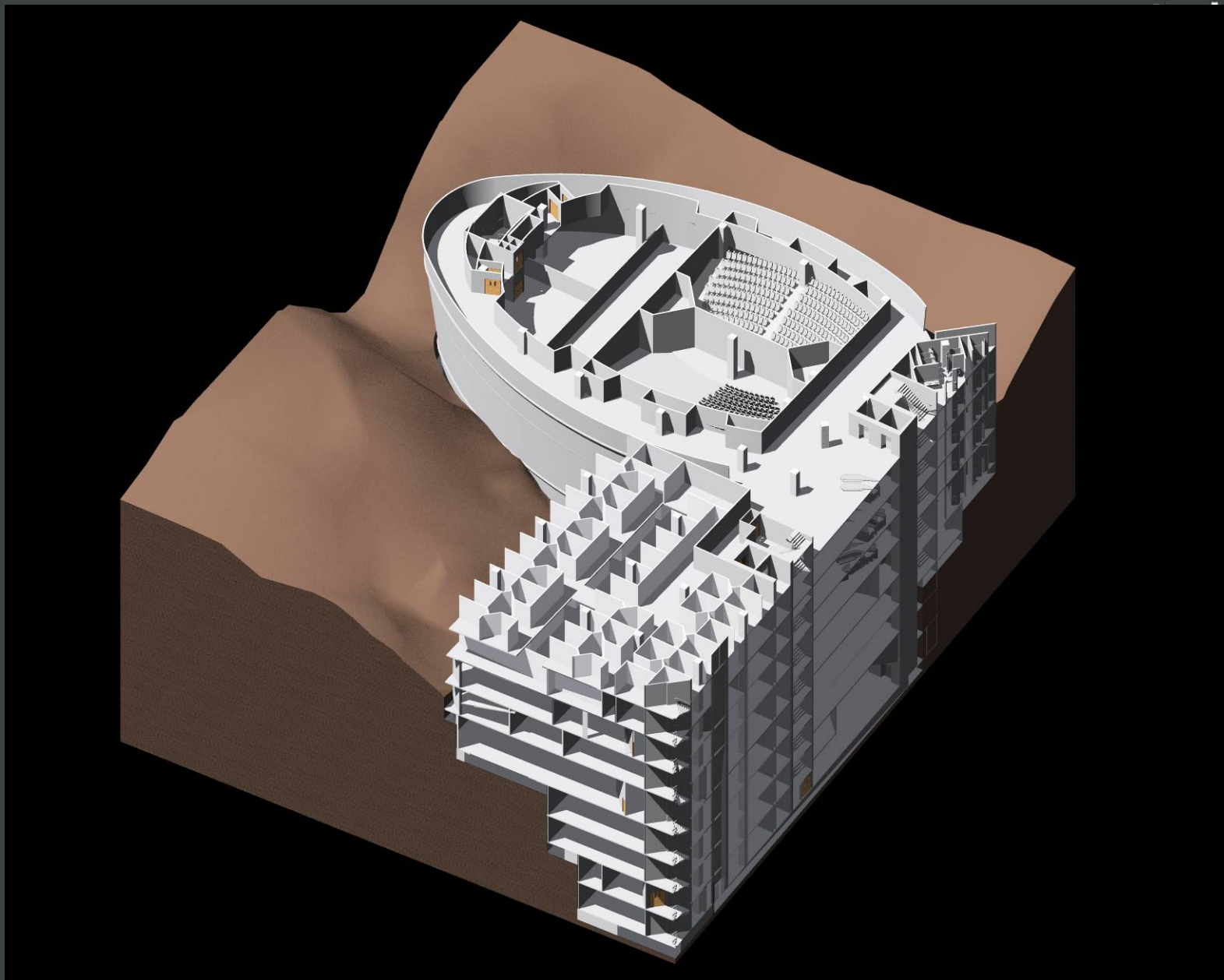


DIFFERENT DESIGN APPROACH

Aedas



香港城市大學教學大樓項目

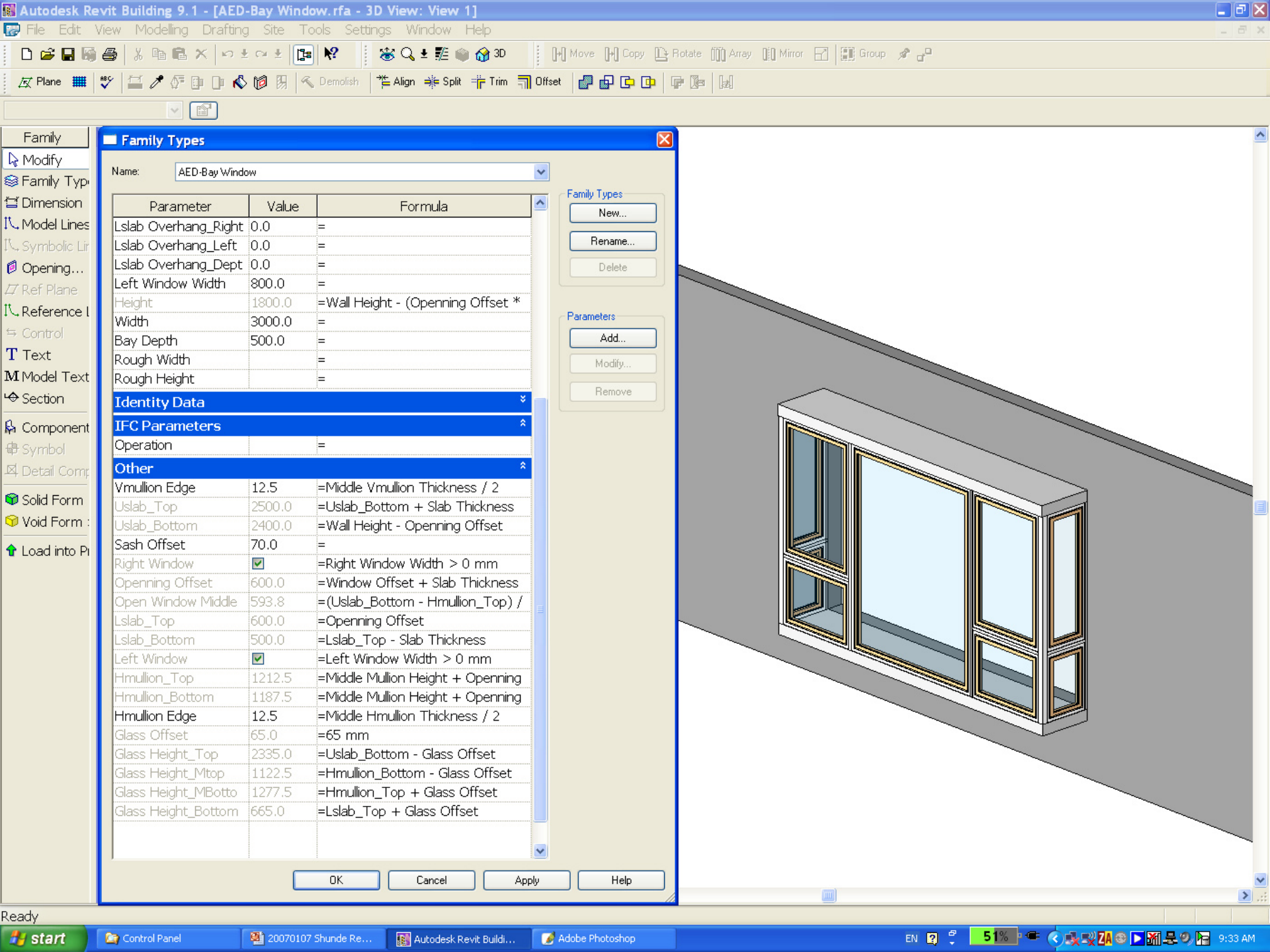


香港城市大學教學大樓項目

BUILDING IN SITE CONTEXT



REPETITIONS vs VARIATIONS



Family Types

Name: AED-Bay Window

Parameter	Value	Formula
Lslab Overhang_Right	0.0	=
Lslab Overhang_Left	0.0	=
Lslab Overhang_Dept	0.0	=
Left Window Width	800.0	=
Height	1800.0	=Wall Height - (Opening Offset *
Width	4500.0	=
Bay Depth	500.0	=
Rough Width		=
Rough Height		=
Identity Data		
IFC Parameters		
Operation		=
Other		
Vmullion Edge	12.5	=Middle Vmullion Thickness / 2
Uslab_Top	2500.0	=Uslab_Bottom + Slab Thickness
Uslab_Bottom	2400.0	=Wall Height - Opening Offset
Sash Offset	70.0	=
Right Window	☒	=Right Window Width > 0 mm
Opening Offset	600.0	=Window Offset + Slab Thickness
Open Window Middle	593.8	=(Uslab_Bottom - Hmullion_Top) /
Lslab_Top	600.0	=Opening Offset
Lslab_Bottom	500.0	=Lslab_Top - Slab Thickness
Left Window	☒	=Left Window Width > 0 mm
Hmullion_Top	1212.5	=Middle Mullion Height + Opening
Hmullion_Bottom	1187.5	=Middle Mullion Height + Opening
Hmullion Edge	12.5	=Middle Hmullion Thickness / 2
Glass Offset	65.0	=65 mm
Glass Height_Top	2335.0	=Uslab_Bottom - Glass Offset
Glass Height_Mtop	1122.5	=Hmullion_Bottom - Glass Offset
Glass Height_MBotto	1277.5	=Hmullion_Top + Glass Offset
Glass Height_Bottom	665.0	=Lslab_Top + Glass Offset

Family Types

New...

Rename...

