

Building Information Modelling (BIM)

- Marketing Opportunities

David Fung

MTR Marketing / Retail

Modelling Information

Kiosk Location Plan
KioskLayout Plan
Sections
Elevations
Perspective/ Rendering
Area Diagrams
Sprinkler Layout
Electrical Layout
Air Diffuser Layout
Details
Tenant Provisions
Material/ Colour
Other Diagrams...

Geographical Data
Name/ Type
Area Schedule
Finishing Schedules
Door/Window/Louvre
Schedules
Equipment Ratings
Provision schedules...
Contract Information
Renting Period
Fitting Out approval Record
FS inspection Record
Complaint Record
Operating Data
SCO Cost
Deficiency Record

Modelling

CAD SYSTEMs

e.g. AutoCAD,
Microstation

Information

Word

Excel (spreadsheet)

Access (Data Base)

MS Project

BQ Softwares

.....

Modelling

Information

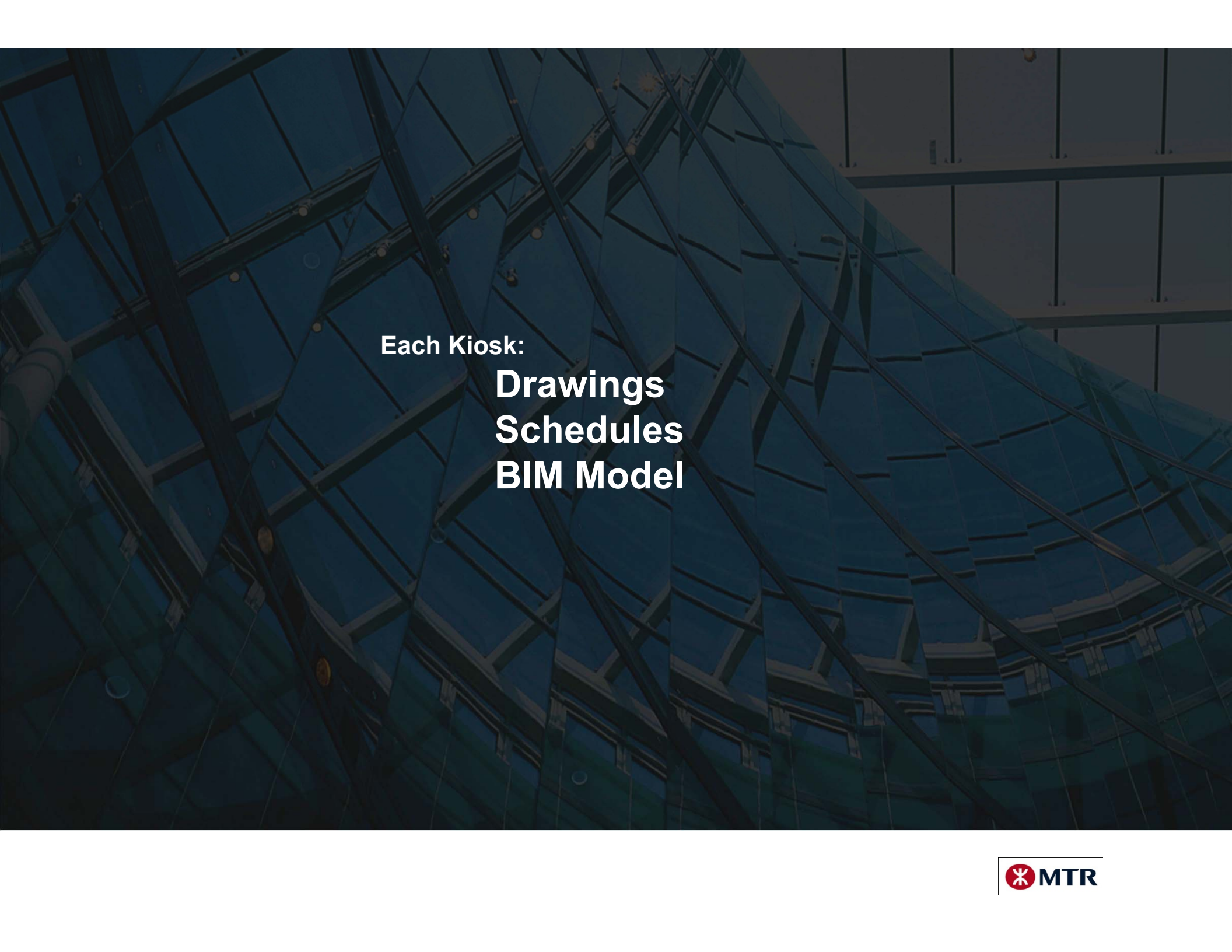
BIM

Building Information Modeling

信息化建築模型

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

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



Each Kiosk:
Drawings
Schedules
BIM Model

Z_ISL_ADM_ARC.rvt - Floor Plan: (CONTRACT)_Z_S100 CONCOURSE LEVEL

Home Insert Annotate Analyze Structure Massing & Site Collaborate View Manage Add-Ins Modify

Modify Select Materials Object Snaps Styles Project Information Project Parameters Project Units Shared Parameters Transfer Project Standards Purge Unused Additional Settings Location Coordinates Position Design Options Main Model Add to Set Pick to Edit Manage Links Manage Images Decal Types Starting View Phases Demolish IDs of Selection Select by ID Warnings Inquiry Macro Manager Security Macros

Properties

Floor Plan

Floor Plan: (CONTRACT)_Z_S100 + Edit Type

Underlay	None
Underlay Orientation	Plan
Orientation	Project North
Wall Join Display	Clean all wall joins
Discipline	Architectural
Color Scheme Locati...	Background
Color Scheme	Department
Default Analysis Disp...	None
Sun Path	

Properties help Apply

Z_ISL_ADM_ARC.rvt - Project Browser

Views (all)

Floor Plans

- (CONTRACT)_Z_S200 VENT SHAFT W
- (CONTRACT)_Z_S100 CONCOURSE LEVEL**
- (CONTRACT)_Z_S100 ROOF LEVEL
- (CONTRACT)_Z_S200 CONCOURSE LE
- (CONTRACT)_Z_S200 LOW PLATFORM
- (CONTRACT)_Z_S200 UPPER PLATFOR
- (CONTRACT)_Z_S200 VENT SHAFT W
- (CONTRACT)_Z_S300_CONCOURSE LE
- (CONTRACT)_Z_S500 BASE LEVEL
- (CONTRACT)_Z_S500 CONCOURSE LE
- (CONTRACT)_Z_S500 GROUND LEVEL
- (CONTRACT)_Z_S500 LOWER PLATFOI
- (CONTRACT)_Z_S500 LOWER TRACK L
- (CONTRACT)_Z_S500 ROOF LEVEL
- (CONTRACT)_Z_S500 UPPER PLATFOR

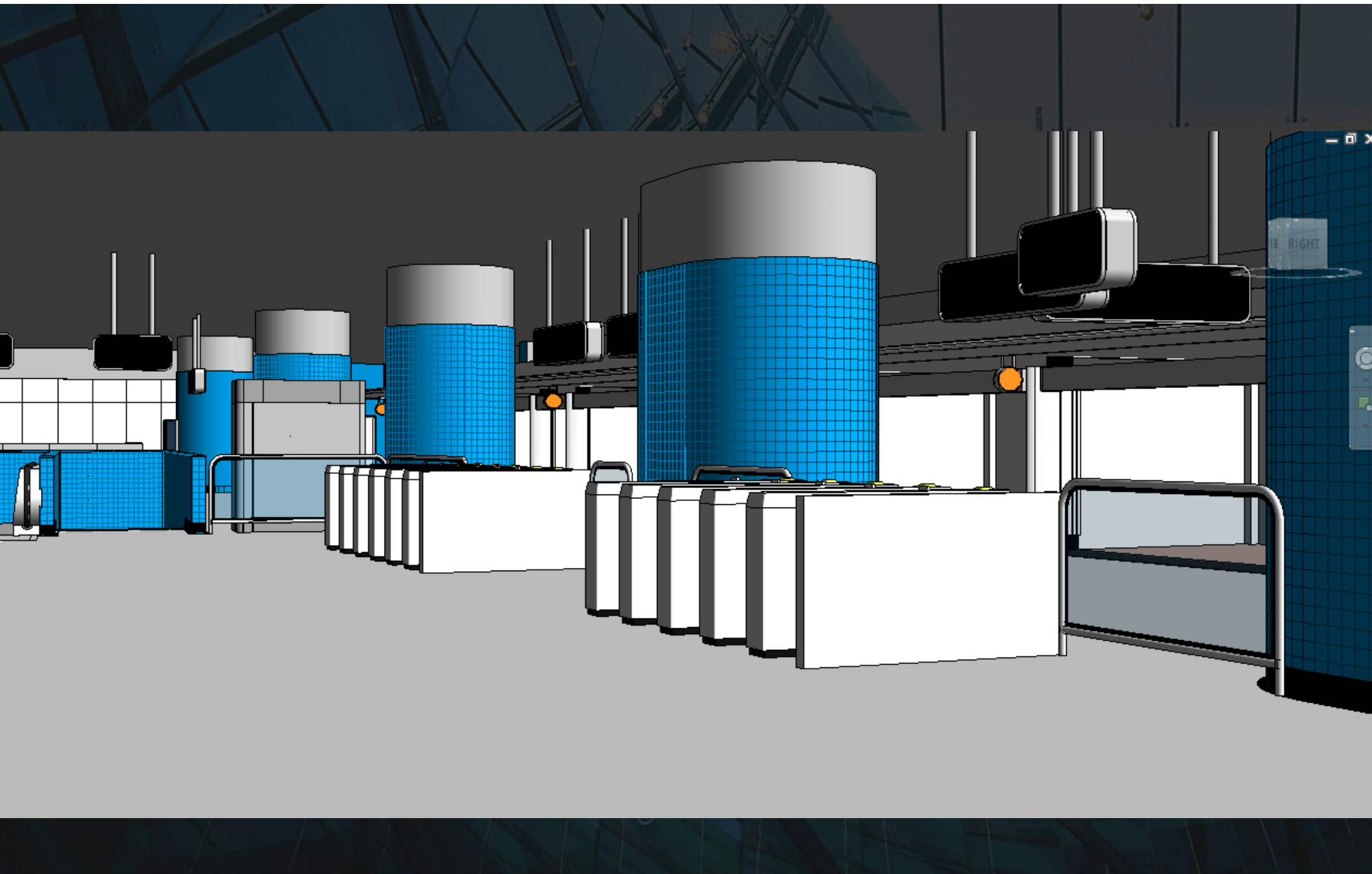
1 : 100

Click to select, TAB for alternates, CTRL adds, SHIFT unselects.

