

NZEB

NET ZERO ENERGY BUILDING

BIM

COLLABORATION

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 - 🔧 Structure
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 - 🔧 Integration
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BIM Services for Buildings, Infrastructure & Transportation

ENCLOSURE

STRUCTURE

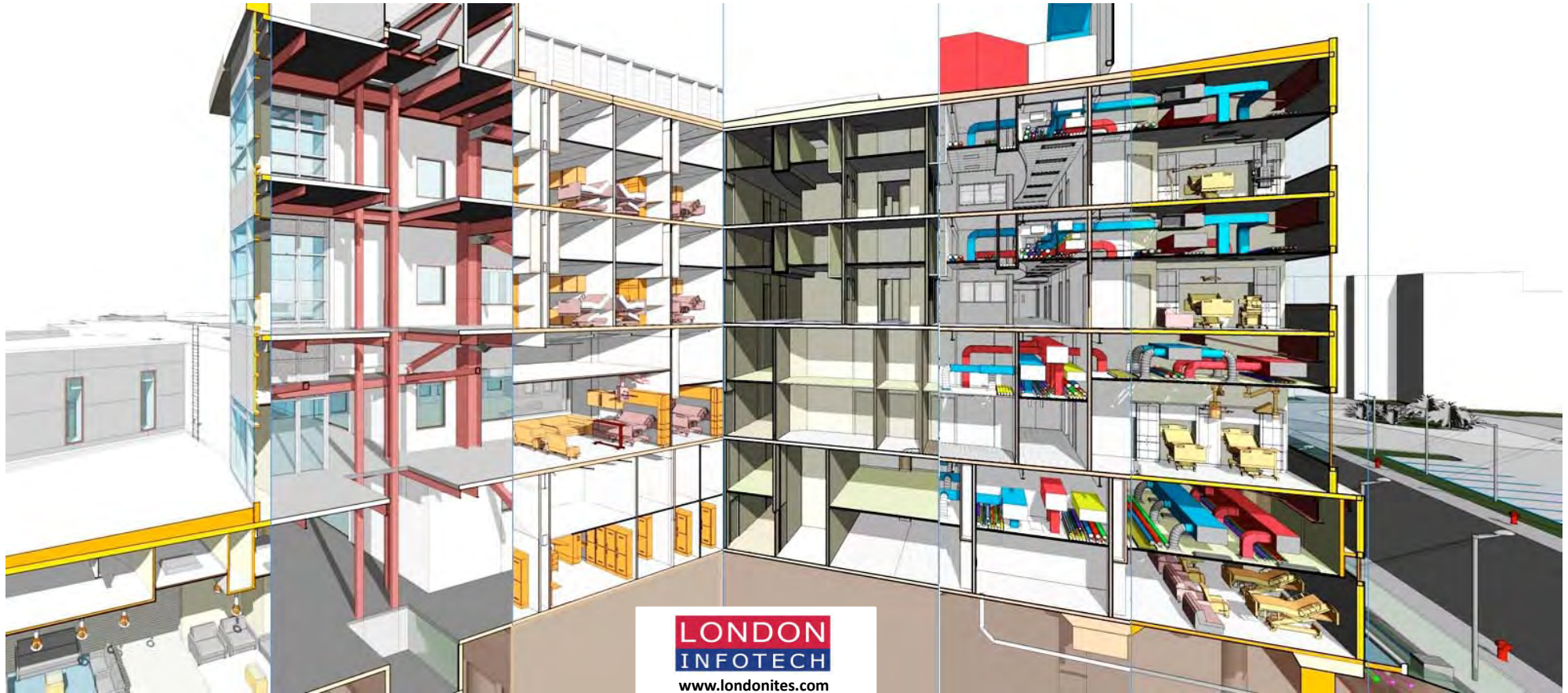
EQUIPMENT

FFE - INT

MEPF

INTEGRATED

UTILITIES



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INFOTECH**

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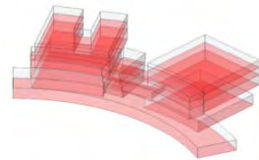
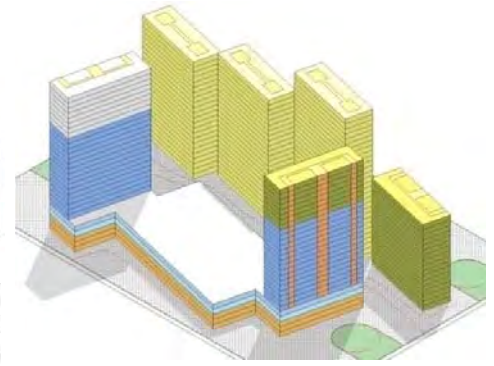
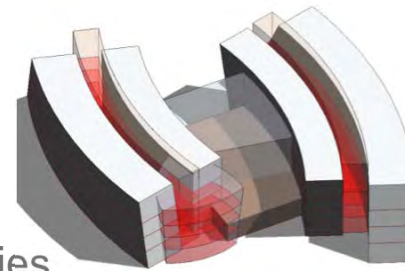
Healthcare Tall Buildings Airports Sport Civic & Govt Education Site & Campus Justice Mission Critical Army Corps Infrastructure Bridges Utilities Equipment

40 million sqft of BIM projects executed since 2005 for some of the best & leading Design and Construction firms across the world, covering Modeling of all trades and their virtual Coordination with support for BIM Implementation

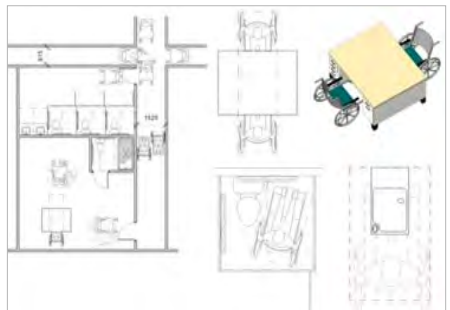