Delete

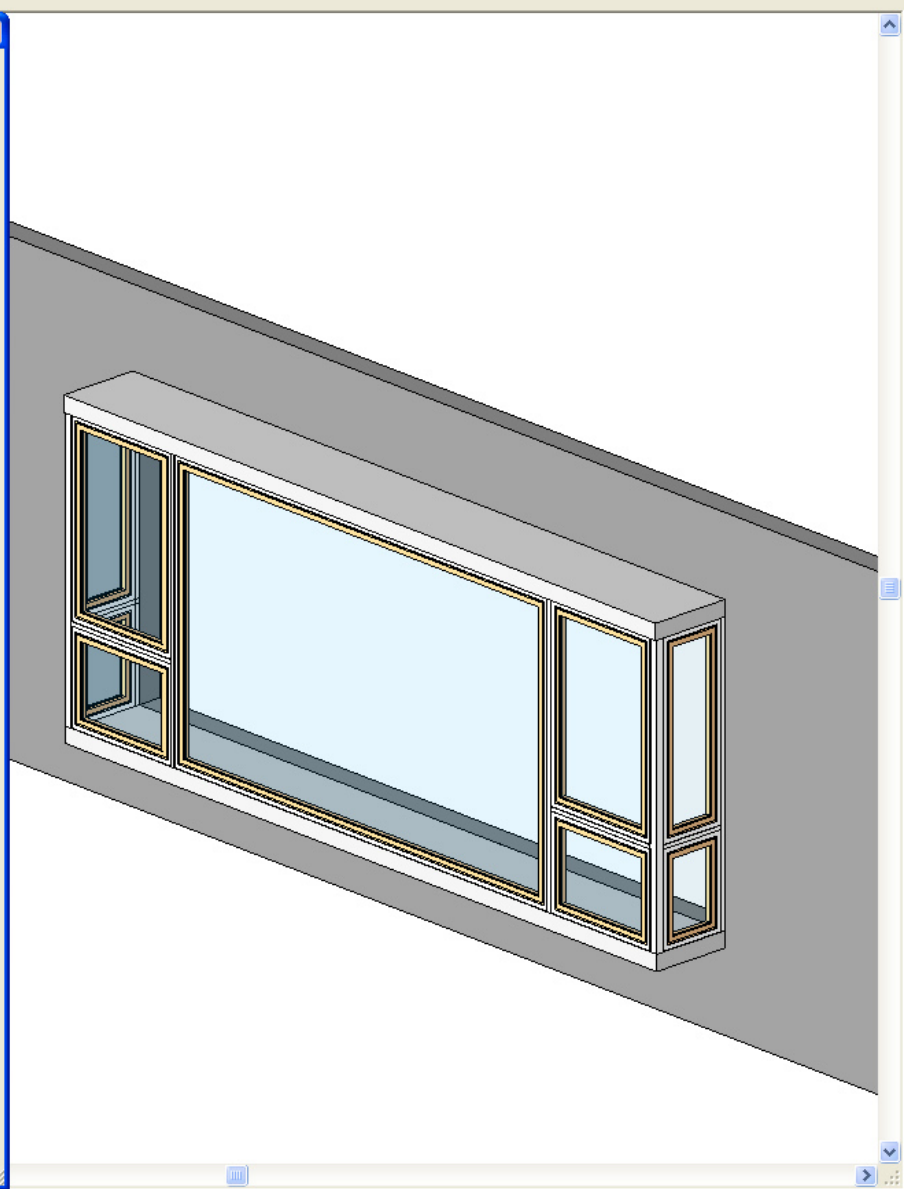
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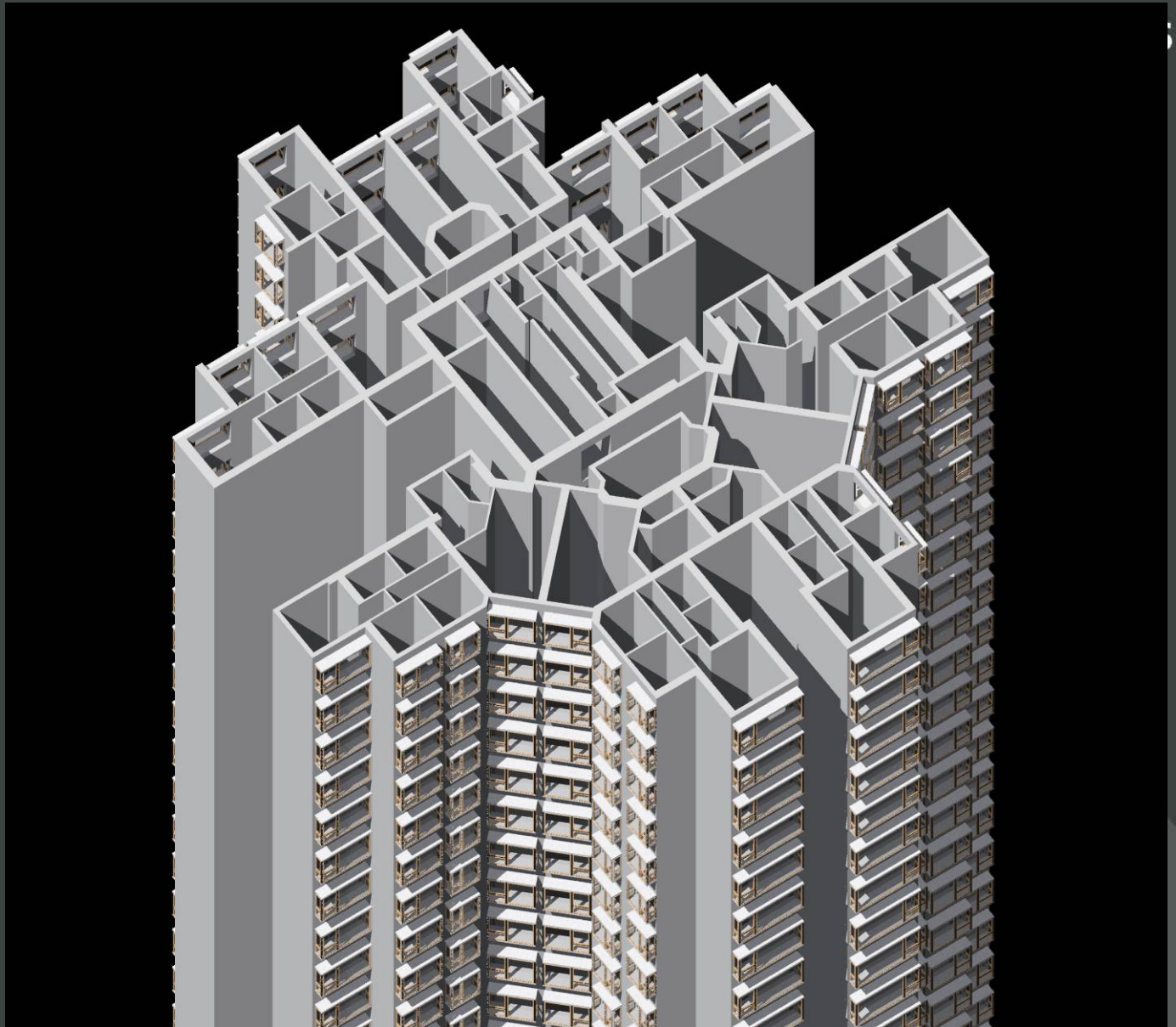
Add...

Modify...

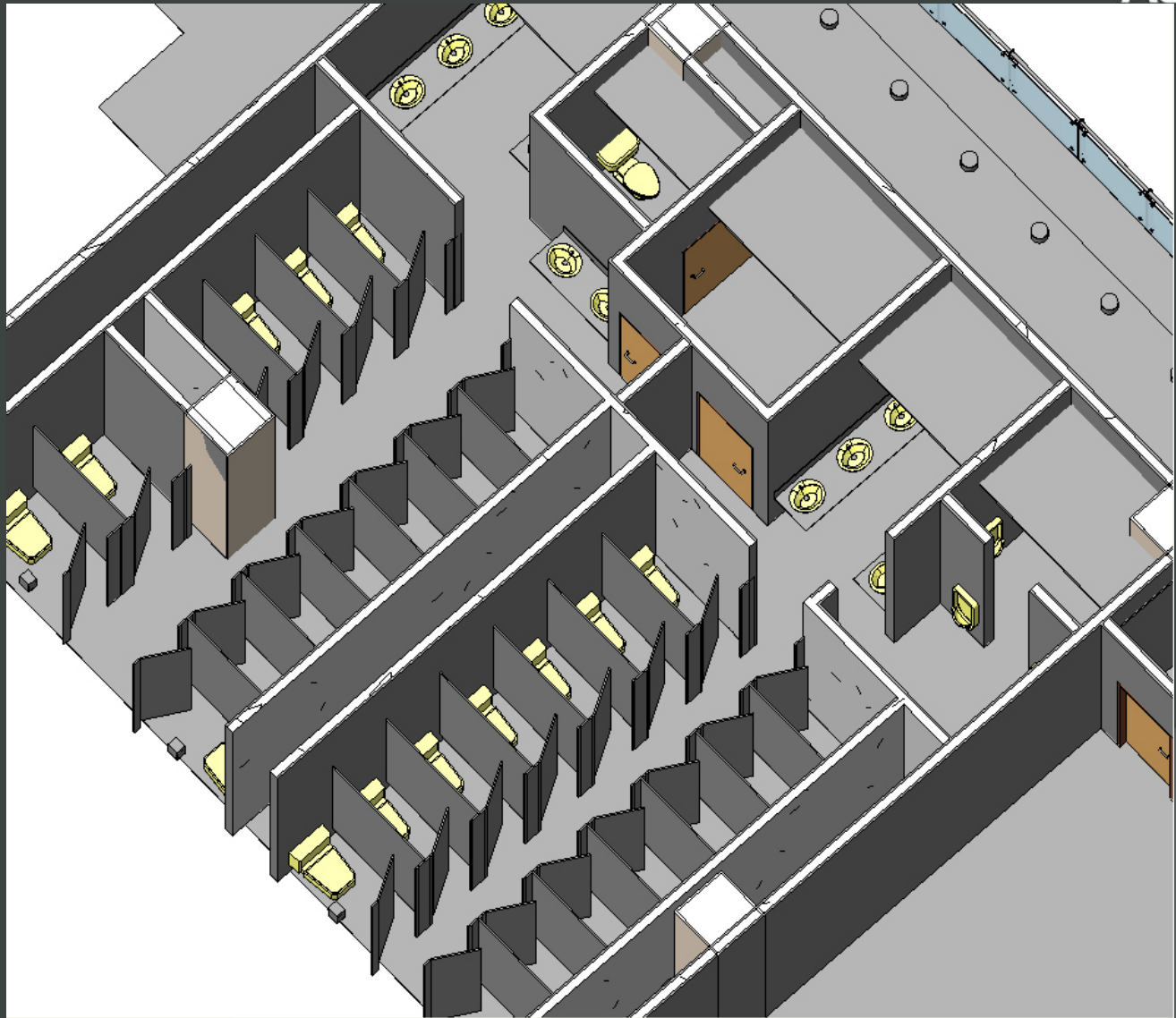
Remove

OK Cancel Apply Help





REPETITIONS vs VARIATIONS



CREATIVE TOOLS



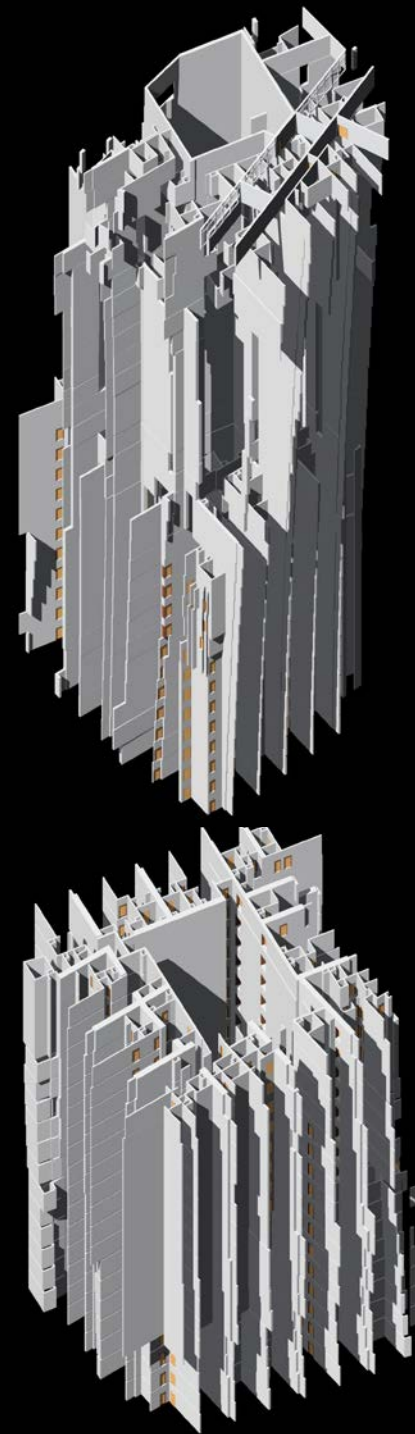
FAÇADE PANEL DESIGN



Program: Residential, Site Area: 3,746 sqm
Floor Area: 659,659 sqm | Building Height: 345 m