Concourse Level Main Model

Editable Only Press & Drag

ZH 9:32 24/6/2011



Shop C																		
Level	Shop No.	Shop Name	STA No.	Shop Location (Paid/Unpaid)	Usable Floor Area	Type of Shop	Toilet Inside Shop	Floor Finish	Wall Finish	Ceiling Finish	TV Points No.	Tel. Outlet No.	Fire Shutter				Shutter No.	Meta
													Fire Shutter No.	Operation/ Fire Rating	A/V Unit	Intercom		
CONCOURSE LEVEL	16	ADM 16			23.00 m²		☒											☒
CONCOURSE LEVEL	17	ADM 17			14.89 m²		☒											☒
CONCOURSE LEVEL	18	ADM 18			22.55 m²		☒											☒
CONCOURSE LEVEL	19	ADM 19			14.89 m²		☒											☒
CONCOURSE LEVEL	20	ADM 20			17.75 m²		☒											☒
CONCOURSE LEVEL	21	ADM 21			17.76 m²		☒											☒
CONCOURSE LEVEL	22	ADM 22			17.73 m²		☒											☒
CONCOURSE LEVEL	23	ADM 23			16.89 m²		☒											☒
CONCOURSE LEVEL	24	ADM 24			18.05 m²		☒											☒
CONCOURSE LEVEL	25	ADM 25			18.19 m²		☒											☒
CONCOURSE LEVEL	26-27	ADM 26-27			41.84 m²		☒											☒
CONCOURSE LEVEL	28	ADM 28			25.14 m²		☒											☒
CONCOURSE LEVEL	29	ADM 29			26.12 m²		☒											☒
CONCOURSE LEVEL	30	ADM 30			27.52 m²		☒											☒
CONCOURSE LEVEL	31	ADM 31			22.20 m²		☒											☒
CONCOURSE LEVEL	32	ADM 32			30.67 m²		☒											☒
CONCOURSE LEVEL	33	ADM 33			29.38 m²		☒											☒

Shop Detail			ECS (A/C System)																
Level	Shop No.	Shop Name	Refrigerant System			Fresh Air Provision			Mechanical Ventilation (For F&B Kiosk)				Air Curtain Nos.	Cabin Concept					
			VRV Unit -	Split Type Unit -	Total Installed	Supply Air Flow Rate	Treated Air via PAUU	Untreated Outdoor Air	Supply Flow	Treated Air via PAU	Untreated Outdoor air	Exhaust Flow Rate		Yes/No	Smoke Zone	Smoke Free Height (m)	Tenant's Perforated	% of Fr Area	
CONCOURSE LEVEL	16	ADM 16					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	17	ADM 17					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	18	ADM 18					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	19	ADM 19					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	20	ADM 20					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	21	ADM 21					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	22	ADM 22					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	23	ADM 23					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	24	ADM 24					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	25	ADM 25					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	26-27	ADM 26-27					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	28	ADM 28					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	29	ADM 29					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	30	ADM 30					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	31	ADM 31					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	32	ADM 32					☒	☒		☒	☒			☒					
CONCOURSE LEVEL	33	ADM 33					☒	☒		☒	☒			☒					

MSP-3D (Matabee Stereo Photo 3Dsystem)

現実を3次元モデルに再現し、各種のプランニング・シミュレーション作業を支援し、実施設計に繋がります。



モデル化
通常一週間程度で3次元現況モデルを作成します。

■ 建替えシミュレーション



現況3次元モデル

テクスチャ貼り付け

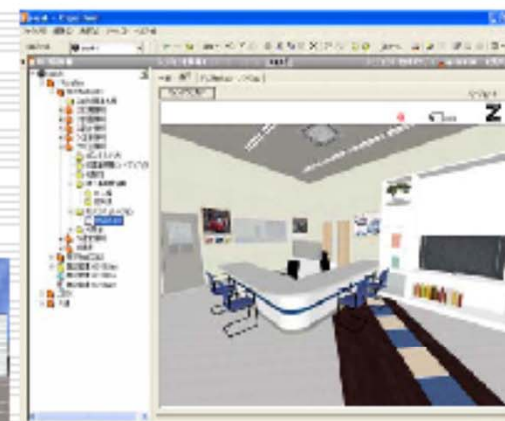
建替え後モデルと交換

集客に影響の大きい看板の見え方を、色々な角度から、色々な形状をわずかな費用で検討できます。

■ 看板シミュレーション



■ 内装・外観シミュレーション

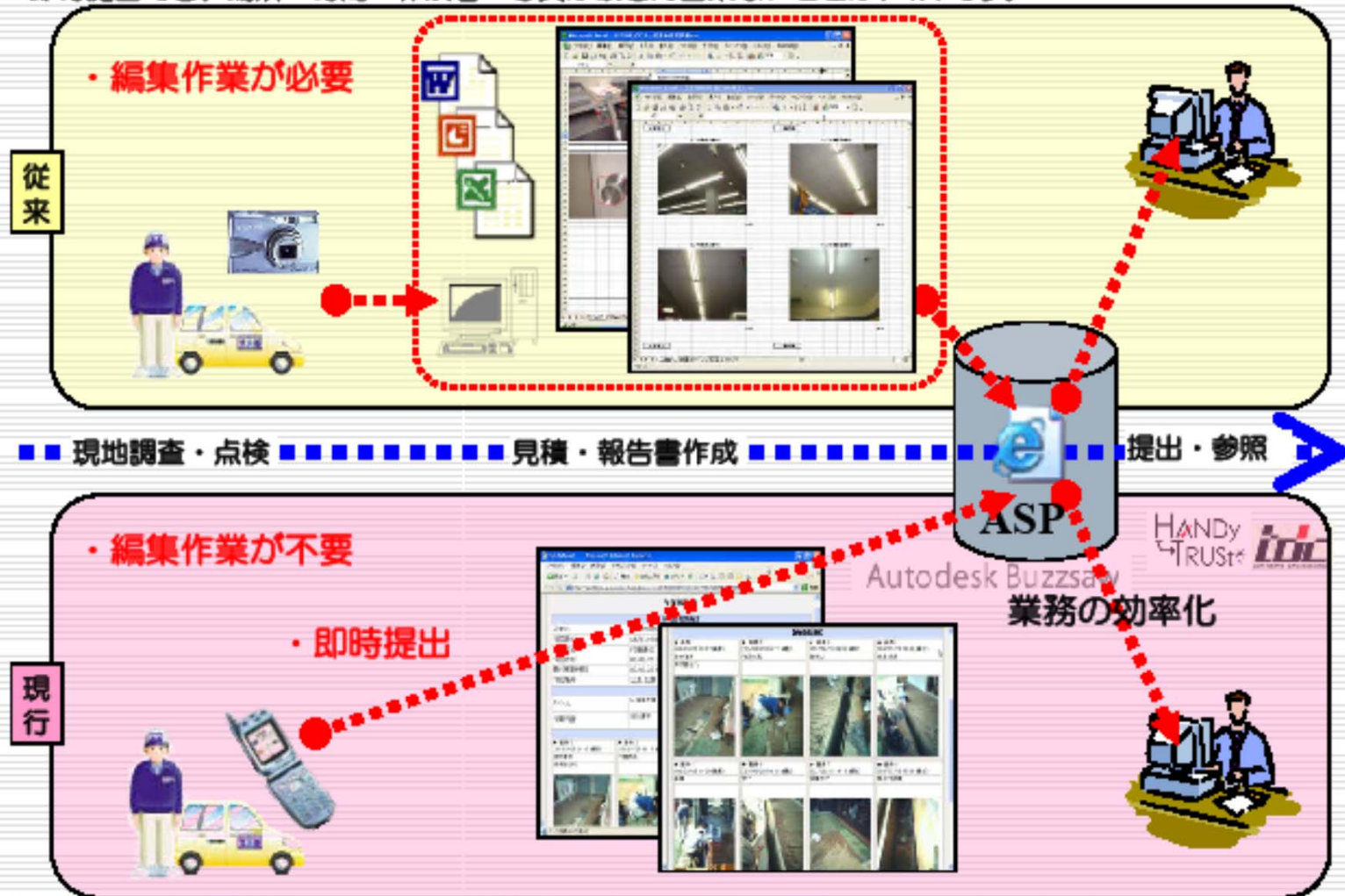


お客様の動線や、建物の内装、外観など気になることを建築するまえに、気の済むまで、検討することができます。

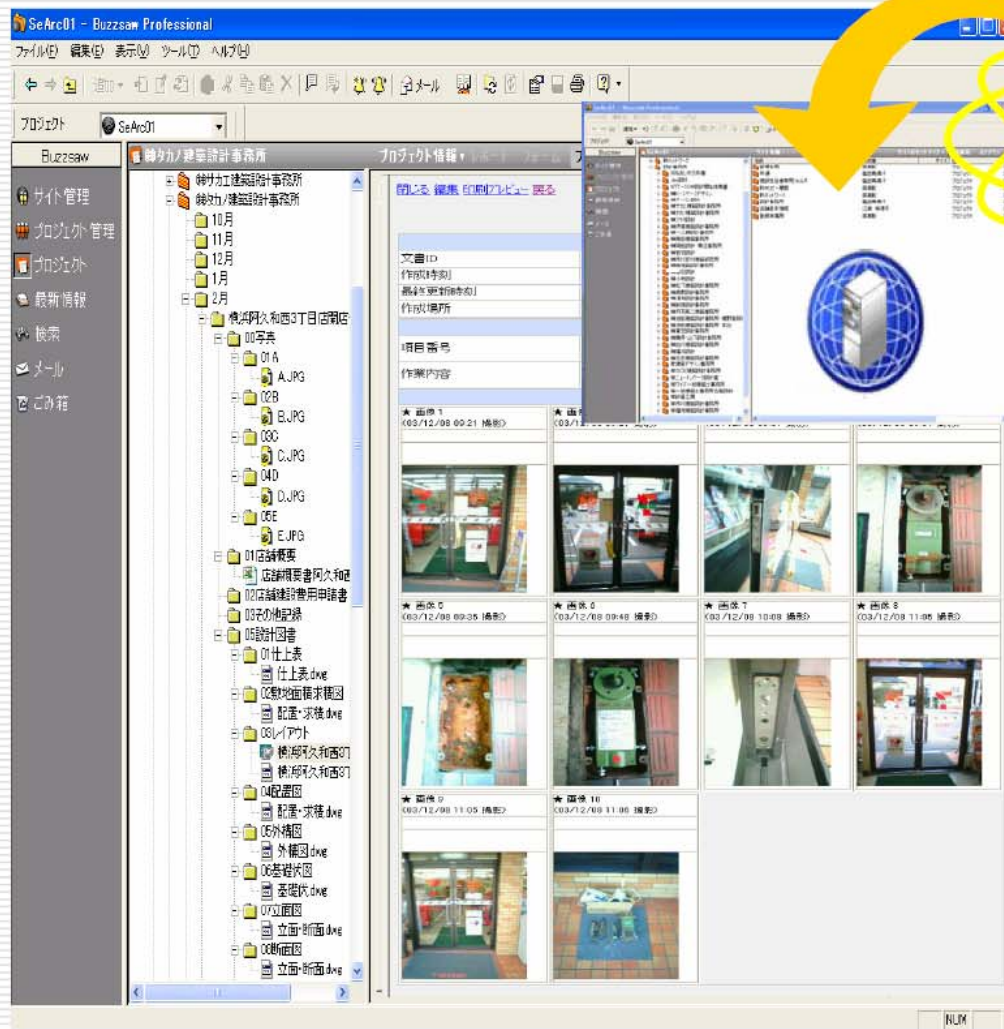
Modelling

HandyBuz (Handy Trust + Buzzsaw)

作業の効率化のため、加付携帯電話を用いて報告書を作成するシステムで、作業現場から簡単な操作で即時提出でき、場所・時間・作成者・写真が改ざん出来ないことがポイントです。



HandyBuz (Handy Trust + Buzzsaw)