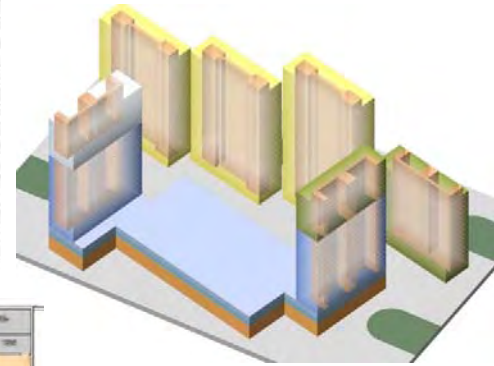
ANALYSE preliminary project stage

AREA & VOLUME studies

CODE compliance



Mass Family	Mass Comments	Level	Floor Area	Floor Volume
Mass 1		Level 1	8939	160901.97 ft³
Mass 1		Level 2	8939	134084.98 ft³
Mass 1		Level 3	8939	134084.98 ft³
Mass 1		Level 4	8939	208631.72 ft³
Mass 2		Level 1	19782	348086.63 ft³
Mass 2		Level 2	18894	277867.95 ft³
Mass 2		Level 3	18155	266776.26 ft³
Mass 2		Level 4	17415	387521.28 ft³
Mass 3		Level 1	10831	196761.43 ft³
Mass 3		Level 2	11031	186725.12 ft³
Mass 3		Level 3	11198	169231.50 ft³
Mass 3		Level 4	11366	264355.87 ft³
Mass 5		Level 2	6951	291938.29 ft³
Mass 4		Level 1	2653	50126.31 ft³
Mass 4		Level 2	2919	45500.22 ft³
Mass 4		Level 3	3149	49029.10 ft³
Mass 4		Level 4	3389	70356.50 ft³
Mass 6		Level 1	10598	211950.95 ft³
Grand total: 18			184087	3523931.07 ft³



EXIT STAIR U TOTAL OCCUPANT CAPACITY = 120
STAIR WIDTH = 4'-0" = 2 UNITS
STAIR CAPACITY = 2 X 60 PEOPLE / UNIT = 120 PEOPLE
DOOR WIDTH = 3'-0" = 2 UNITS
DOOR CAPACITY = 2 X 60 PEOPLE / UNIT = 120 PEOPLE
Reference: Table 6-1