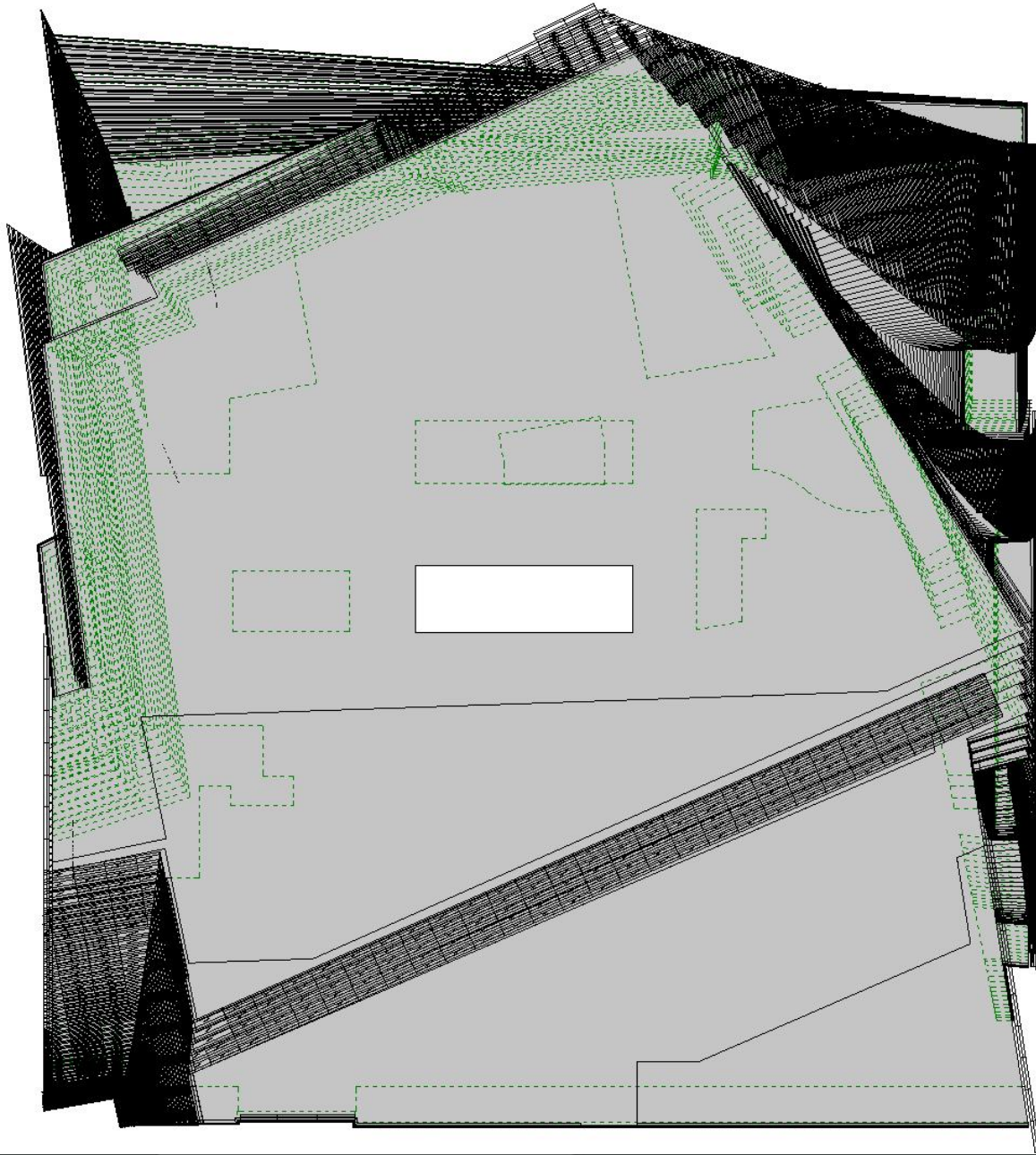


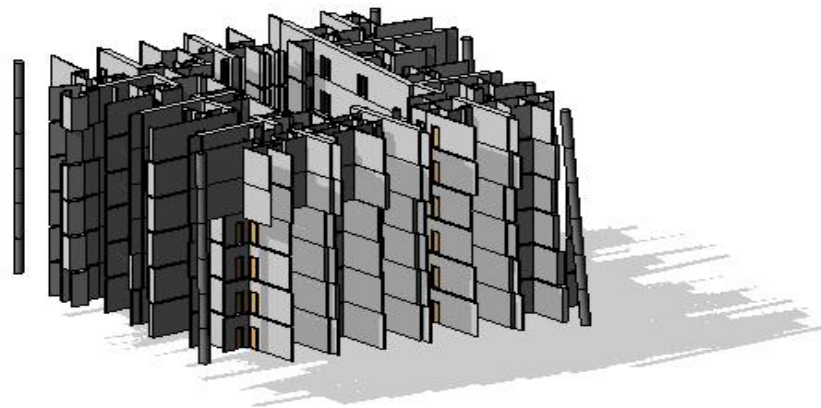
Dubai **Ocean Heights One**

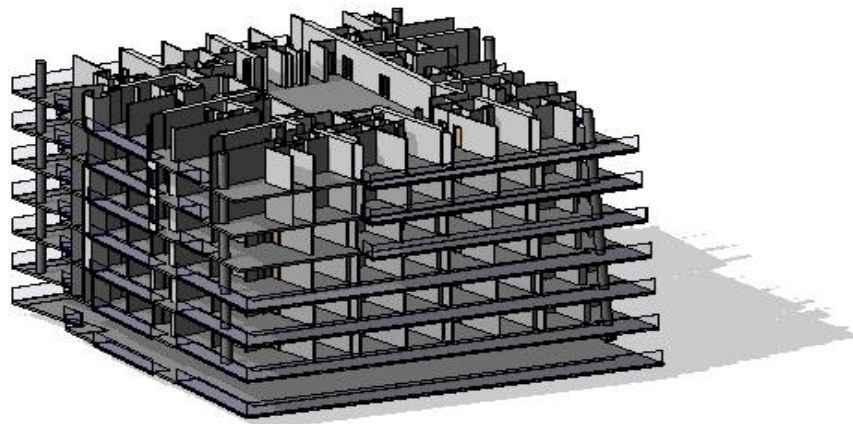


中東住宅項目

COMPLEX GEOMETRY





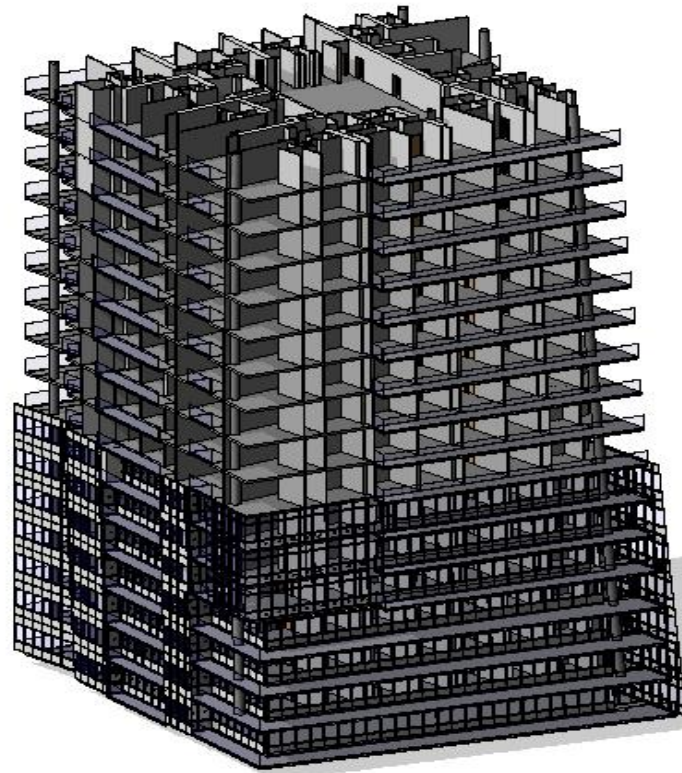


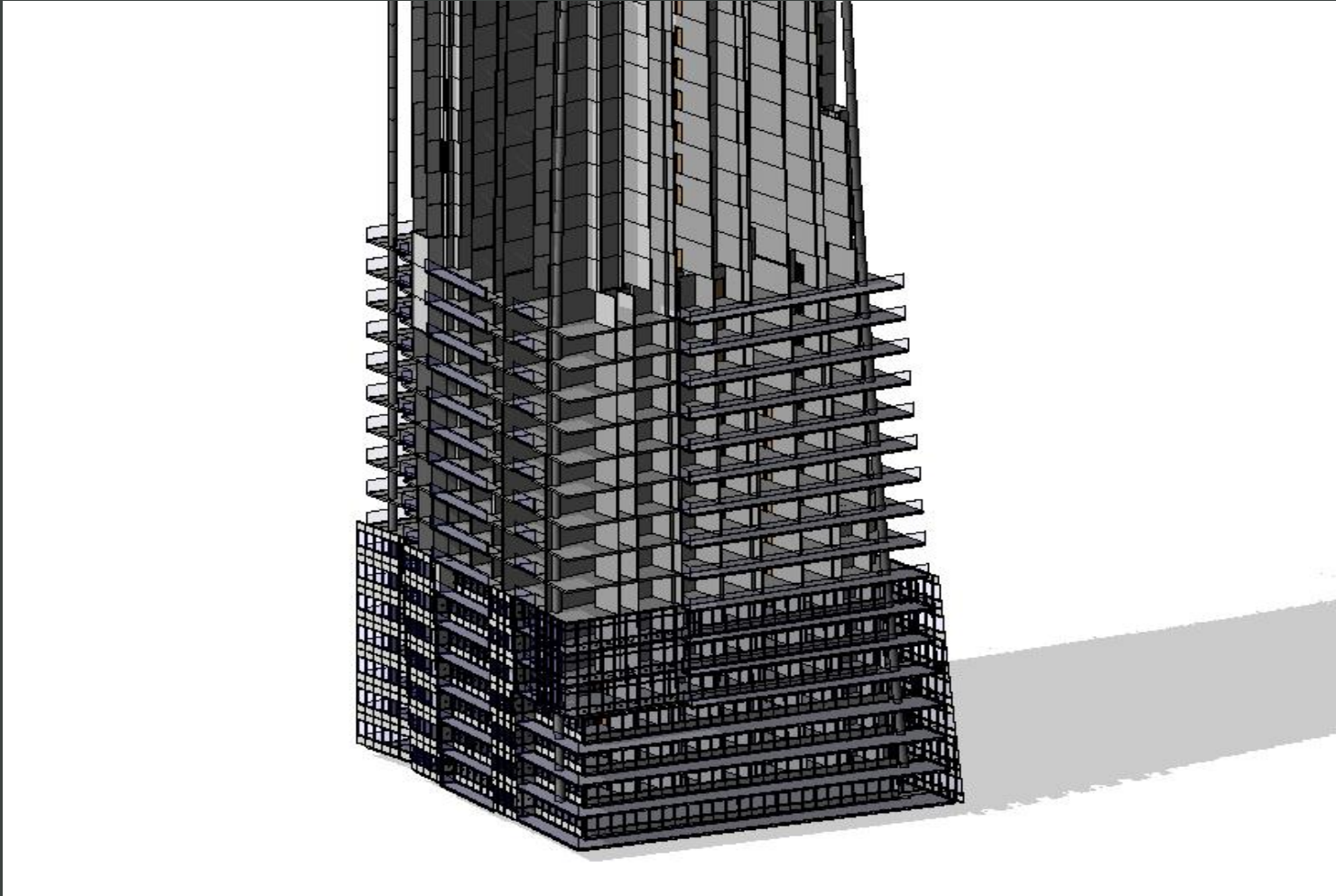








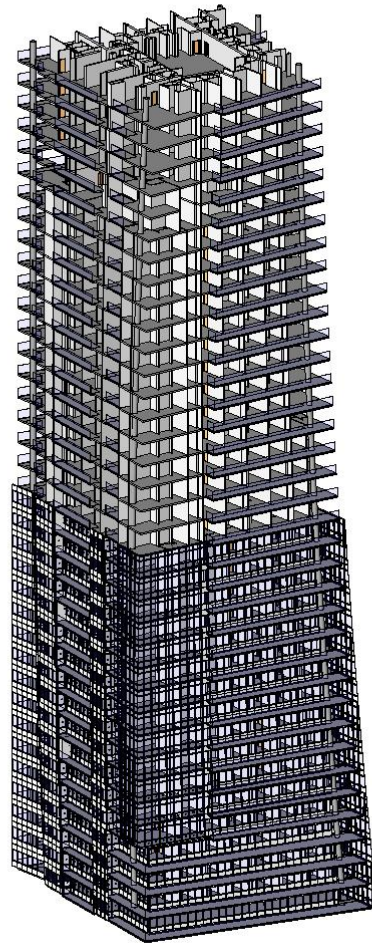


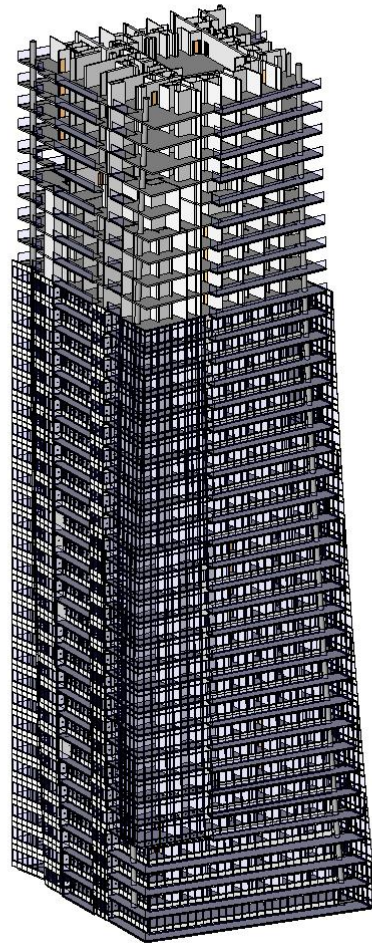


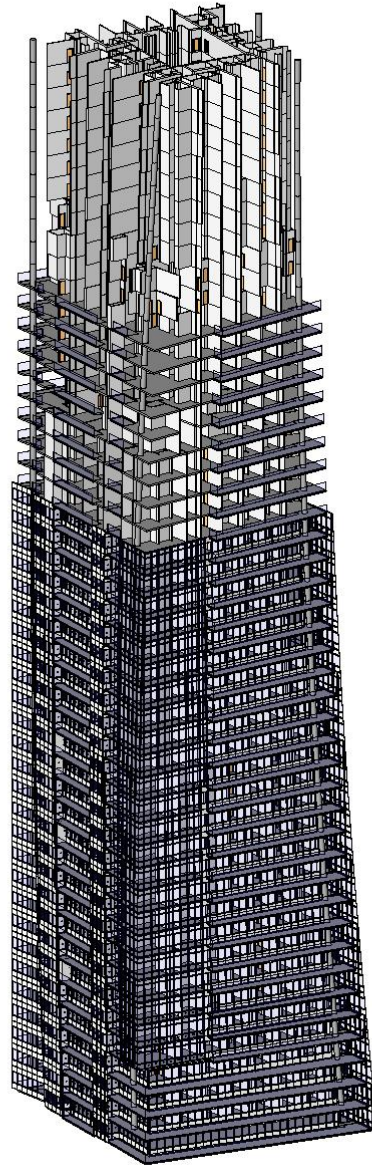


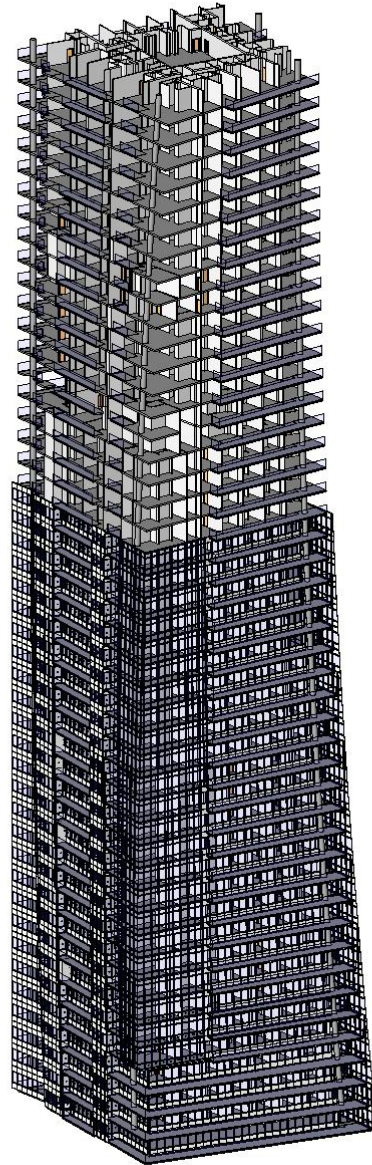


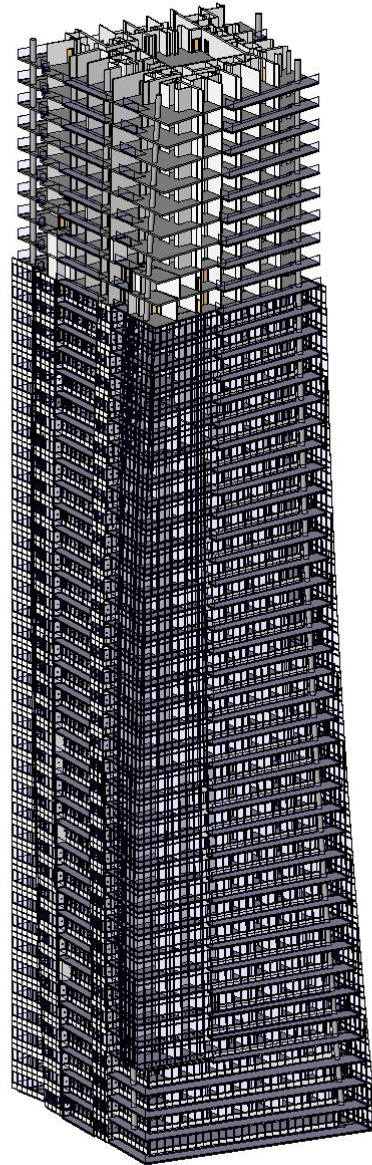


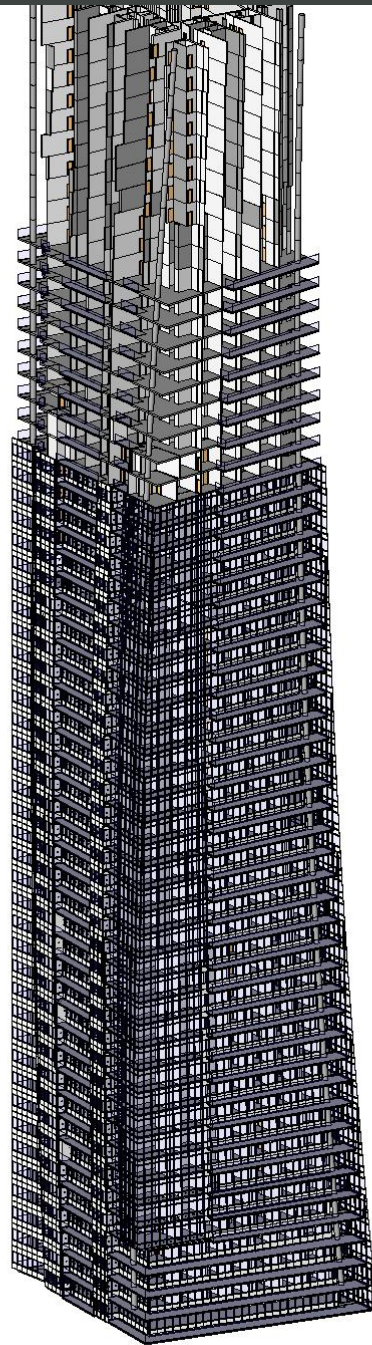