携帯による撮影

お問い合わせは

株式会社 JM

システム管理グループ

〒102-0083 東京都千代田区麹町5-4 KY麹町ビル5F

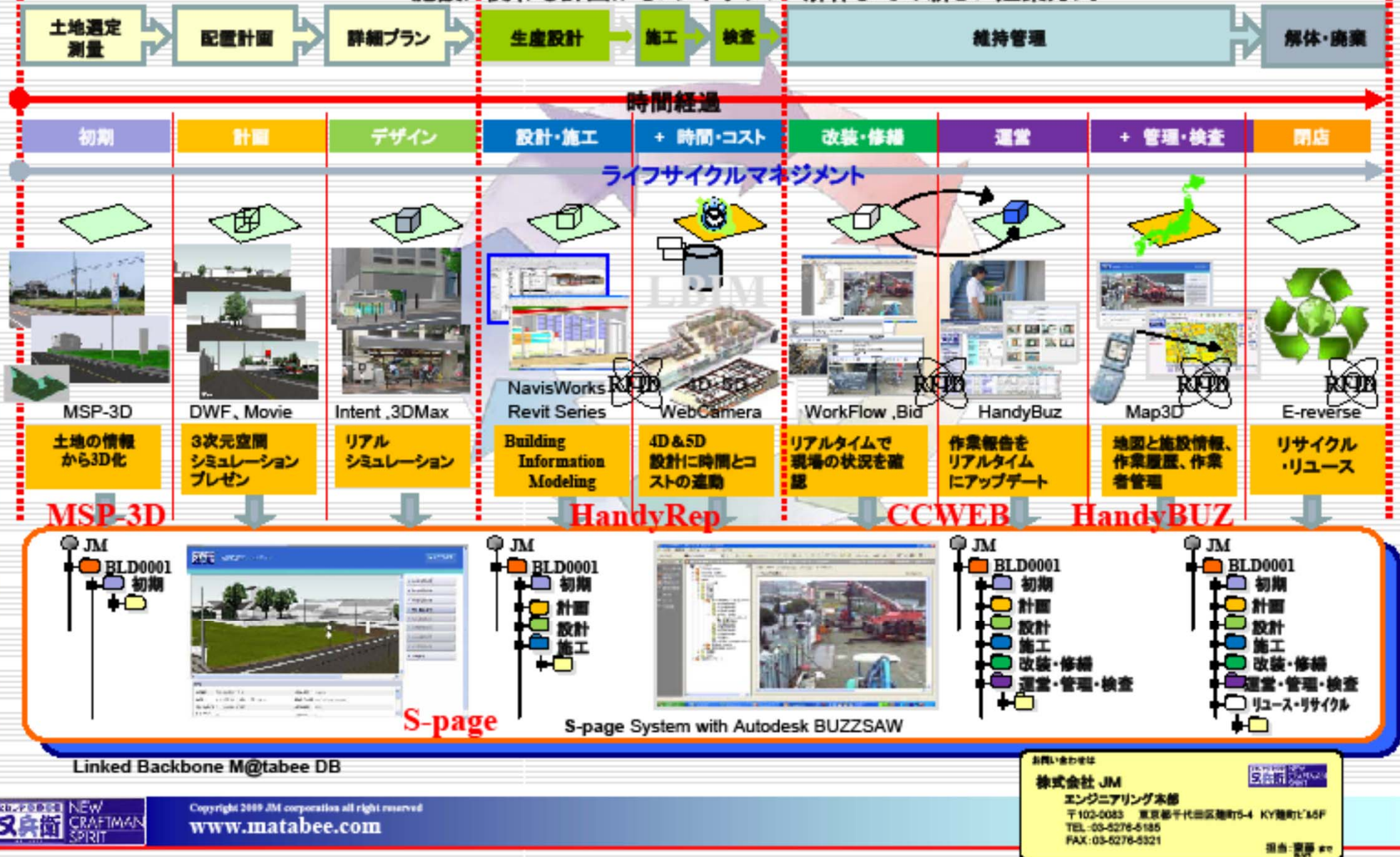
TEL: 03-5276-5185

FAX: 03-5276-5321

システム担当: 岩松 まで
いけまつ

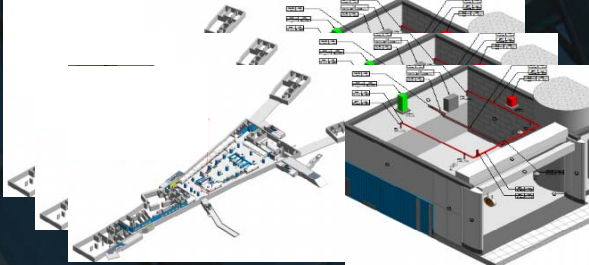
BLM (Building Lifecycle Management system) ライフサイクル マネジメントシステム

施設に関わる計画からメンテナンス・解体までの新しい建築方式

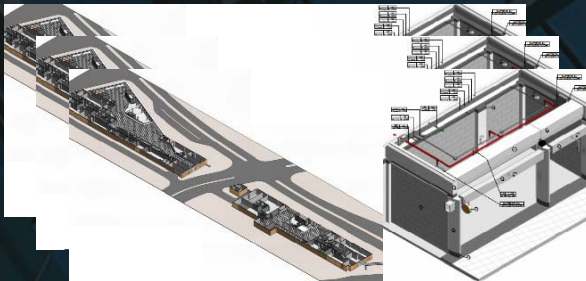


MODELLING + INDIVIDUAL DATABASE

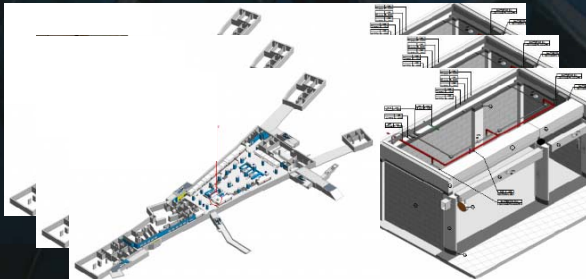
S1



S2



S3



SYSTEM WIDE DATABASE

**MEGA
DATABASE**

APPLICATIONS

APP 1

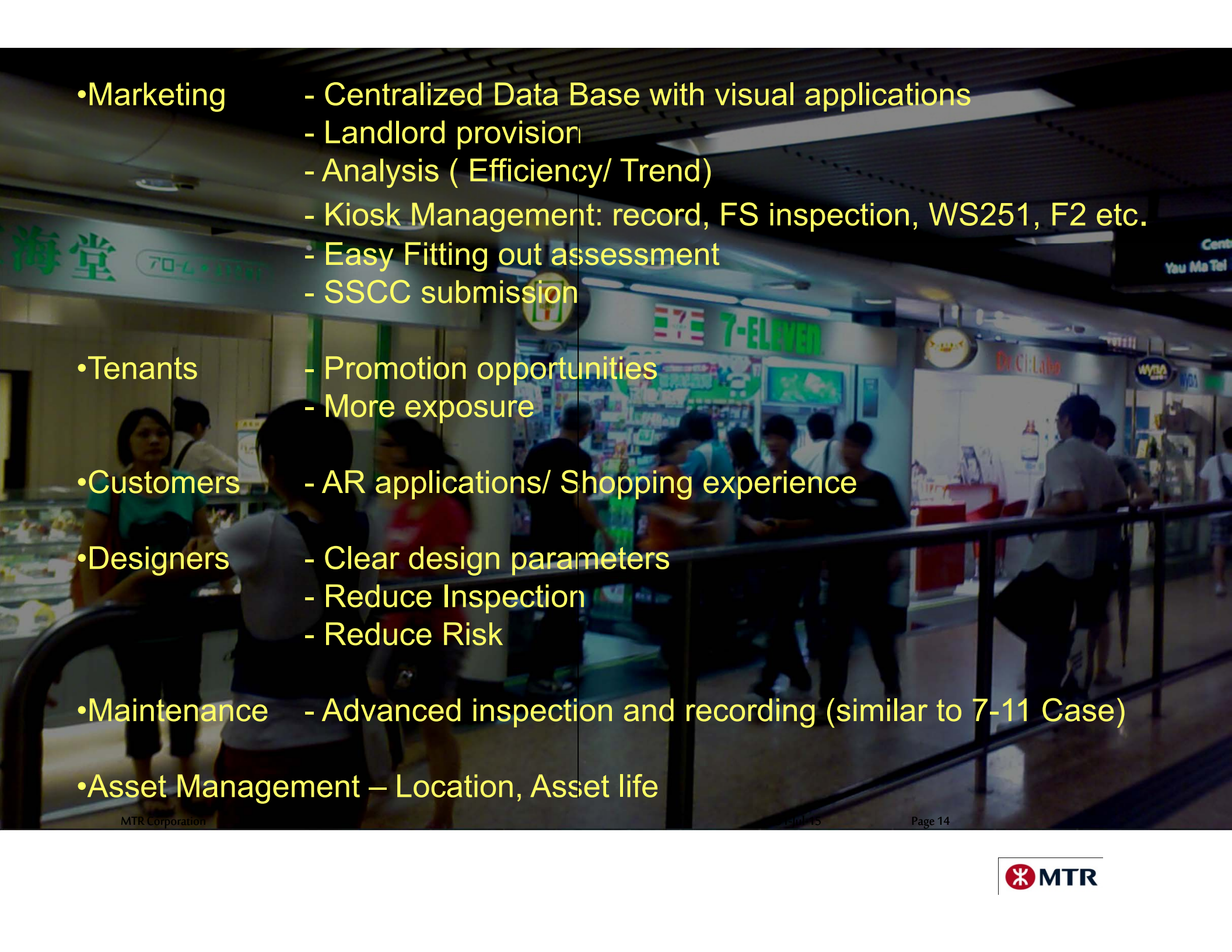
E.G. IRS

APP 2

E.G. RETAIL

APP 3



- 
- Marketing
 - Centralized Data Base with visual applications
 - Landlord provision
 - Analysis (Efficiency/ Trend)
 - Kiosk Management: record, FS inspection, WS251, F2 etc.
 - Easy Fitting out assessment
 - SSCC submission
 - Tenants
 - Promotion opportunities
 - More exposure
 - Customers
 - AR applications/ Shopping experience
 - Designers
 - Clear design parameters
 - Reduce Inspection
 - Reduce Risk
 - Maintenance
 - Advanced inspection and recording (similar to 7-11 Case)
 - Asset Management – Location, Asset life

PROGRAM

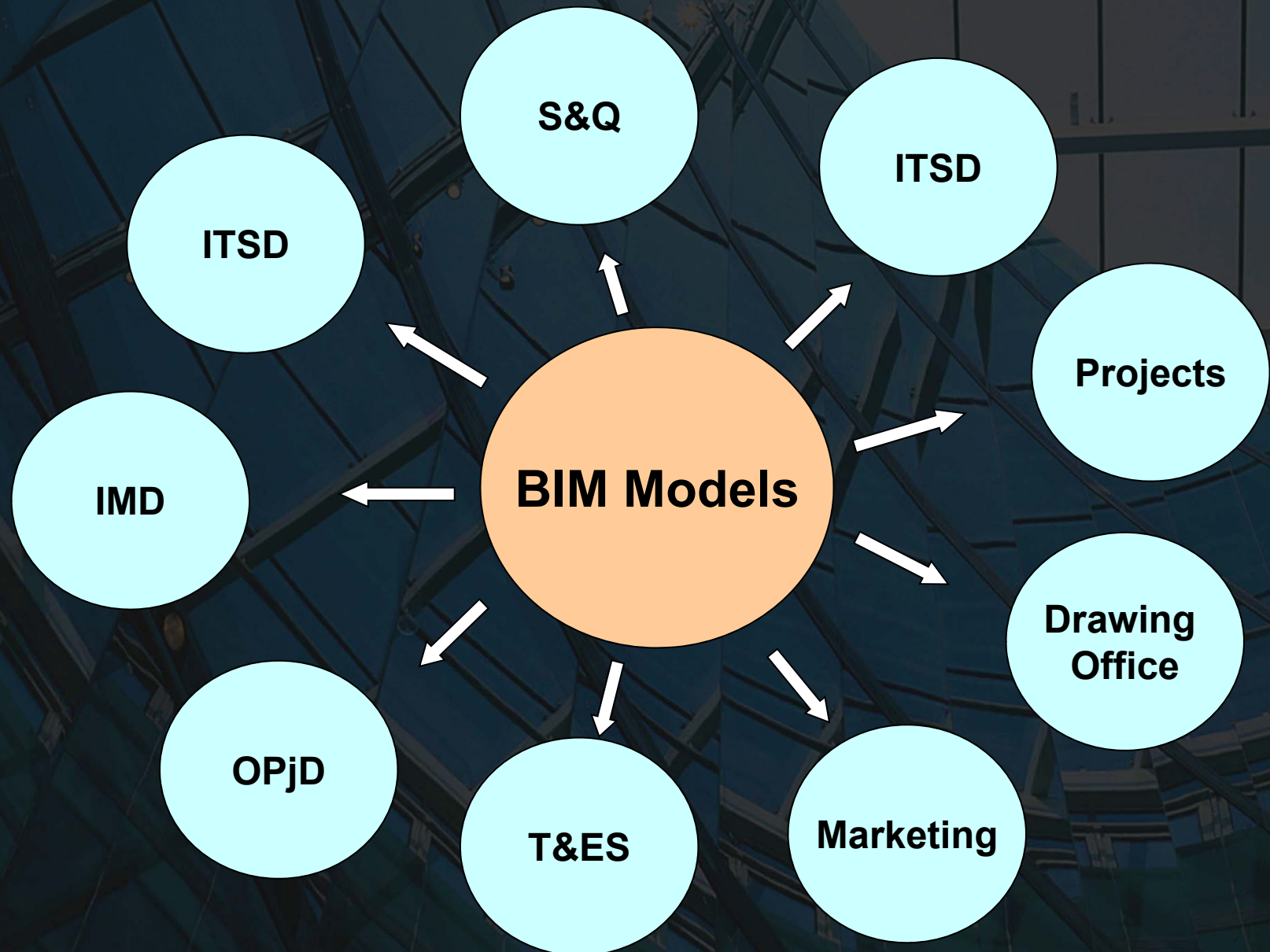
1	SURVEY	Technician by Marketing	0.25 days/Kiosk
2	MODELING	Each BIMer	6 days/Kiosk
		Each BIMer	43 Kiosks/ year
		10 BIMers	430 Kiosks/ year
		3 Years Leasing Cycle	1290 Kiosks