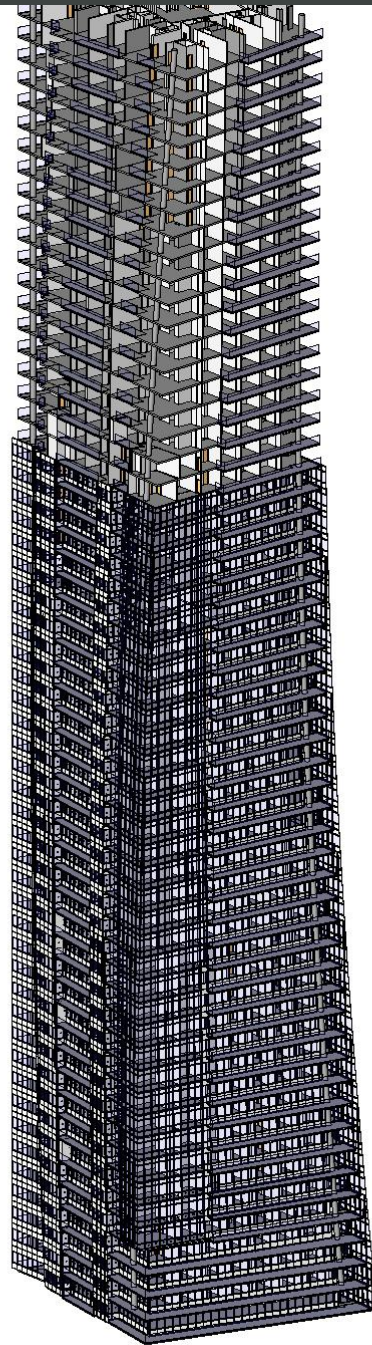


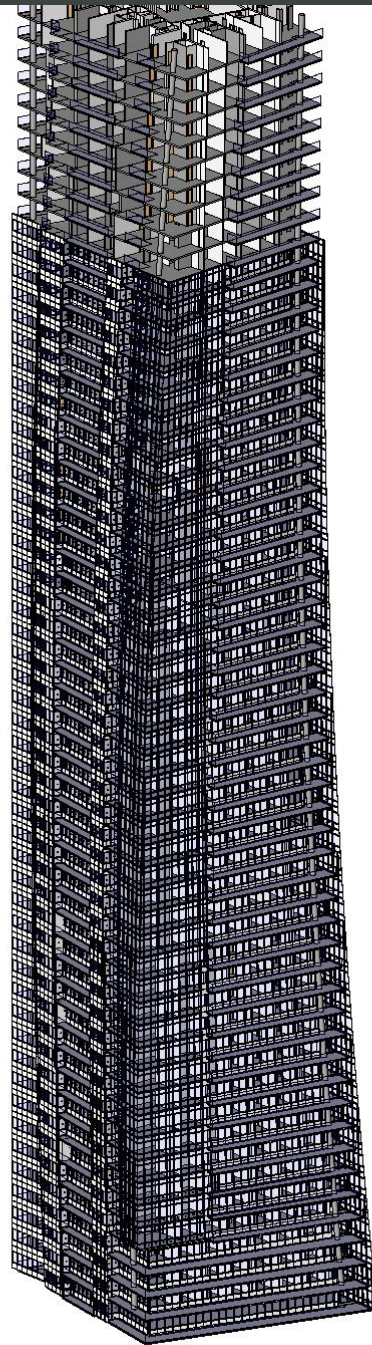
















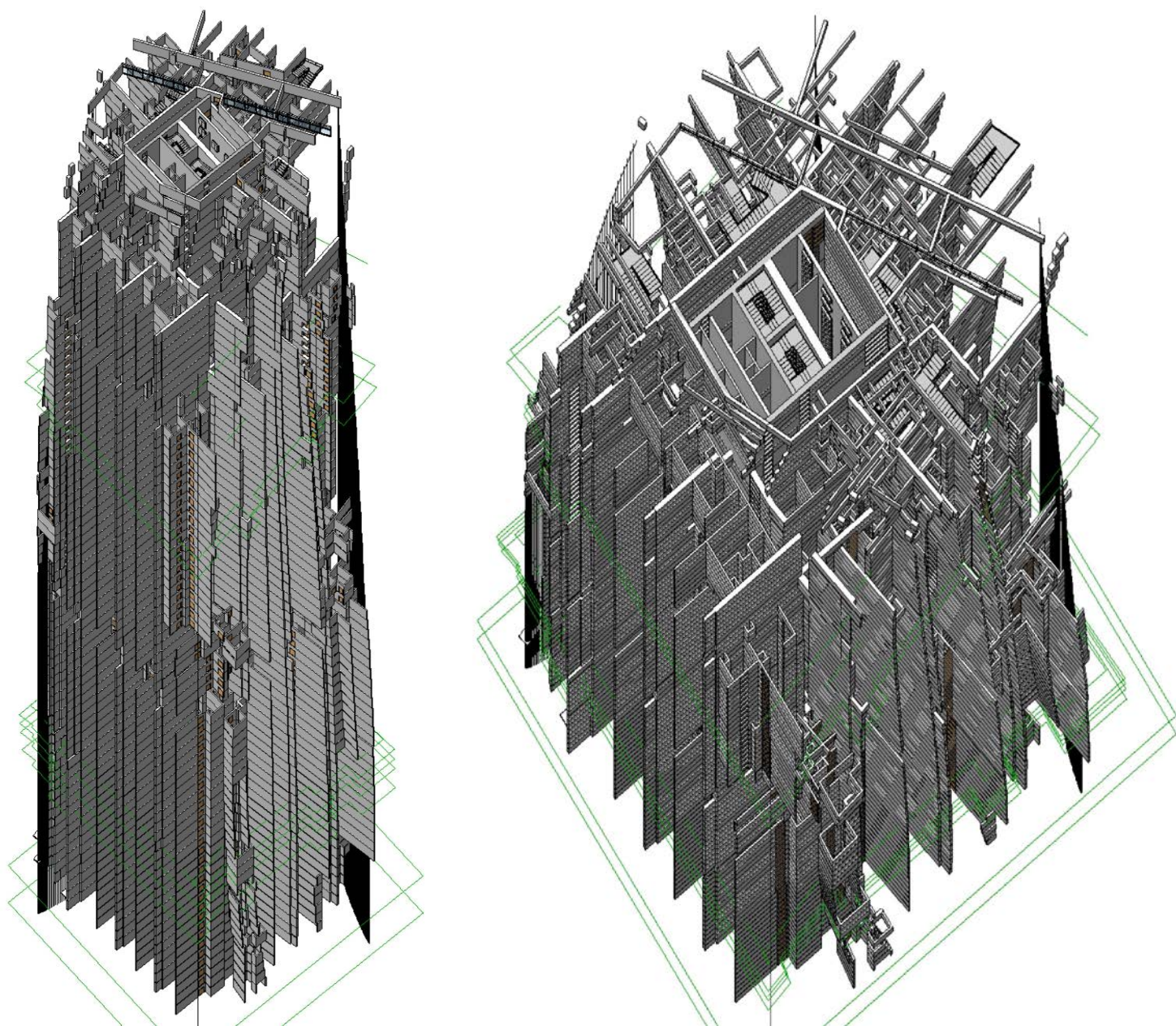




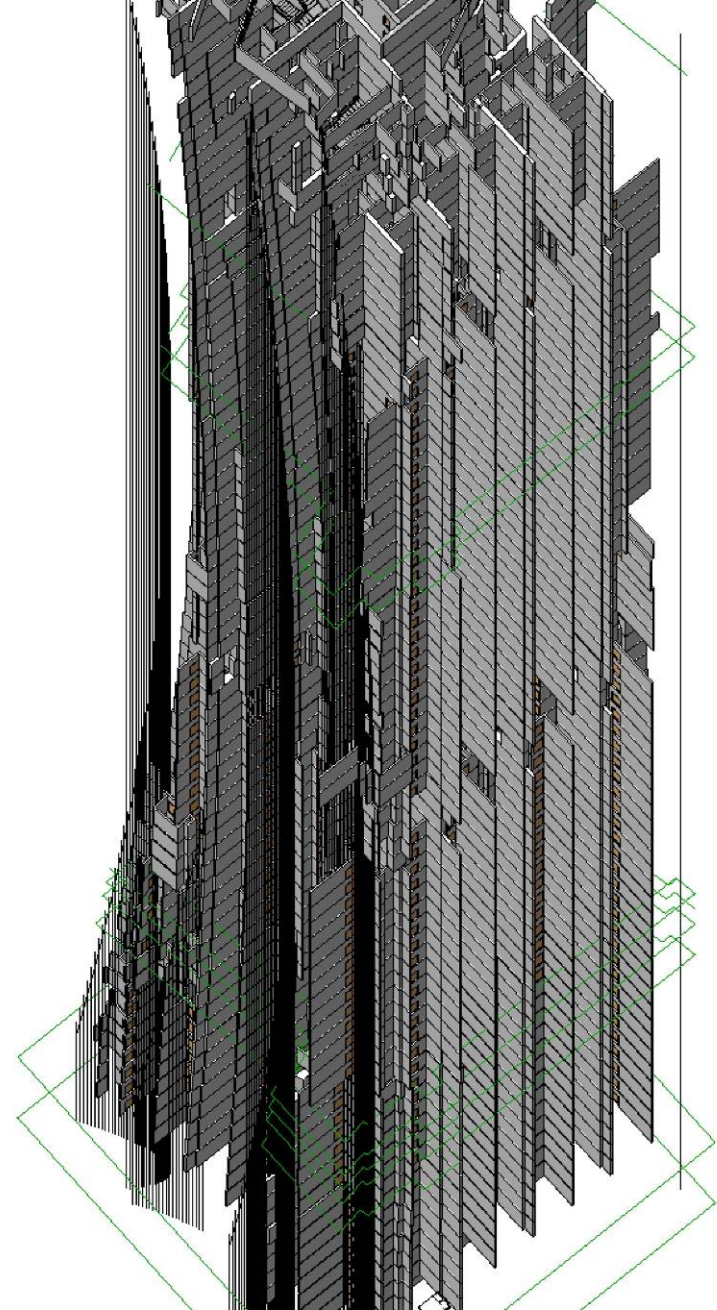
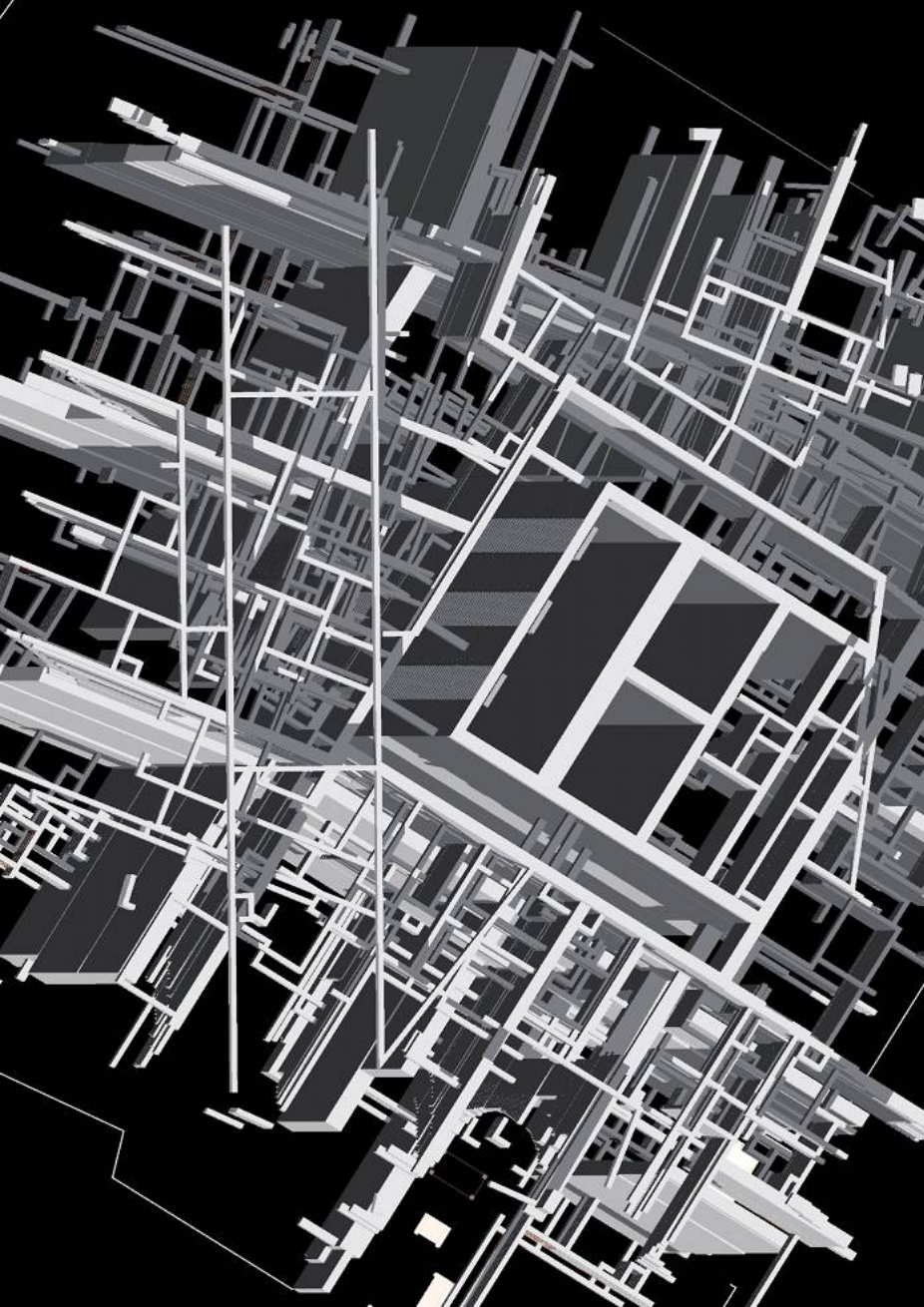




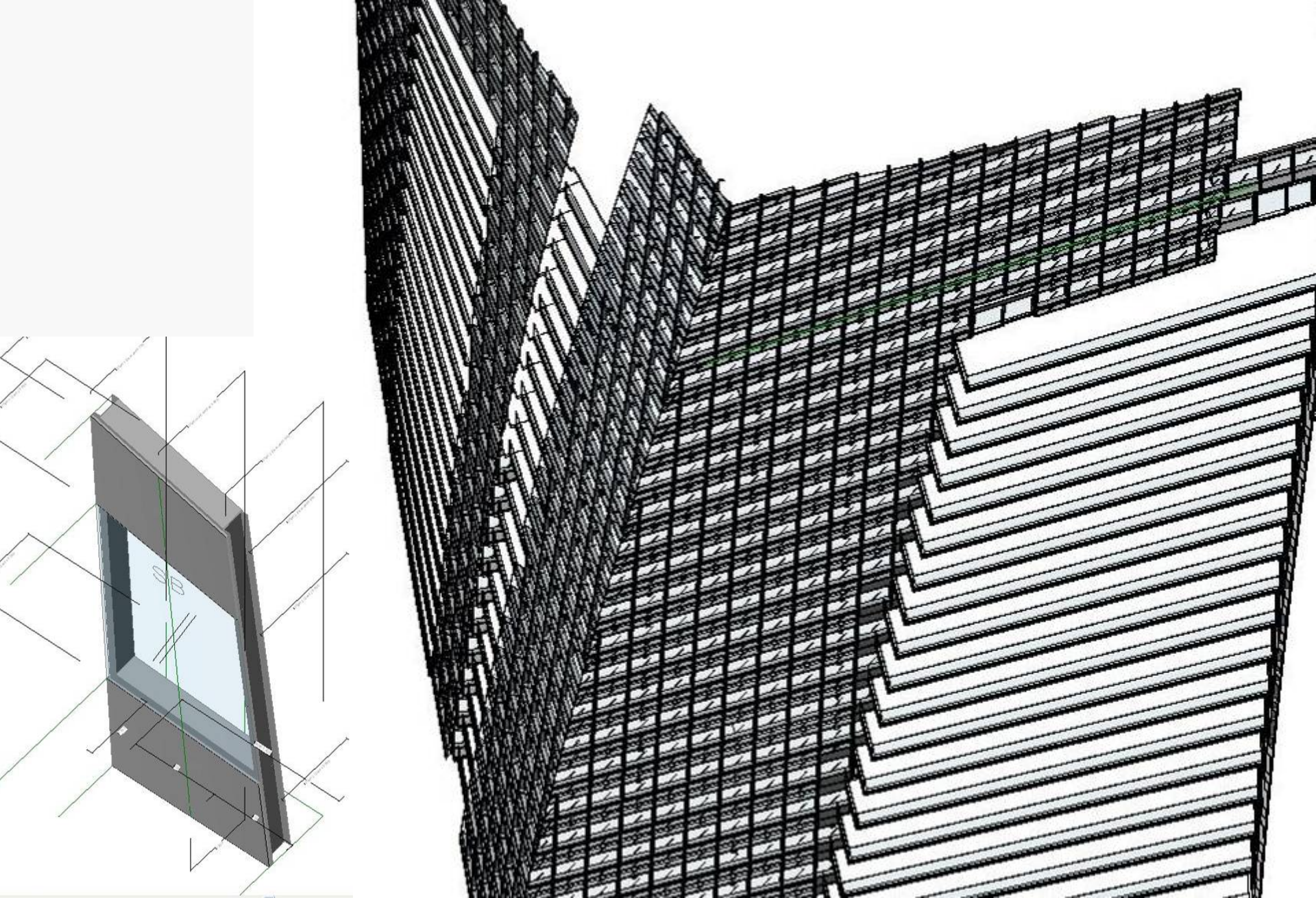




VERTICAL CO-ORDINATION



INTERNAL vs EXTERNAL



COMPLICATED CURTAIN WALL

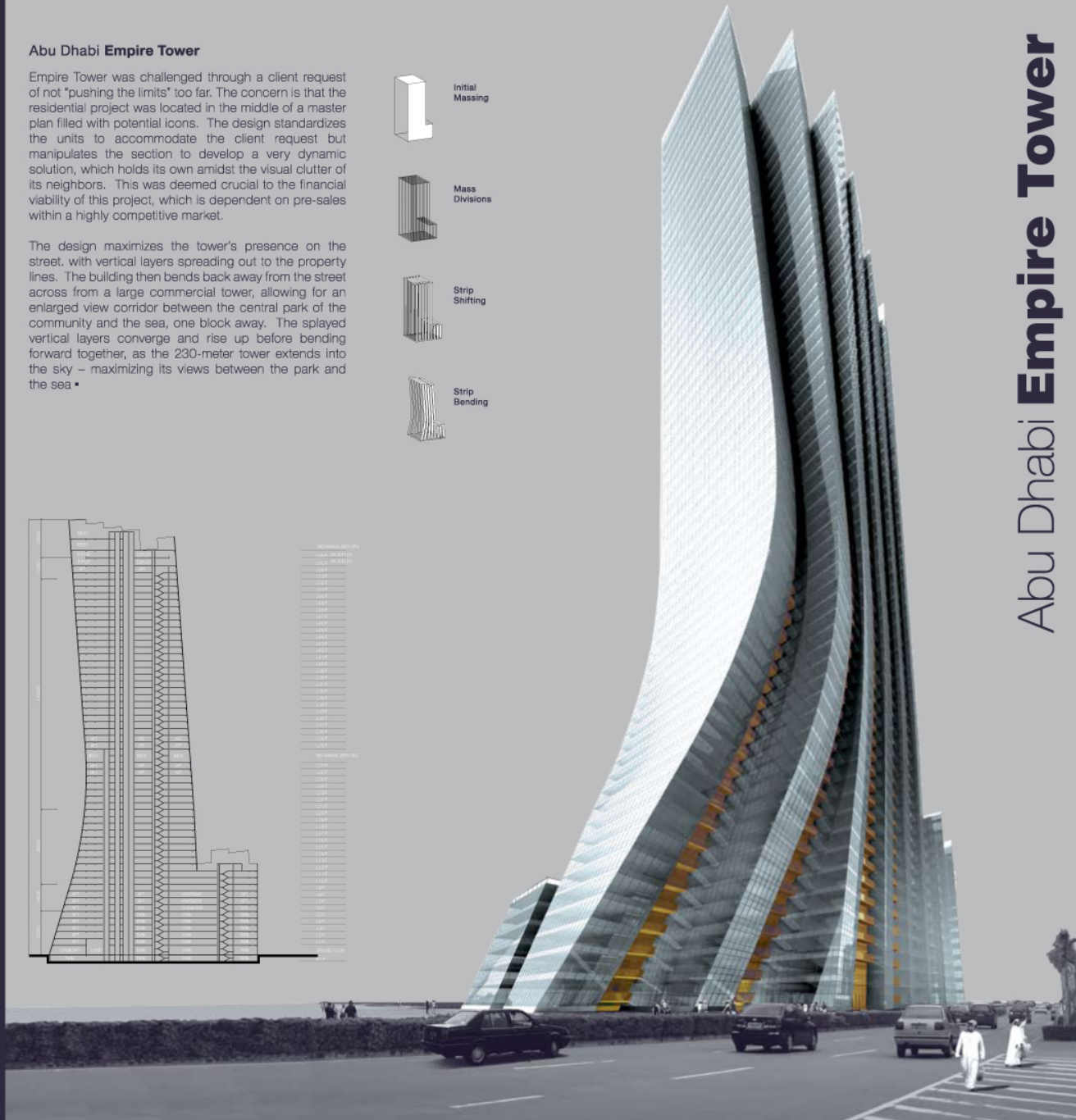
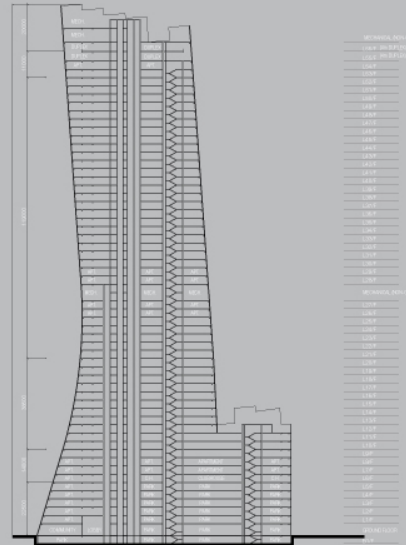


Program: Residential, Site Area 7,007 sqm
Floor Area 90,206 sqm, Building Height 225 m

Abu Dhabi Empire Tower

Empire Tower was challenged through a client request of not "pushing the limits" too far. The concern is that the residential project was located in the middle of a master plan filled with potential icons. The design standardizes the units to accommodate the client request but manipulates the section to develop a very dynamic solution, which holds its own amidst the visual clutter of its neighbors. This was deemed crucial to the financial viability of this project, which is dependent on pre-sales within a highly competitive market.