COST

STAGE 1	CAPITAL COST (Hardware + Software)	Total BIMer	10	
		Hardware + Software		600,000
	MODELLING	Monthly Salary/ BIMer	12,000	
		Total 3 years salary		4,680,000
STAGE 2	APPLICATIONS	Reference to IRS		700,000
		Total		5,980,000 over 3 years
		Total 1200 Kiosks		4,983 / Kiosk
STAGE 3	UPDATING & MAINTENANCE			100,000 / Year

Initial Investment (First Year)

2,160,000



Floor Plan: S200_CONCOURSE_RETAIL Edit Type

Graphics

View Scale	1:100
Scale Value	100
Display Model	Normal
Detail Level	Medium
Visibility/Graphics Overrides	Edit...
Visual Style	Shaded with Edges
Graphic Display Options	Edit...
Underlay	None
Underlay Orientation	Plan
Orientation	Project North
Wall Join Display	Clean all wall joins
Discipline	Architectural
Color Scheme Location	Background
Color Scheme	Department
Analysis Display Style	None
Sun Path	☐

Identity Data

View Name	S200_CONCOURSE_RETAIL
Dependency	Independent
Title on Sheet	
Referencing Sheet	
Referencing Detail	
Default View Template	None
Workset	View "Floor Plan: S200_CONC...
Edited by	DSKFUNG

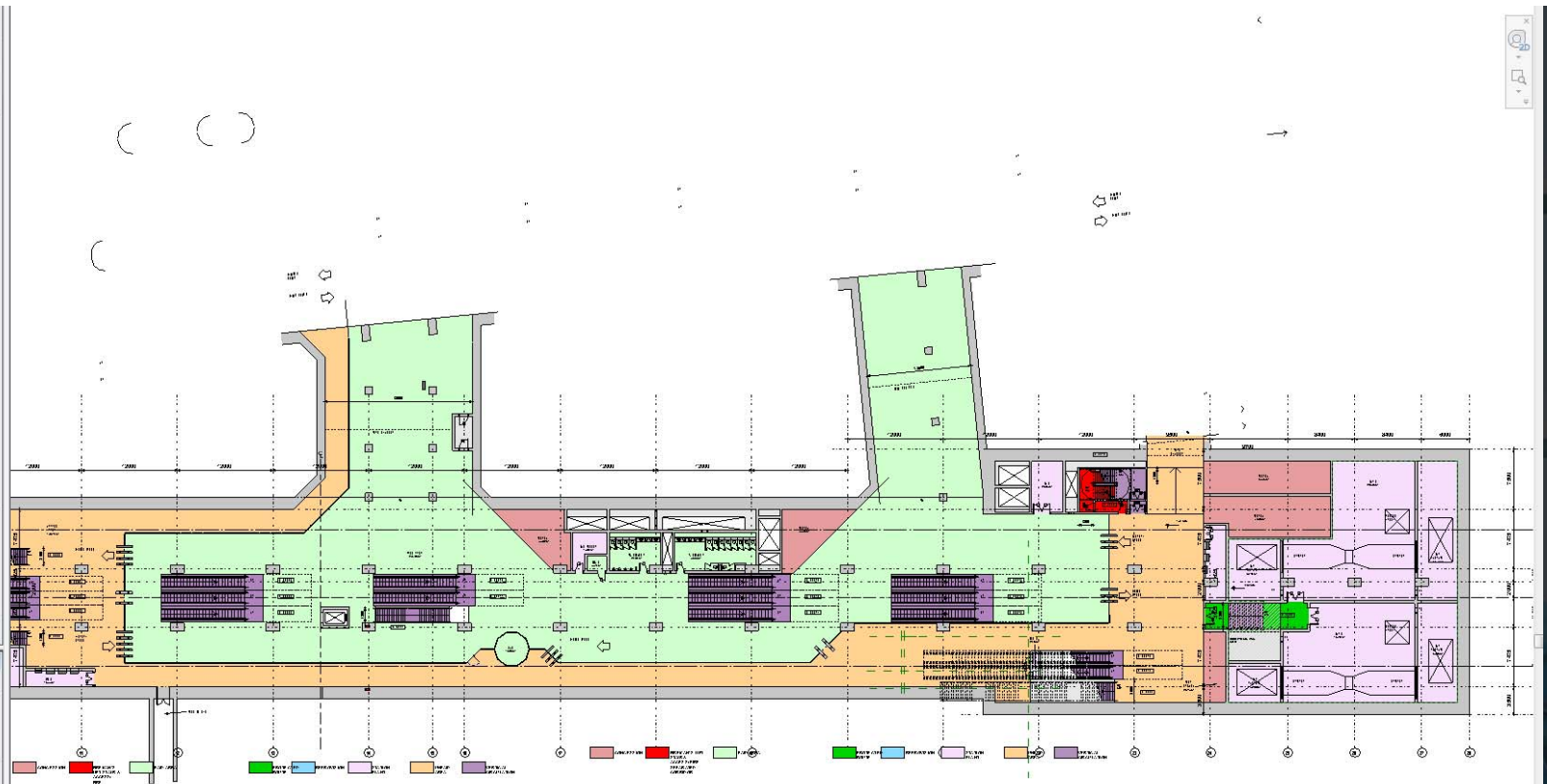
Extents

Crop View	☐
Crop Region Visible	☐
Annotation Crop	☒
View Range	Edit...

[Properties help](#) Apply

S_SCL_DIH_ARC.rvt - Project Browser

- Views (all)
 - Floor Plans
 - 24HR ACCESS @ ROOF LEVEL
 - CONCOURSE LEVEL (+1.77mPD)
 - DHS AIR INTAKE EAST
 - DHS AIR INTAKE EAST UPPER LEVEL
 - DHS AIR INTAKE WEST
 - DHS AIR INTAKE WEST UPPER LEVEL
 - KTL-DIH STATION PLATFORM LEVEL (-3.43mPD)
 - LOCATION PLAN
 - OVERALL STATION & DHS
 - ROOF LEVEL
 - S200_CONCOURSE
 - L_CONCOURSE
 - M_CONCOURSE
 - R_CONCOURSE
 - S200_CONCOURSE_RETAIL
 - S200_MEZZ LEVEL
 - L_MEZZ LEVEL
 - M_MEZZ LEVEL
 - R_MEZZ LEVEL
 - S200_PLATFORM LEVEL
 - L_PLATFORM LEVEL
 - M_PLATFORM LEVEL
 - R_PLATFORM LEVEL
 - S200_ROAD LEVEL PLAN
 - S200_ROOF LEVEL
 - S200_SITE PLAN
 - 24HR ACCESS_SITE PLAN
 - L SITE PLAN
 - M SITE PLAN
 - R SITE PLAN
 - S200_UPPER MEZZ LEVEL
 - L_S200_UPPER MEZZ LEVEL
 - L_KTL-DIH STATION PLATFORM LEVEL
 - R_KTL-DIH STATION PLATFORM LEVEL
 - SCL-DIH AHU EXHAUST



Properties

Schedule: Kiosk Provision

Graphics

Visibility/Graphics Overrides

Identity Data

View Name: Kiosk Provision

Dependency: Independent

Default View Template: None

Workset: View "Schedule: Kiosk Provision"

Edited by: DSKFUNG

Phasing

Phase: New Construction

Other

Fields: Edit...

Filter: Edit...

Sorting/Grouping: Edit...

Formatting: Edit...

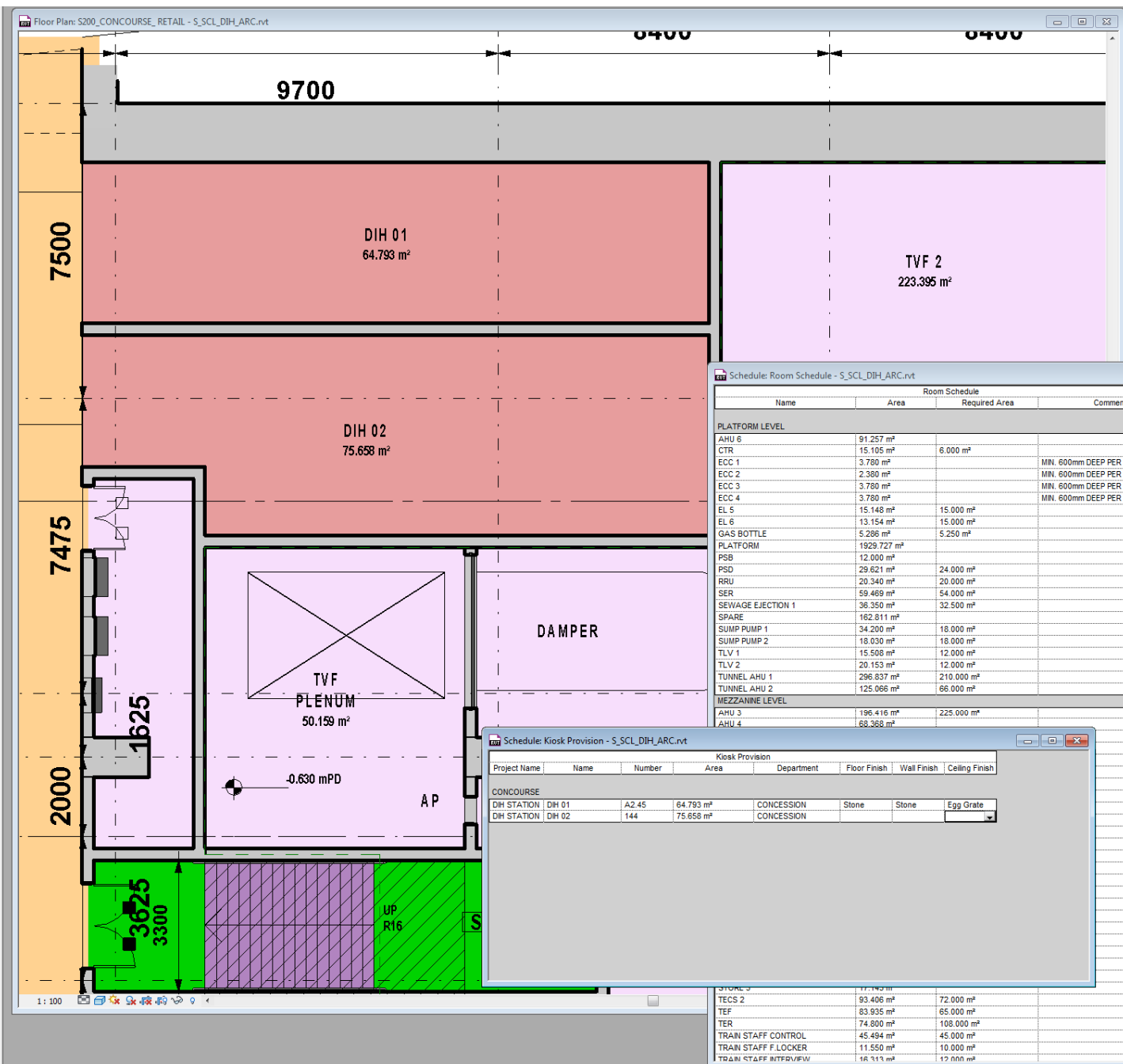
Appearance: Edit...