The design maximizes the tower's presence on the street, with vertical layers spreading out to the property lines. The building then bends back away from the street across from a large commercial tower, allowing for an enlarged view corridor between the central park of the community and the sea, one block away. The splayed vertical layers converge and rise up before bending forward together, as the 230-meter tower extends into the sky – maximizing its views between the park and the sea •



Abu Dhabi Empire Tower

Aedas



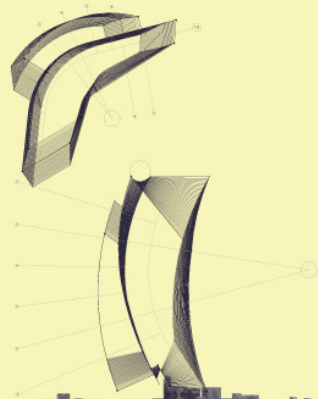
Abu Dhabi Dancing Towers

Located in the heart of Abu Dhabi, Dancing Towers was designed to appropriately fit its surrounding neighbors in scale.

The challenge was how to achieve this when the project was only 70,000 square meters and adjacent properties were relatively small, averaging 900 square-meter floor plates. Two slender towers as opposed to one singular tower was the first step, but the site itself was constrained, forcing a close proximity between the two buildings.

This site constraint is intensified in achieving a viable connective retail podium between the commercial and residential towers, drop-offs to the lobbies and access to supporting functions. The buildings were placed deliberately to maximize the uses down below.

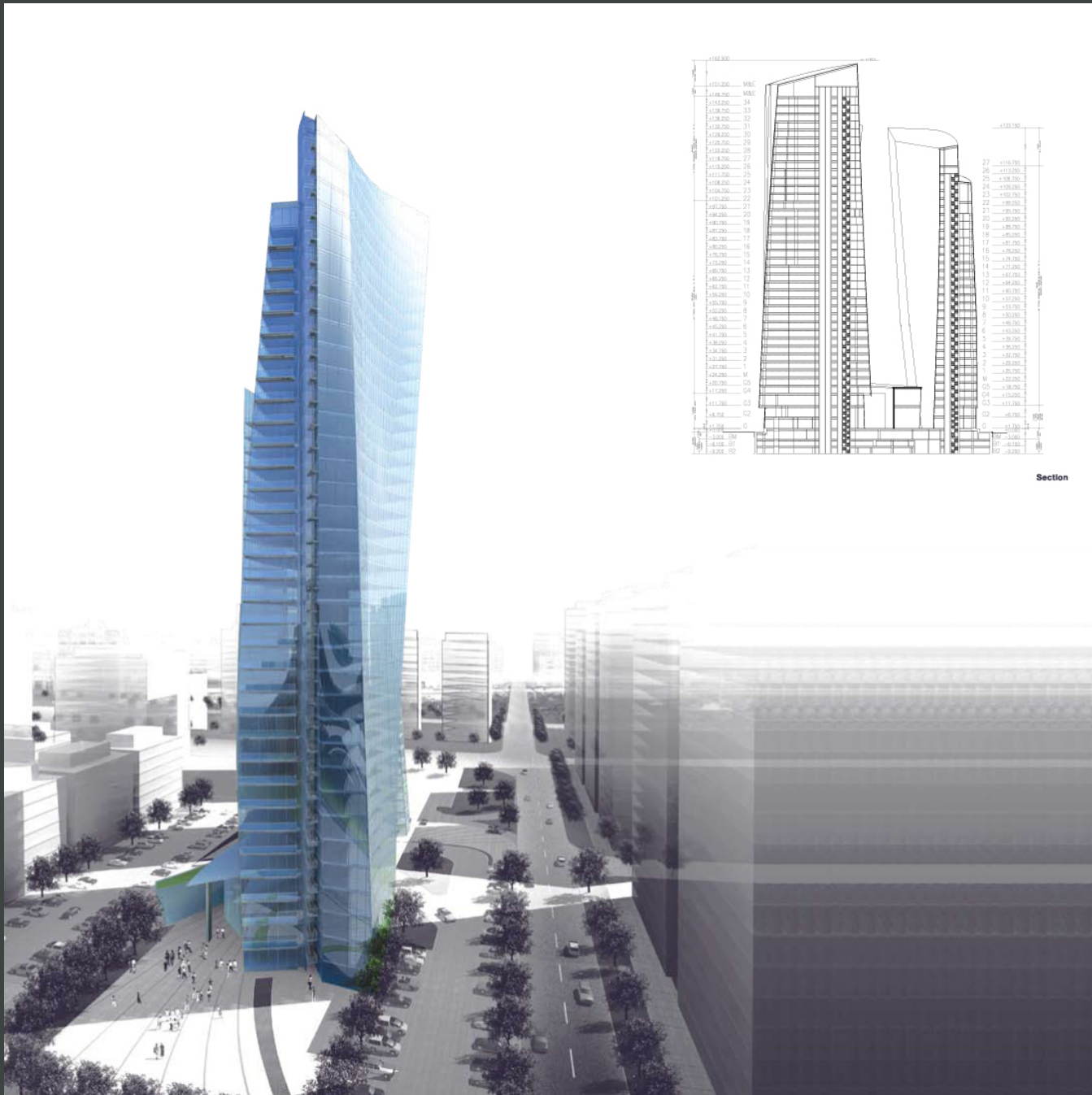
However, the two towers quickly lean, rotate, bend and warp to respond to each other, the adjacent sites and ultimately the view to the ocean at their horizon. These two figures fluidly respond to each other, dynamically engaged and flowing – and ultimately tied together in a passionate dance •



Program Mixed Use Site Area 4,160 sqm
Floor Area 44,235 sqm Building Height 160 m



Abu Dhabi Dancing Towers

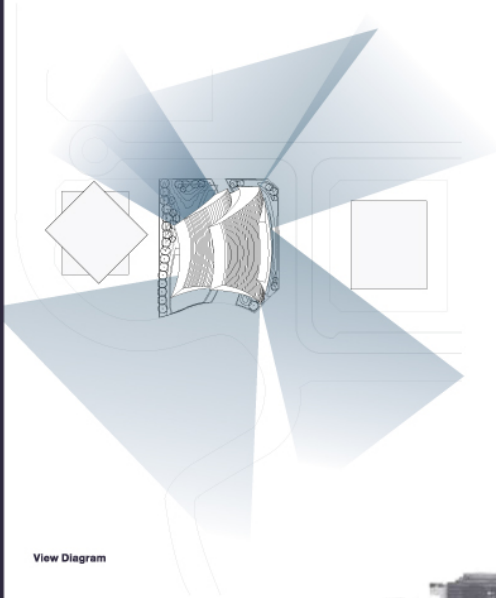




Dubai Ocean Heights Two

Ocean Heights Two is also located in Dubai Marina, UAE, along with its sister project, Ocean Heights One. At 460 meters in height and 105 floors, it will be the tallest tower in its vicinity. However, unlike its predecessor, the requirements for more modulated units up to the 60th floor, forced a different approach while intending to maintain the spirit of its sister.

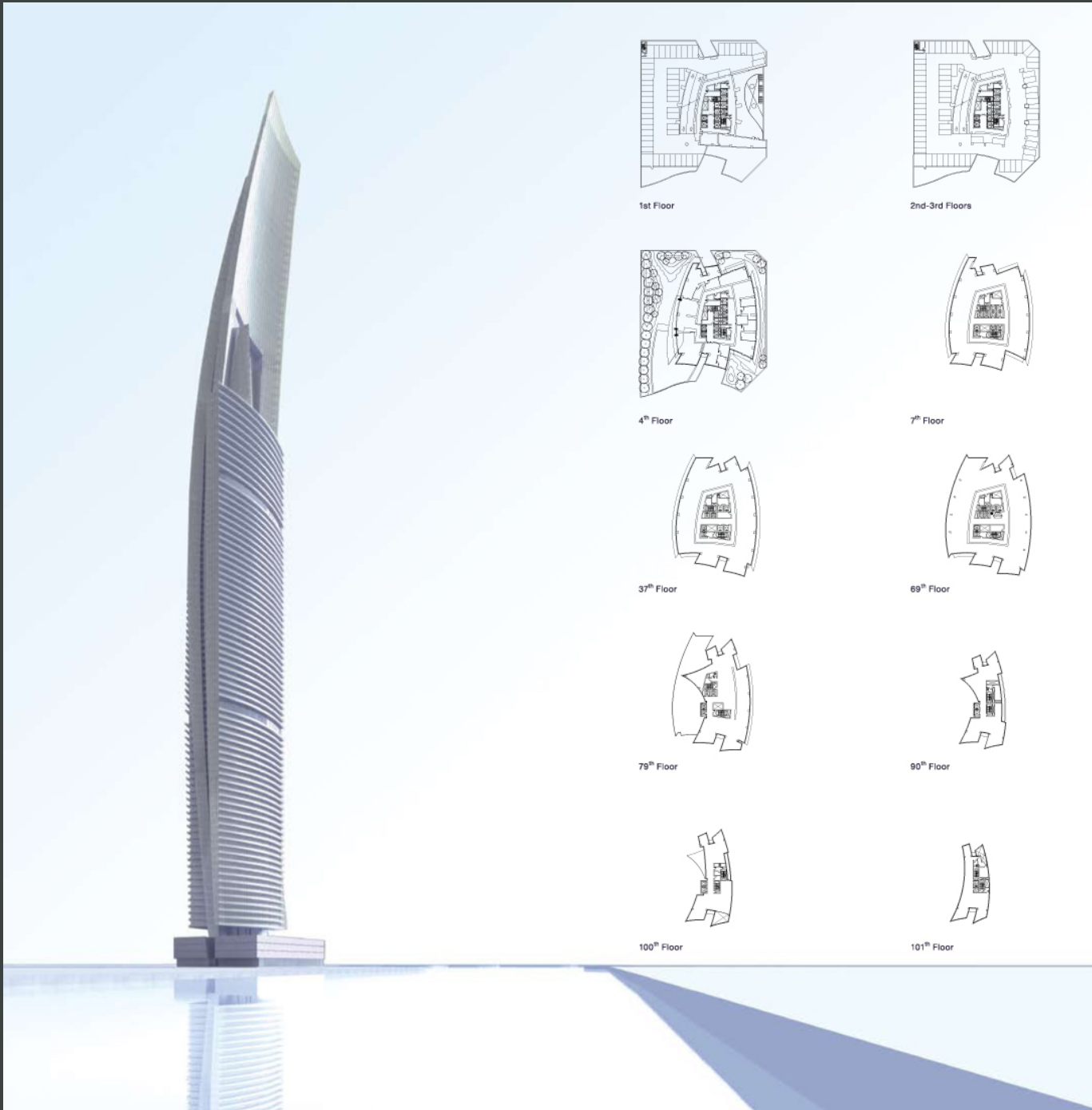
The first 60th floors of the tower are intended to be service apartments, which in order to be marketable, needed to have the majority of units standardized. The curved shape of the tower improves views past its densely located neighbors. The playfulness of this tower was concentrated into the two most visible faces, allowing units to bend up the tower in two blades. These blades were still modulated up to the 60th floor before the tight restrictions of unit area fluctuations become more relaxed. At this point, the modules drop off and the blades continue, tapering and bending into the sky ■



Program Residential Site Area 3,463sqm
Floor Area 197,979 sqm Building Height 460 m

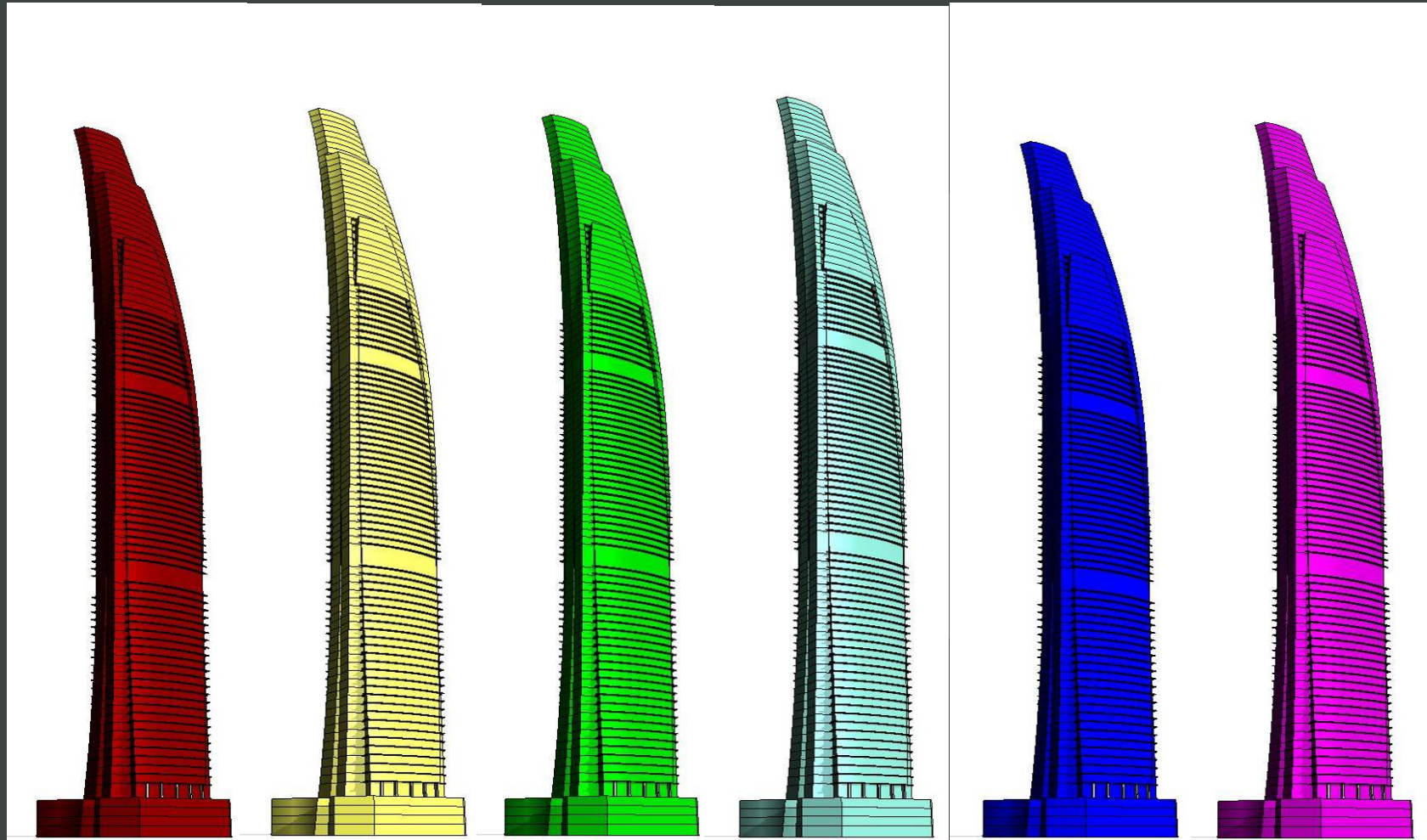


Dubai Ocean Heights Two



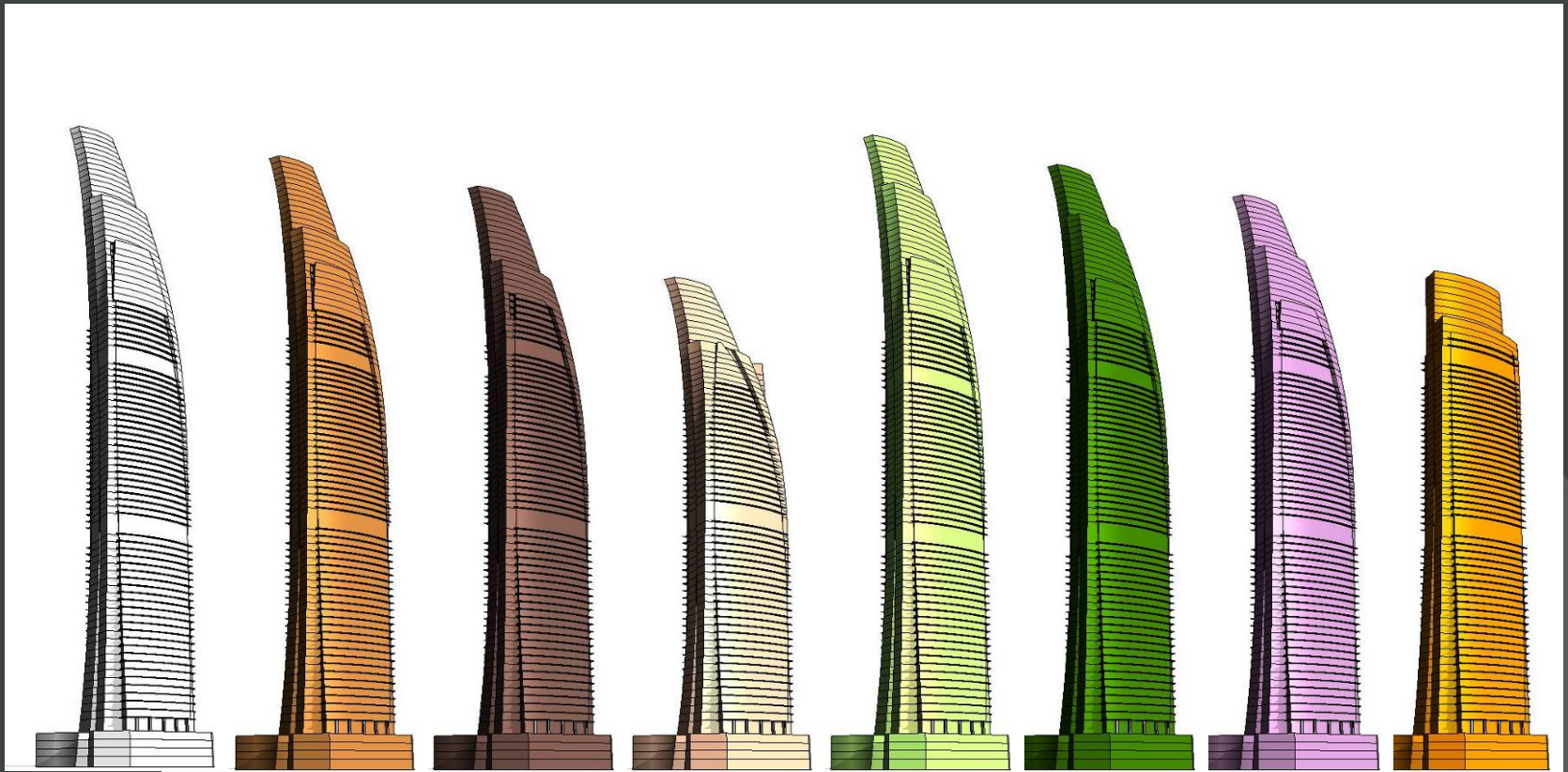


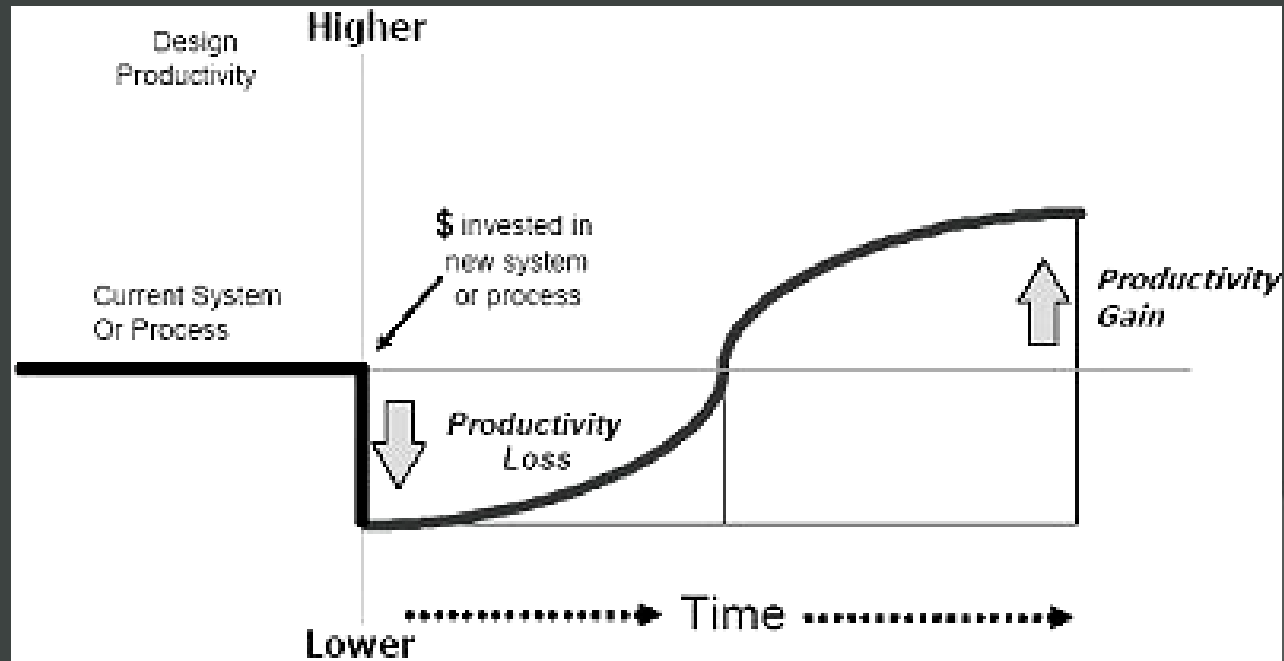
Ocean Heights II – Options





Ocean Heights II – Options





$\frac{(B - (\frac{B}{1+E})) \times (12 - C)}{A + (R \times C \times D)} = \text{First Year ROI}$	
A = cost of hardware and software	\$6,000
B = monthly labor cost	\$4,200
C = training time	3 months
D = productivity loss during training	50%
E = productivity gain after training	25%

Source 26/1/07:
<http://aec.cadalyst.com/aec/article/articleDetail.jsp?id=124222>

PRODUCTIVITY
>60%



Is the Building Industry changing?





Design and Construction

• Overview

• Architecture & Engineering

• CAD Standards

▶ 3D-4D Building Information Modeling

3D-4D-BIM Overview

Spatial Program Validation

4D Phasing

3D Laser Scanning

Energy and Sustainability

BIM Library

• Commissioning

• Construction Excellence

• Design Excellence and the Arts

• Facility Access for the Disabled

• Sustainable Design

• Urban Development

• Design and Construction Delivery Process

[Home](#) > [Buildings](#) > [Public Buildings](#) > [Design and Construction](#) > 3D-4D Building Information Modeling

3D-4D Building Information Modeling

Since 2003, the General Services Administration (GSA) through its Public Buildings Service (PBS) Office of Chief Architect (OCA) has established the National 3D-4D-BIM Program. OCA has completed 10 pilot projects. It has 11 pilot projects underway in its current capital program, while assessing and supporting 3D, 4D, Building Information Modeling (BIM) applications in over 25 ongoing projects across the nation. The power of visualization, coordination, simulation, and optimization from three-dimensional (3D), four-dimensional (4D), and BIM computer technologies allow GSA to more effectively meet customer, design, construction, and program requirements. GSA is committed to a strategic and incremental adoption of 3D, 4D, BIM technologies.

There is a progression from 2D to 3D, 4D and BIM. While 3D models make valuable contributions to communications, not all 3D models qualify as BIM models since a 3D geometric representation is only part of the BIM concept.

Critical to successful integration of computer models into project coordination, simulation, and optimization is the inclusion of information—the "I" in BIM—to generate feedback. As a shared knowledge resource, BIM can serve as a reliable basis for decision making and reduce the need for re-gathering or re-formatting information. GSA is currently exploring the use of BIM technology throughout a project's lifecycle in the following areas: spatial program validation, 4D phasing, laser scanning, energy and sustainability, and courts design validation.

For all major projects (prospectus-level) receiving design funding in Fiscal Year 2007 and beyond, GSA will require spatial program BIMs be the minimum requirements for submission to OCA for Final Concept approvals by the PBS Commissioner and the Chief Architect. At the same time, all GSA projects are encouraged to deploy mature 3D, 4D, and BIM technologies—spatial program validation and beyond—at strategic project phases in support of specific project challenges.

[BIM Program Flyer](#)

The following are highlights of the GSA National 3D-4D-BIM Program:

- Established policy to phase in 3D, 4D, and BIM adoption for all major projects
- Leading 3D-4D-BIM pilot application on current capital projects
- Providing expert support and assessment for ongoing capital projects to incorporate 3D, 4D, and BIM technologies
- Assessing industry readiness and technology maturity
- Developed GSA-specific incentives for 3D-4D-BIM
- Developed solicitation and contractual language for 3D-4D-BIM services
- Partnered with BIM vendors, professional associations, open standard organizations, and academic/research institutions

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GSA Organizations

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[Abbreviation Look-up](#)

GSA Regions by State

Choose State:

AK



QuickLinks

[A-Z Links to GSA Topics](#)

For all major projects (prospectus-level) receiving design funding in Fiscal Year 2007 and beyond, GSA will require spatial program **BIMs** be the **minimum requirements** for submission to OCA for Final Concept approvals by the PBS Commissioner and the Chief Architect.