Properties help

Apply

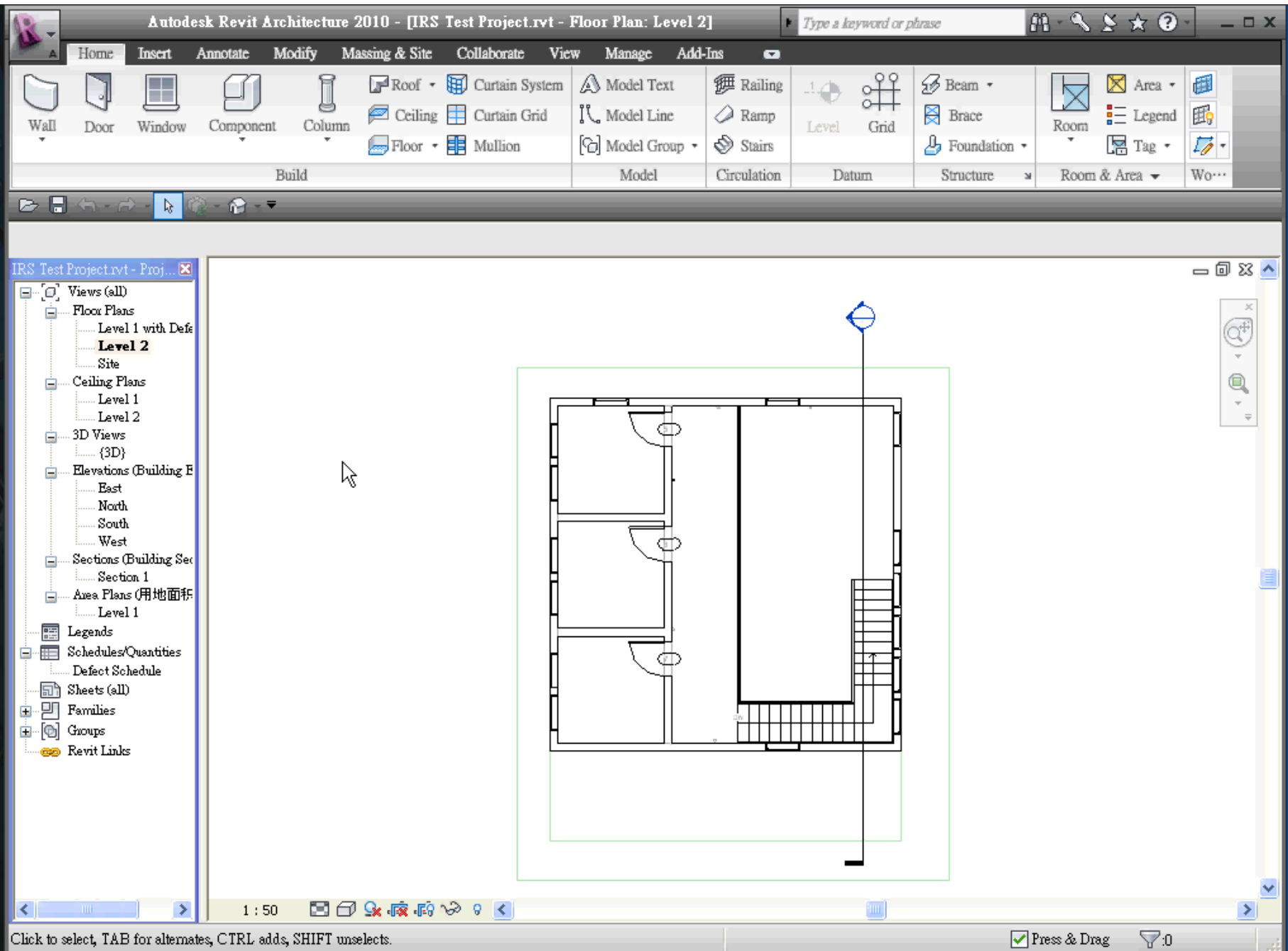
S_SCL_DIH_ARC.rvt - Project Browser

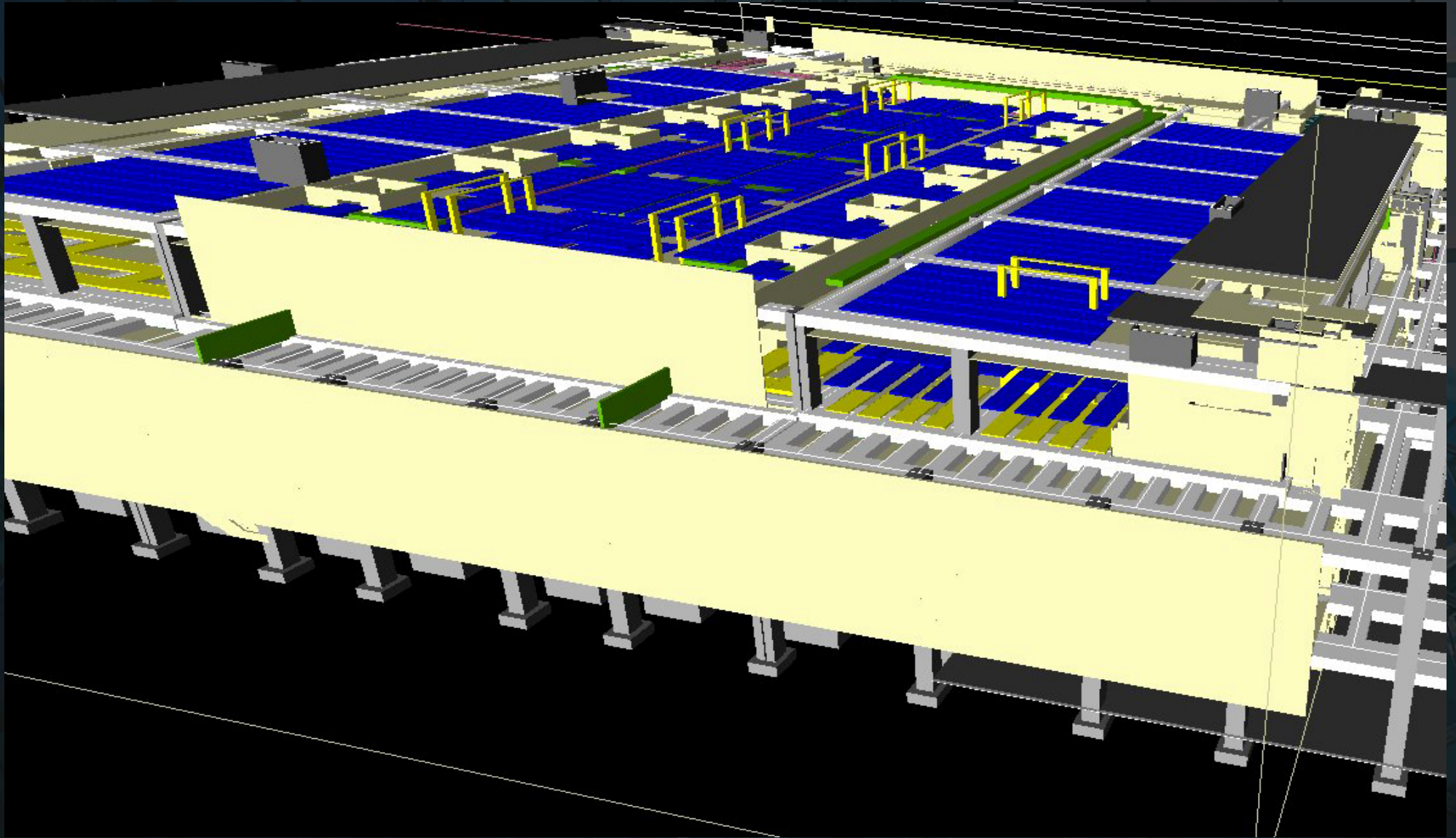
- Area Plans (Gross Building)
 - STREET LEVEL WEST
- Area Plans (Rentable)
 - Legends
- Schedules/Quantities
 - Area Schedule (Rentable)
 - Drawing List
 - Kiosk Provision
 - Room Schedule
- Sheets (all)
 - 6.1.11 - SCHEDULE OF ACCOMMODATION - SCL
 - 10.001 - LOCATION PLAN
 - Floor Plan: LOCATION PLAN
 - 10.002 - SITE PLAN
 - Floor Plan: SITE PLAN
 - 10.003 - ROOF LEVEL PLAN
 - 10.004 - CONCOURSE PLAN
 - Floor Plan: CONCOURSE LEVEL (+1.77mPD)
 - 10.005 - MEZZANINE LEVEL AND PLATFORM LEVEL PLANS FOR
 - Floor Plan: KTL-DIH STATION PLATFORM LEVEL (-3.43mPD)
 - Floor Plan: SCL-DIH STATION MEZZANINE LEVEL (-8.72mPD)
 - Floor Plan: SCL-DIH STATION PLATFORM LEVEL (-15.92mPD)
 - 10.006 - SCL - DIH STATION BOTTOM LEVEL PLAN
 - 10.007 - SITE PLAN (SHEET 1 OF 3)
 - Floor Plan: 24HR ACCESS_SITE PLAN
 - Floor Plan: L SITE PLAN
 - 10.008 - SITE PLAN (SHEET 2 OF 3)
 - 10.009 - SITE PLAN (SHEET 3 OF 3)
 - 10.010 - ROAD LEVEL PLAN (SHEET 1 OF 3)
 - 10.011 - ROAD LEVEL PLAN (SHEET 2 OF 3)
 - 10.012 - ROAD LEVEL PLAN (SHEET 3 OF 3)
 - 10.013 - ROOF LEVEL PLAN (SHEET 1 OF 3)
 - 10.014 - ROOF LEVEL PLAN (SHEET 2 OF 3)
 - 10.015 - ROOF LEVEL PLAN (SHEET 3 OF 3)
 - 10.016 - CONCOURSE LEVEL PLAN (SHEET 1 OF 3)
 - Floor Plan: L CONCOURSE
 - Legend: HIGH LEVEL DUCT



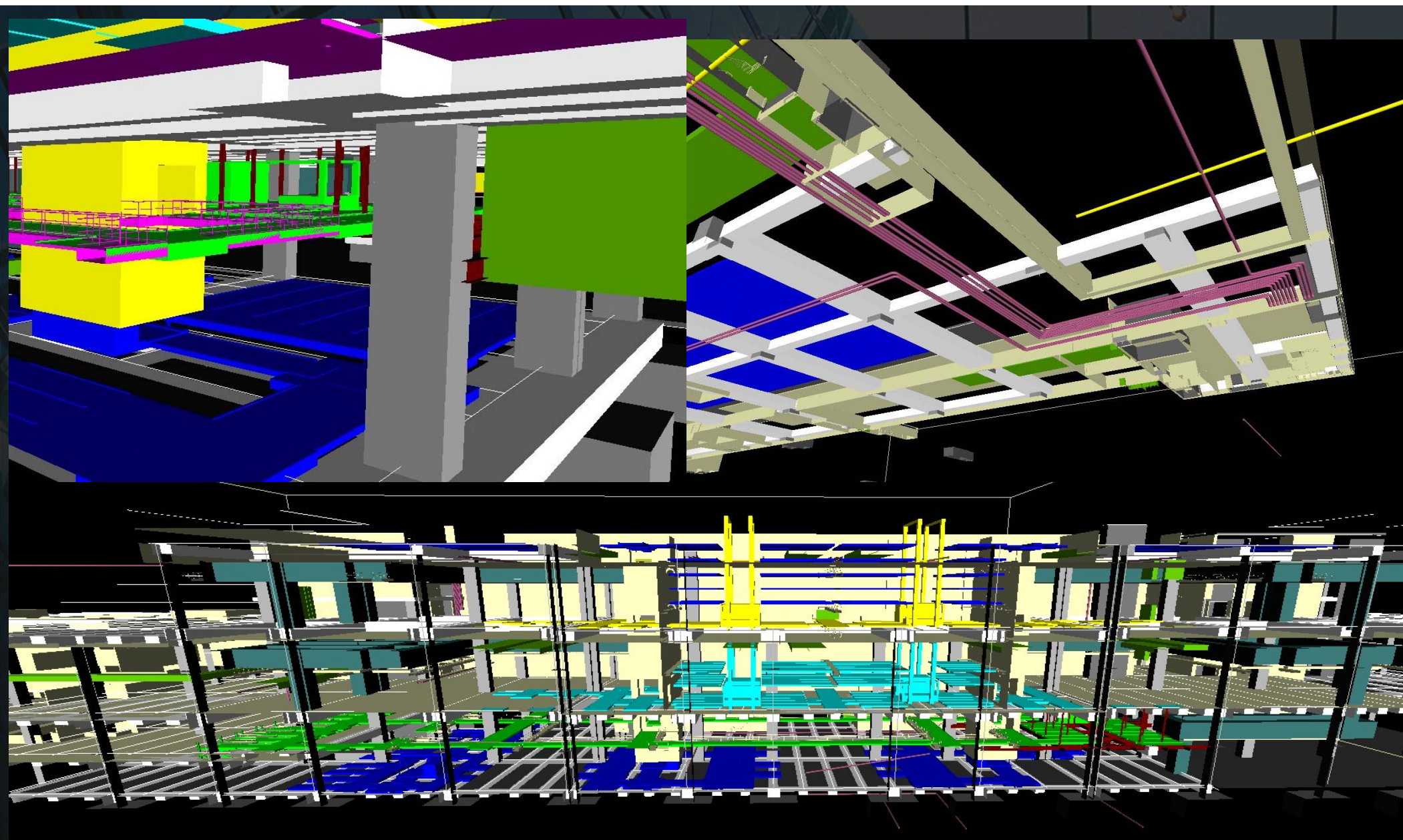


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
6	Station	Shop No.	Shop Name	STA No.	Shop Detail													
7					Location (Paid / Unpaid / External)	Approx. Usable Floor Area (m2)	Type of Shop	Toilet inside Shop	No. of TV Point(s)	Telephone Outlet	Roller Shutter							
8											Fire				Security			
9											No.	Operation, Fire Rating	A/V unit	Intercom	No.	CS - Clear Sliding CR - Clear Roller MS - Metal Roller P - Perforation	Power Supply	Hole dia. of perforation (mm)
58	TSY	TSY 1	Hang Seng - Mini Bank	NA	Unpaid	65	Bank	No										
59	TSY	TSY 2	7-Eleven	NA	Unpaid	86	Retail	No										
60	TSY	TSY 3	Maxim's Cakes	NA	Unpaid	49	Retail	No										
61	TSY	TSY 4	Okashi Land	NA	Unpaid	41	Retail	No										
62	TSY	TSY 5	Sanrio Gift Gate	NA	Unpaid	70	Retail	No				N/A		Nil		CR with P	No	
71	TSY	TSY 6	DR 美 健 集	NA	Unpaid	76	Retail	No				N/A		Nil		CR with P	No	
72	TSY	TSY 7	Wacoal	NA	Unpaid	81	Retail	No				N/A		Nil		CR with P	No	
73	TSY	TSY 12	Poon Yuk Lan Bone Setting Center 潘玉蘭跌打診所	NA	Unpaid	21	Retail	No										
74	TSY	TSY 13	Tsing Yi Chinese Medicine & Holistic Health Center	NA	Unpaid	23	Retail	No										
75	TSY	TSY 14	Tsing Yi Chinese Medicine & Holistic Health Center	NA	Unpaid	21	Retail	No										
76	TSY	TSY 15	Tsing Yi Chinese Medicine & Holistic Health Center	NA	Unpaid	37	Retail	No										
77	TSY	TSY 16	Tsing Yi Chinese Medicine & Holistic Health Center	NA	Unpaid	30	Retail	No										
78	TSY	TSY 18a / 18b	Reserved for Mega SCO	NA	Unpaid	40	Retail	No										
79	TSY	TSY 19a / 19b	Reserved for Mega SCO	NA	Unpaid	74	Retail	No										
80	TSY	TSY 20	Reserved for Mega SCO	NA	Unpaid	99	Retail	No										
81	TSY	TSY 21	Reserved for Mega SCO	NA	Unpaid	29	Retail	No										
82	TSY	TSY 22	Reserved for Mega SCO	NA	Unpaid	55	Retail	No										
83	TSY	TSY 24	Reserved for Mega SCO	NA	Unpaid	50	Retail	No										
84	TSY	TSY 25	Reserved for Mega SCO	NA	Unpaid	50	Retail	No										
85	TSY	TSY 26 / 27	Reserved for Mega SCO	NA	Unpaid	100	Retail	No										
86	TSY	TSY 28	Reserved for Mega SCO	NA	Unpaid	32	Retail	No										
87	TSY	TSY 29	Reserved for Mega SCO	NA	Unpaid	72	Retail	No										
88	TSY	TSY 30	ans	NA	Unpaid	32.4	Retail	No				N/A		Nil		CR with P	No	
89	TSY	TSY 31	IP Zone	NA	Unpaid	29	Retail	No				N/A		Nil		CR with P	No	
90	TSY	TSY 32	Pre-let to Samuel & Kevin	NA	Unpaid	35.2	Retail	No				N/A		Nil		CR with P	No	
91	TSY	TSY 33	MUK	NA	Unpaid	32.6	Retail	No				N/A		Nil		CR with P	No	
92	TSY	TSY 34	Rich Honour Optical	NA	Unpaid	69	Retail	No				N/A		Nil		CR with P	No	