Intra and Inter-offices Communications





Intra-offices Management (e-OFFICE)

eOffice - Aedas - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Address <http://eoffice.hk.aedas.com/> Go Links

Aedas

eOffice Home Practice Production News Human Resources Information Services TimeSheets

eOffice Home

- Practice
 - Internal Telephone List
 - Location Plan
- Production
 - Office Standard
 - Microsoft Office Template
 - Project List
 - Resources Planning
 - Course Registration
 - Brand Usage Policy
 - Training Material
- News
 - Private Eye-das
 - Aedas Review
- Human Resources
 - iSMAS (Leave Application)
 - iSMAS for Macau Office (Leave Application)
 - iSMAS Manager
 - Employee Guideline
 - Leave Schedule
 - Medical Claim Forms
 - Group Travel Insurance
 - Current Notices
 - Cyberport Workshop
 - Aedas Mentoring Program
 - Skill Survey
 - Events Registration

Welcome to the Aedas eOffice Home Page

Announcement

Announcement	Announce Date
Tangshan Earthquake Memorial Park Ideas Design Competition (NEW) <i>This competition is open to all professionals and students anywhere in the world. Registration is made via the webpage (www.tsghj.gov.cn). The total Prize is of 56,000 US dollars</i>	23 May 2007
Sports in June (NEW) <i>Basketball and Badminton</i>	23 May 2007
Private Eye-das May 2007	3 May 2007
Referral Incentive Scheme	17 April 2007

Please join us to welcome new staff

Name	Position	Join Date
Frankie Cheung	CAD Draughtsman	22 May 2007
David Tang	Interior Designer	21 May 2007
Janie Yip	Architect	21 May 2007
Josephine Tao	Architectural Graduate	21 May 2007

 Shawn Dolley
Associate
21 May 2007

Local intranet



Intra-offices Management (e-OFFICE)

eOffice - Aedas - Microsoft Internet Explorer

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Aedas

[eOffice Home](#) [Practice](#) [Production](#) [News](#) [Human Resources](#) **Information Services** [TimeSheets](#)

[eOffice Home > Information Services](#)

Information Services

- Email Web Access
 - Exchange (OWA)
- MessageLabs
 - PNAP
- Law and Regulations
 - Building Ordinance
 - Others Law and Regulations
 - Building Department Architectural Code of Practice and Design Manuals
 - Other government notices
 - Practice and Design Manuals
 - [Exchange \(OWA\)](#)
 - [MessageLabs](#)
 - PNAP
 - BA Forms
 - Others Law and Regulations
 - Other government notices
- HKIA Notices
- Library Books
 - Country / Style
 - Architect / Artist
 - Landscape
 - Building Type
 - Others
- Aedas Screen Saver

Available IT Equipment for borrowing

Item	Available	Last Update Time
Digital Camera	1	29 May 2007 10:00
Card Reader	1	29 May 2007 10:00
Notebook Computer	0	29 May 2007 10:00
USB Drive	0	29 May 2007 10:00
Projector	2	29 May 2007 10:00
Laser Pointer	1	29 May 2007 10:00
Presenter	1	29 May 2007 10:00
Portable Screen	2	29 May 2007 10:00
Polycom	0	29 May 2007 10:00

- [Building Department Architectural Code of Practice and Design Manuals](#)
- [PNAP](#)
- [BA Forms](#)
- [Others Law and Regulations](#)
- [Others government notices](#)

Local intranet



Intra-offices Management (e-OFFICE)

The screenshot displays the eOffice - Aedas - Microsoft Internet Explorer interface. The browser window title is "eOffice - Aedas - Microsoft Internet Explorer". The address bar shows the URL "http://eoffice.hk.aedas.com/Production.aspx". The page features a navigation menu with tabs: "eOffice Home", "Practice", "Production", "News", "Human Resources", "Information Services", and "TimeSheets". The "Production" tab is selected, and a dropdown menu is visible, listing items: "Office Standard", "Microsoft Office Template", "Project List", "Resources Planning", "Course Registration", "Brand Usage Policy", and "Training Material". The "Office Standard" item is highlighted, and a sub-menu is shown with links: "IMS", "ADS", "CADD", "BIM", "ACONEX", "Design Visualization", and "ISO Certificates". The main content area is divided into two sections: "Office Standard" and "Microsoft Office Template". The "Office Standard" section lists links: "IMS", "ADS", "CADD", "BIM", "ACONEX", "Design Visualization", and "ISO Certificates". The "Microsoft Office Template" section lists a link: "Microsoft Office Template". The page footer shows "Local intranet".

eOffice - Aedas - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Address http://eoffice.hk.aedas.com/Production.aspx Go Links

Aedas

eOffice Home Practice **Production** News Human Resources Information Services TimeSheets

eOffice Home > Production

Production

- Office Standard
 - IMS
 - ADS
 - CADD
 - BIM
 - ACONEX
 - Design Visualization
 - ISO Certificates
- Microsoft Office Template
 - Project List
 - Resources Planning
 - Course Registration
 - Brand Usage Policy
 - Training Material
 - BIM Training Material
 - HKIA ARB Professional Assessment
 - Past Paper
 - Course Material
 - Design Forum Material

Office Standard

- [IMS](#)
- [ADS](#)
- [CADD](#)
- [BIM](#)
- [ACONEX](#)
- [Design Visualization](#)
- [ISO Certificates](#)

Microsoft Office Template

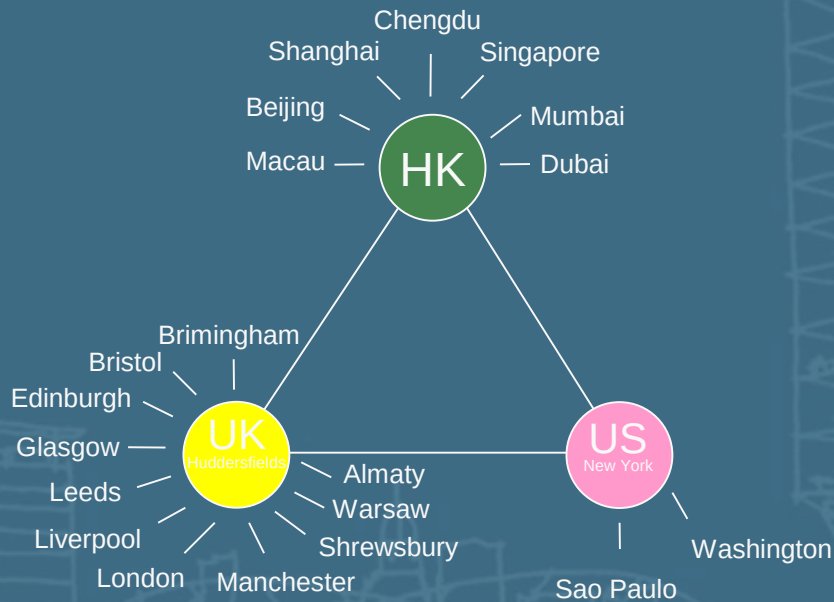
- [Microsoft Office Template](#)

Local intranet



Inter-offices Management (MIS)

Proposed Network Infrastructure for MIS





Work Flow & MIS



Aedas MIS Modules –

1/2

Production

- Production Home
 - > My Projects
 - > My Project Tasks
 - > Grey List
 - + Projects
 - Resourcing
 - > **Project Resourcing**
 - > Projects without Resources
 - > Resource Charts
 - > Unresourced Staff
 - + Tasks
 - + Analyse
- Production Content
 - > Forum
 - > Forum (AutoCAD)
 - > Forum (QMS)
 - + **QMS**
 - + Risk Issues
 - > Barbour Index
 - + **ARB Standards**
 - > Business Plan 2005
 - > Production Team
 - > Outsource / Insource
 - > Appointment Documents
 - + Business Recovery
 - > Source details

Timesheets

- **Timesheet Home**
 - > My Timesheets
 - + **My Holiday**
 - Timesheets
 - + **Manager Authorise**
 - Analyse
 - > By Status
 - > Missing Timesheet Value
 - > Missing Timesheets
 - > Non-Project Time by Office
 - > Non-Project Time by Staff
 - > Sick Leave by Office
 - > Staff Time by Activity
 - > Staff Time by Office
 - **Expenses**
 - > Manager Authorise
 - Analyse
 - > By Office
 - > By Project
 - > By Staff
 - > By Status
- Holidays
 - > Manager Authorise
- Analyse
 - > By Office
 - > By Staff
 - > Holiday Allowances
 - > Holiday Trends

Finance

- **Finance Home**
 - > Management Tasks
 - + **Invoices**
 - > Draft Invoice Records
 - > Unpaid Invoice Records
 - > Paid Invoice Records
 - > Add Credit Note
 - > Add Fee Application
 - > Add Invoice
 - > Aged Debtors
 - > Billings to Date
 - > Consolidated Billings
- Job Costs
 - > Job Cost Adjustments
 - > Job Costs for a Project
 - > Job Costs by Period
 - > Job Costs to Date
 - > Projected Job Costs
- Finance Content
 - > Business Plan 2005
 - > Forum
 - > Finance Team
 - > What We Do
 - > Useful Links

Human Resources

- Human Resources Home
 - > My Training
 - + Staff
 - > **Staff Rates**
- Human Resources Content
 - > Business Plan 2006
 - > Human Resources Team
 - > Forum
 - > Induction
 - > Absence
 - + **Childcare Vouchers**
 - + Current Vacancies
 - + **Equality and Diversity**
 - + **Employment Guide**
 - + **Flexible Working Policy**
 - + **Health & Safety**
 - + **LifeWorks EAP**
 - + Recruitment and Selection
 - > Probationary Evaluation
 - + **Staff Appraisal**
 - > Training and Development
 - + Termination of Employment

Interface with SMAS:

- > Payroll
- > Tax Return
- > Provident Fund

Interface with APPAC

Require localization

Not relevant o HK environment

Require interface with HK existing systems

Aedas MIS Modules –

2/2

Marketing

- **Marketing Home**
 - > Grey List (Production)
- Analyse
 - > Marketing Database
 - > Press Cuttings Database
 - > Prospects
- Sector Experience
 - > Practice-Wide
 - > By Office
 - > By Staff Member
 - > By Most Experienced Staff
 - > By Most Experienced Office
- Marketing Content
 - > Business Plan 2006
 - > Forum
 - > Marketing Team
 - > Art Competition
 - > Branding & Templates
 - > Construction Futures
 - + Construction Leads
 - > CV Database
 - > Events Calendar
 - > Image Database
 - > Practice Information
 - > Press Cuttings Database
 - > Publications
 - > Relevant Experience
 - > Westminster & Whitehall Update

Address Book

- **Address Book Home**
 - > Address Book Search
- Admin Tools
 - > Company Admin
 - > Office Admin
 - > Contact Admin
- > My Mailing Lists
- Companies
 - > Company Records
 - > Add Company
- Contacts
 - > Contact Records
 - > Add Contact
- Analyse
 - > Contact History

Information Services

- > Work Order List
- Information Services Content
 - > Business Plan 2005
 - > IT Team
- IT Development
 - > Forum
- Functional Specifications
 - > Awaiting Approval
 - > Approved
 - > Complete
- Phone Dialler Test
 - > test
- IT Helpdesk
 - > Forum
- > Care of Equipment
- > Common Filename Extensions
- System Status
 - > Email Test
 - > Website Statistics
- Training / User Guides
 - > Blackberry User Guide
 - > Creating a PDF File
 - > Folder / File Conventions
 - > Forming a VPN Connection
 - > MIS Active Content Guide
 - > Mitel Telephone System
 - > Using Microsoft Outlook
 - > Video Conferencing
- > Virus Protection

MIS

- MIS Home
 - > Active Content Updates
 - > Forums
 - > Internal Phone List
- Newsletters
 - Aedas News
 - > 2005
 - Essential Aedas
 - > 2004
 - > **2005**
 - Private Eyedas
 - > 2003
 - > 2004
 - > 2005
 - > 2006
- + Newsreel
- + Offices
- + R&D
- + Sectors
- + Services
- > Useful Links



Conclusions: AEDAS to avoid / minimize the followings:

Inefficiencies, mistakes and delays account for \$200 billion of the \$650 billion spent on construction in America every year.

New wiring, The Economist, January 13th, 2000

In the UK alone, the annual cost of rectifying construction defects caused by poorly detailed drawings and operatives being given incorrect instructions has been put at £1bn (≈\$1.66bn).

IT Construction Best Practice service, <http://www.itcbp.org.uk>

The process of construction is itself repeated in its essentials from project to project. Indeed, research suggests that up to 80% of inputs into buildings are repeated.

M4i, <http://www.m4i.org.uk>



Thank You...