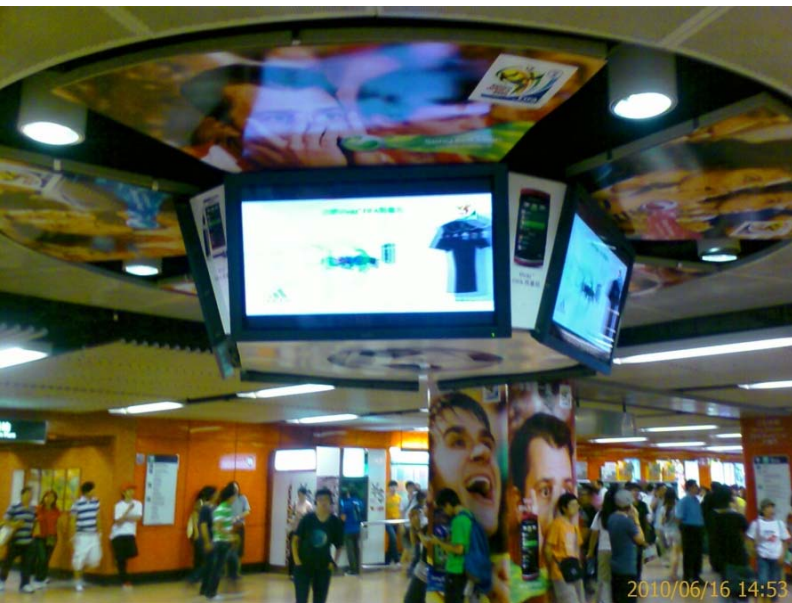




Application 4



CO-ORDINATIONS





29



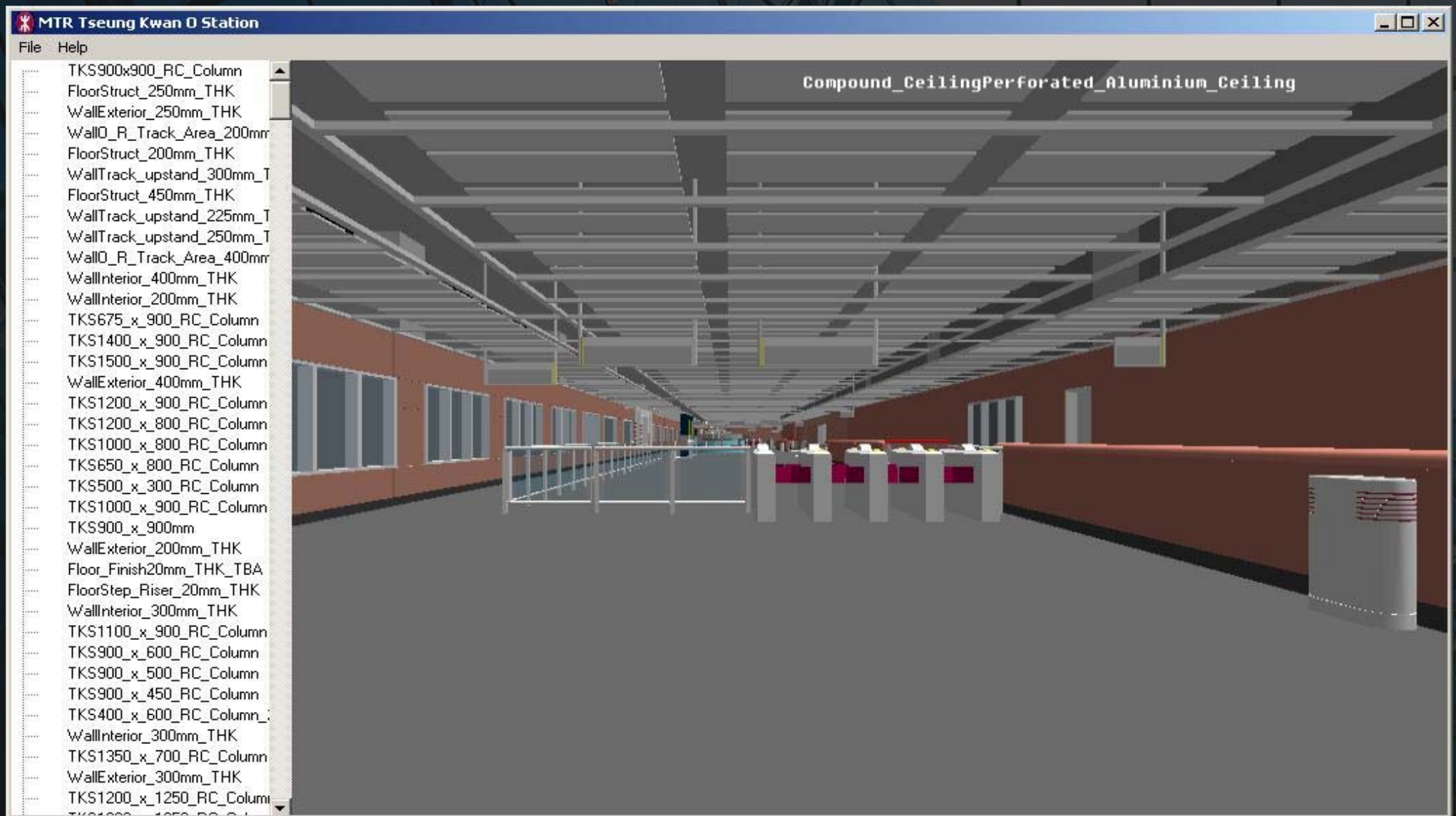
MISS PARIS

Japanese finest
beauty & weight control center

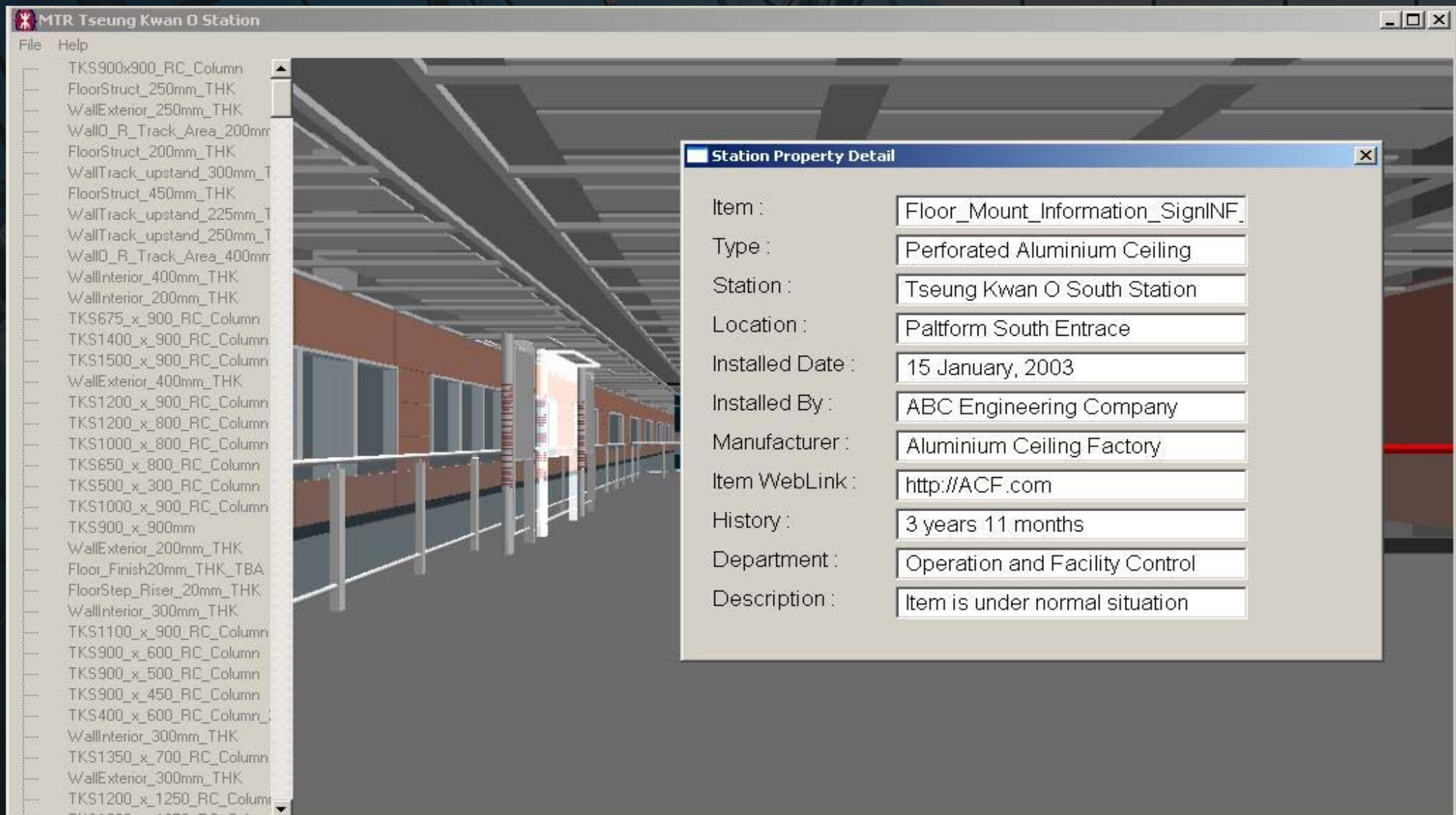
慶祝集團在港
開業一週年

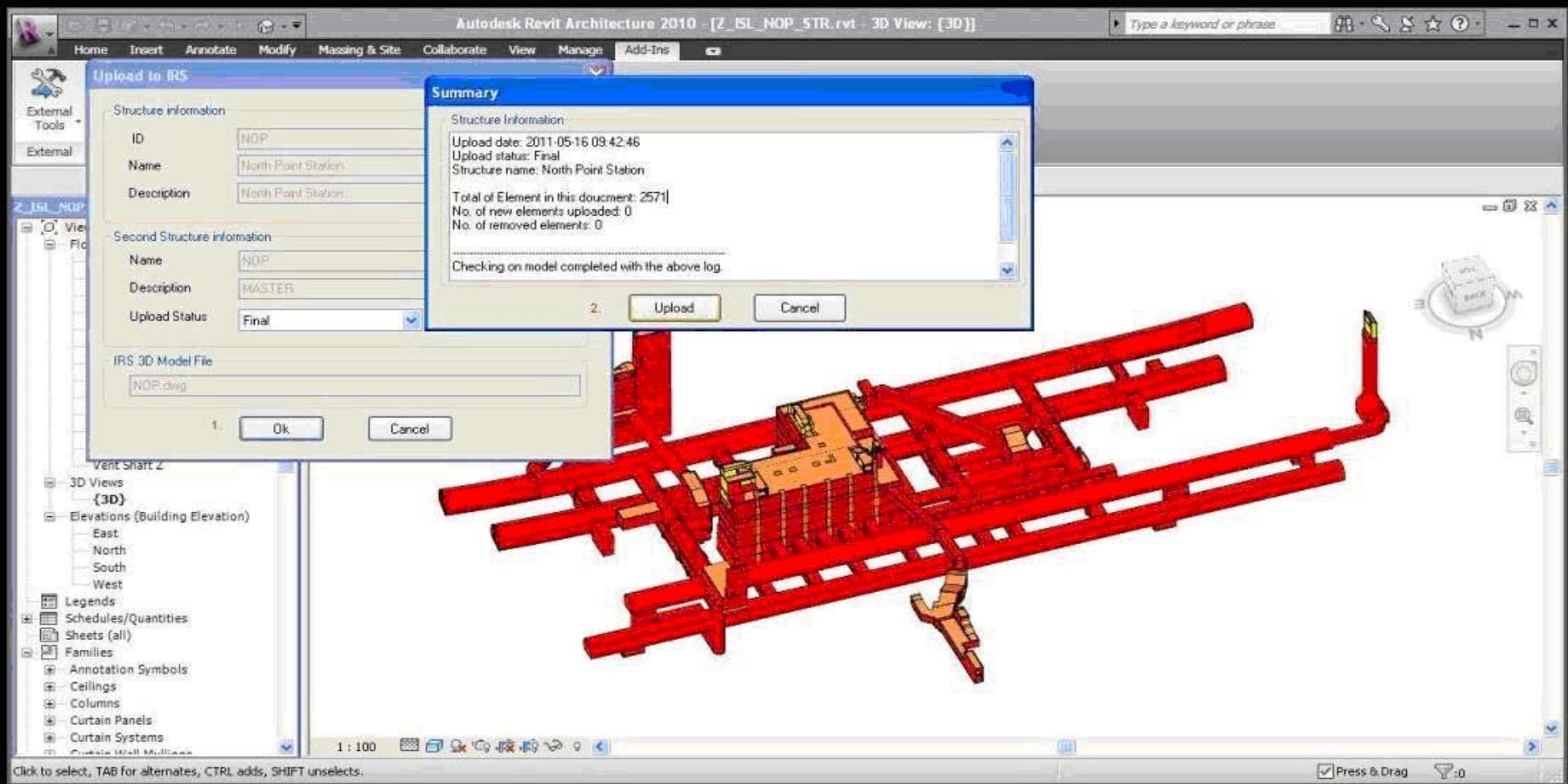
及 MISS PARIS

2010/06/16 14:54



Application 4





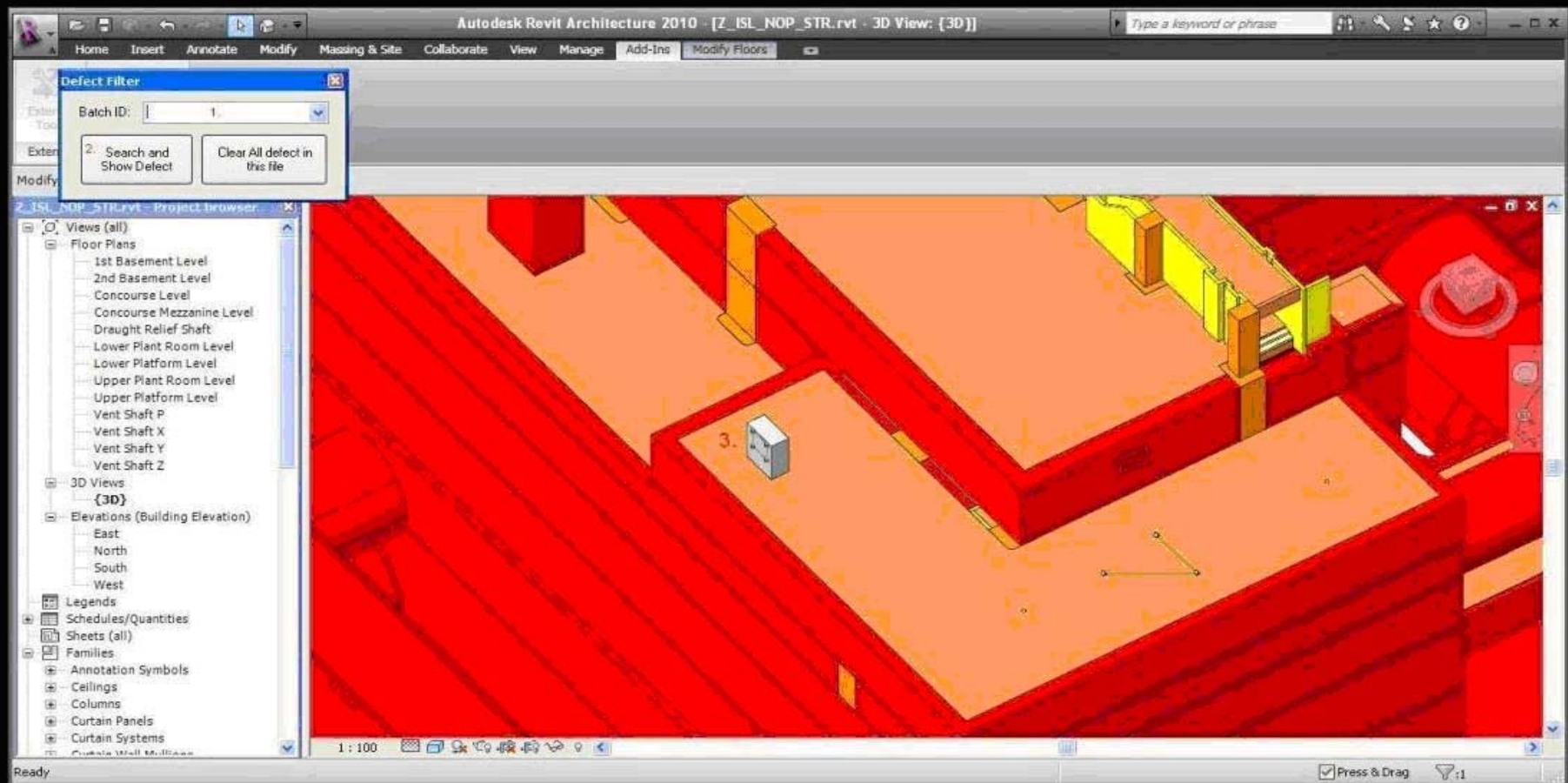
1. BIM model preparation

With the help of the Revit application, 3D model of the station structures with detail attributes are prepared. This is the starting point for the lifecycle of the inspection process. After that, the 3D model will be uploaded to the central system server by using customized Revit plug-in to complete the BIM model preparation process.



Cost

- Stage 1
Survey 0.5 days
- Modelling 10 working days
- Cost about \$5000 - 7,000 per lease
- Deliverable, Drawings, DWF, Schedules
- Stage 2
- Marketing Interface,
- IT tender
- Stage 3
- System Maintenance, Information Updating



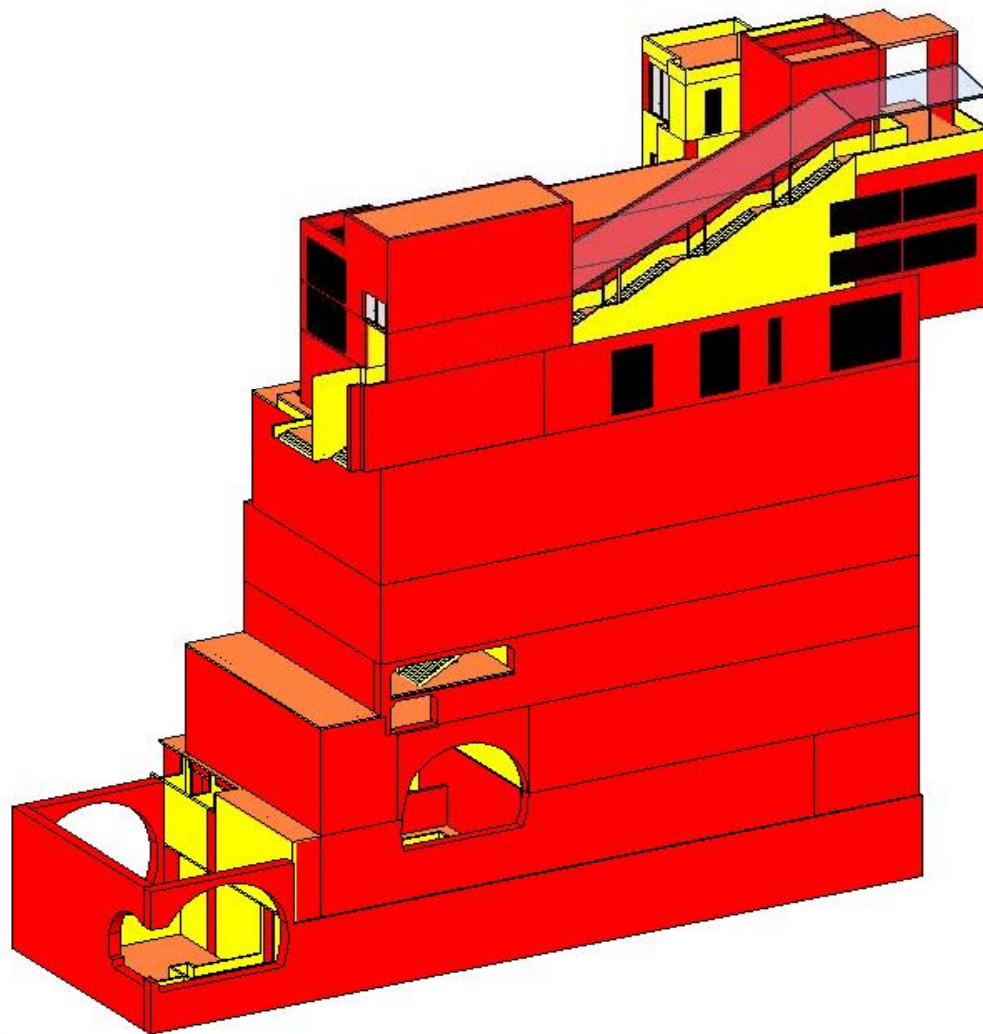
5. BIM model adjustment and checking

During the stage of on-site inspection, Inspector could also report discrepancy found between the BIM model and actual situation (modification, additional facility / feature, etc.). All information can be retrieved and displayed in BIM model inside Revit application thru the customized Revit plug-in tool. The BIM model can then be updated and reload back to IRS system.



IRS_NOP_NPB.rvt - Proj...

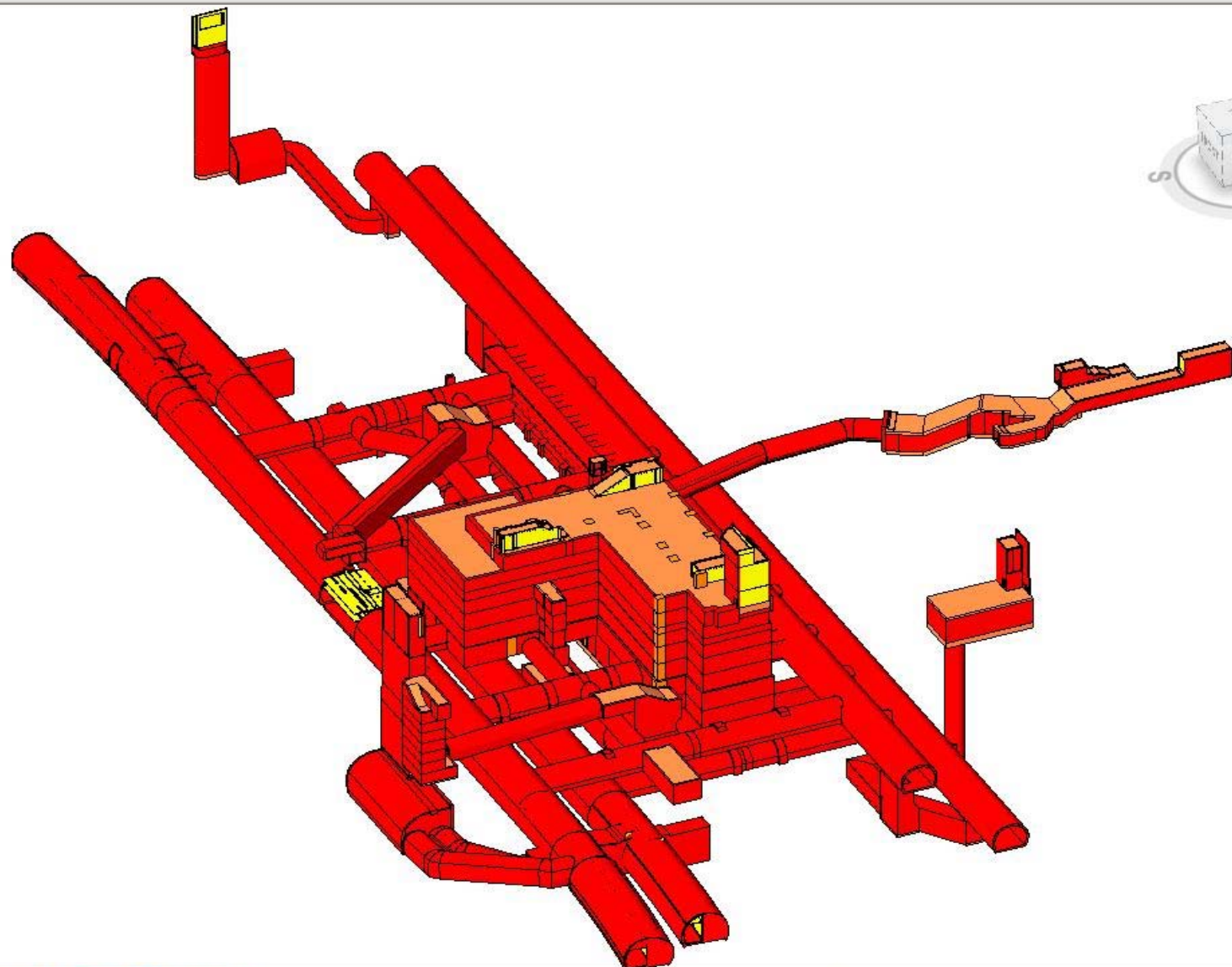
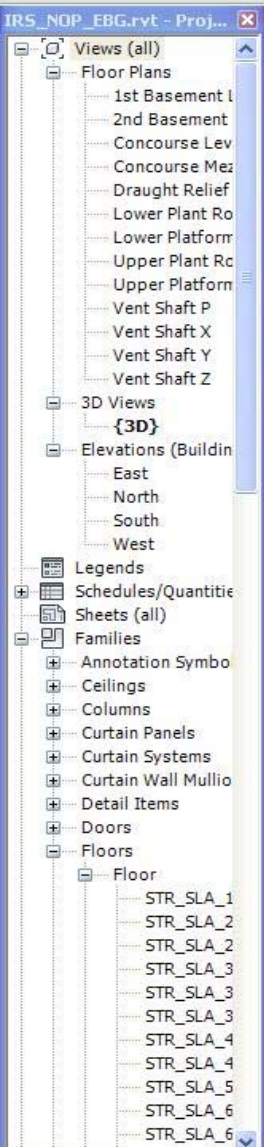
- Views (all)
- Floor Plans
 - Basement 1
 - Basement 3
 - Basement 4
 - Basement 5
 - Basement 6
 - Basement 7
 - Fan Room Level
 - First Floor Level
 - Ground Floor Level
 - Tanner Road Level
 - Upper Chiller Level
 - Upper Vent Level
- 3D Views
 - {3D}
- Elevations (Building)
- East
- North
- South
- West
- Legends
- Schedules/Quantities
- Sheets (all)
- Families
 - Annotation Symbols
 - Ceilings
 - Columns
 - Curtain Panels
 - Curtain Systems
 - Curtain Wall Mullion
 - Detail Items
 - Doors
 - Floors
 - Generic Models
 - Pattern
 - Profiles
 - Railings
 - Ramps
 - Roofs
 - Stairs
 - Structural Beam System
 - Structural Foundation
 - Walls
 - Windows



1 : 100

Ready

1:0

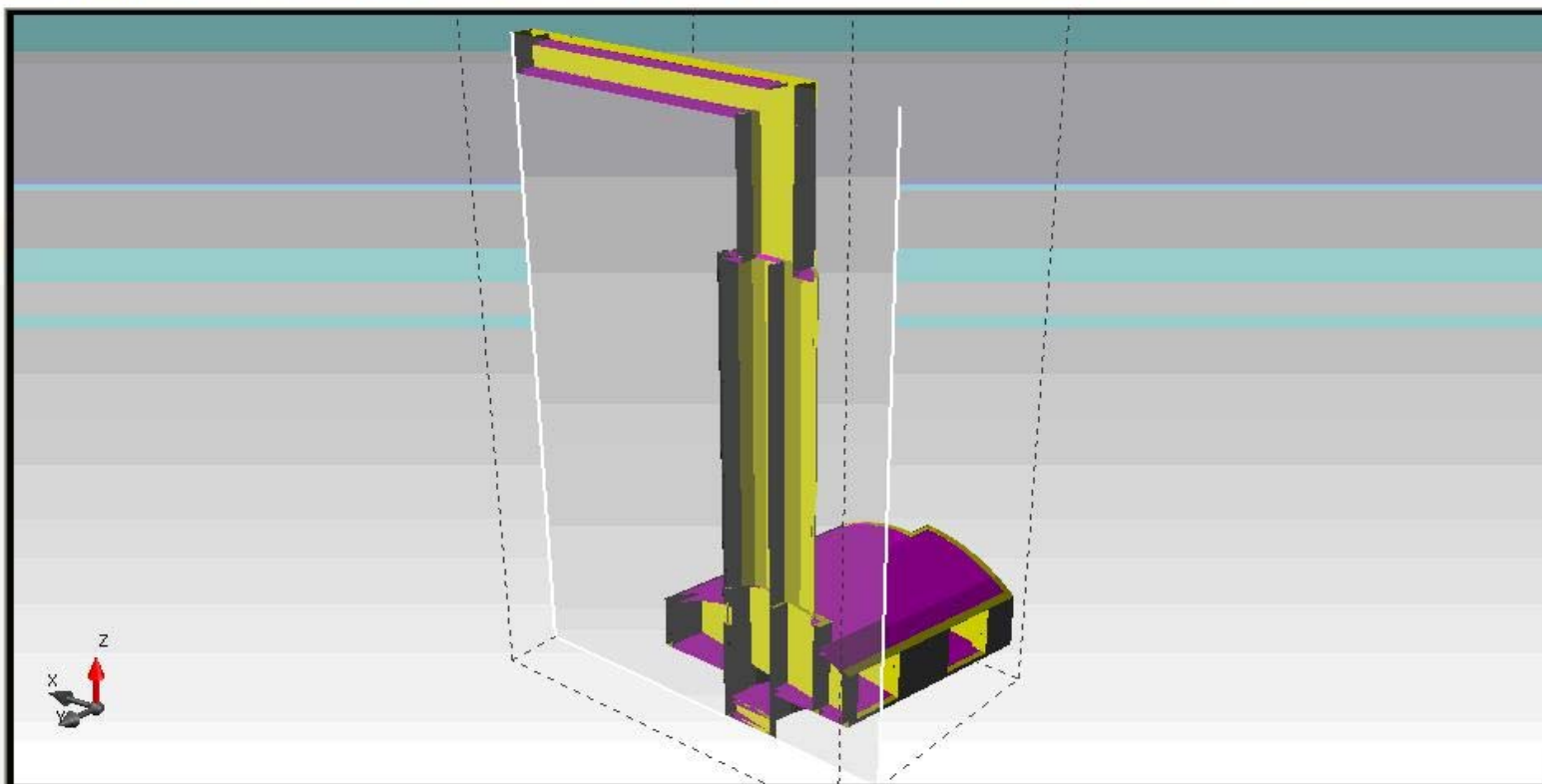




Batch Model Viewer Report

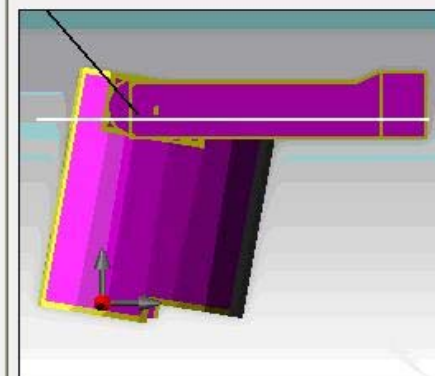
Logon user: irsadmdv

Navigation toolbar: Zoom, Hide, Show All, Locate, View, Clipping Plane (1000), Dummy (Show/Hide), Configuration.



Batch: 1007
 Structure: NOP
 Sec. Structure: ALL
 Level: ALL
 Level: ALL (dropdown menu open showing Vent Shaft N)
 Load

Save the View Load defined View



Element

Name [dropdown menu] [Previous] [Next]

Defect Info