DEDUCTIBLE 204 SF

EXIT DOOR 12 TOTAL OCCUPANT CAPACITY = 150
DOOR WIDTH = 3'-6" = 15 UNITS
DOOR CAPACITY = 1.5 X 100 PEOPLE / UNIT = 150 PEOPLE
Reference: Table 6-1

EXIT DOOR 13 TOTAL OCCUPANT CAPACITY = 150
DOOR WIDTH = 3'-6" = 15 UNITS
DOOR CAPACITY = 1.5 X 100 PEOPLE / UNIT = 150 PEOPLE
Reference: Table 6-1

GROUP D-2 1154 SF

EXIT DOOR 14 TOTAL OCCUPANT CAPACITY = 150
DOOR WIDTH = 3'-6" = 15 UNITS
DOOR CAPACITY = 1.5 X 100 PEOPLE / UNIT = 150 PEOPLE
Reference: Table 6-1

DEDUCTIBLE 204 SF

EXIT STAIR V TOTAL OCCUPANT CAPACITY = 120
STAIR WIDTH = 4'-0" = 2 UNITS
STAIR CAPACITY = 2 X 60 PEOPLE / UNIT = 120 PEOPLE
DOOR WIDTH = 3'-0" = 2 UNITS
DOOR CAPACITY = 2 X 60 PEOPLE / UNIT = 120 PEOPLE
Reference: Table 6-1

GROUP	MAX. TRAVEL DISTANCE [FT]*	OUTDOORS AT GRADE DOOR CAPACITY	EXIT AND CORRIDOR DOOR CAPACITY	STAIR CAPACITY
B-1	100*	75	60	45
C	200	100	80	60
D-2	200*	100	80	60
E	300	100	80	60
F-2, F-3	175/250**	80 / 125***	80 / 125***	80
F-4	170	50 / 100***	50 / 100***	60

AREAS AND OCCUPANCY LOADS			
Name	Area	NFA per Occupant	Occupancy Load
DEDUCTIBLE	1161 SF	0 SF	0
GROUP C	1124 SF	25 SF	45
GROUP D-2	1042 SF	200 SF	5
GROUP E	1754 SF	100 SF	18
Grand total: 9	5081 SF		68



Area Diagrams comparing Required v/s Provided areas

- Dark Orange +25%-50% Over the Net SF Requested
- Med Orange +15%-25% Over the Net SF Requested
- Light Orange +10%-15% Over the Net SF Requested
- Med Yellow +5-10% Over the Net SF Requested
- Light Yellow +2-5% Over the Net SF Requested
- White +/- 0-2% Variance
- Light Pink -2-5% Under the Net SF Requested
- Med Pink -5-10% Under the Net SF Requested
- Light Red -10%-15% Under the Net SF Requested
- Med Red -15%-25% Under the Net SF Requested
- Dark Red -25%-50% Under the Net SF Requested

DESIGN PHASING

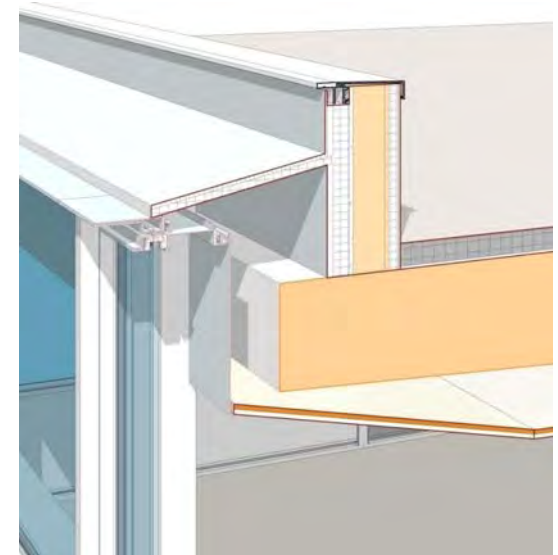
DESIGN OPTIONS



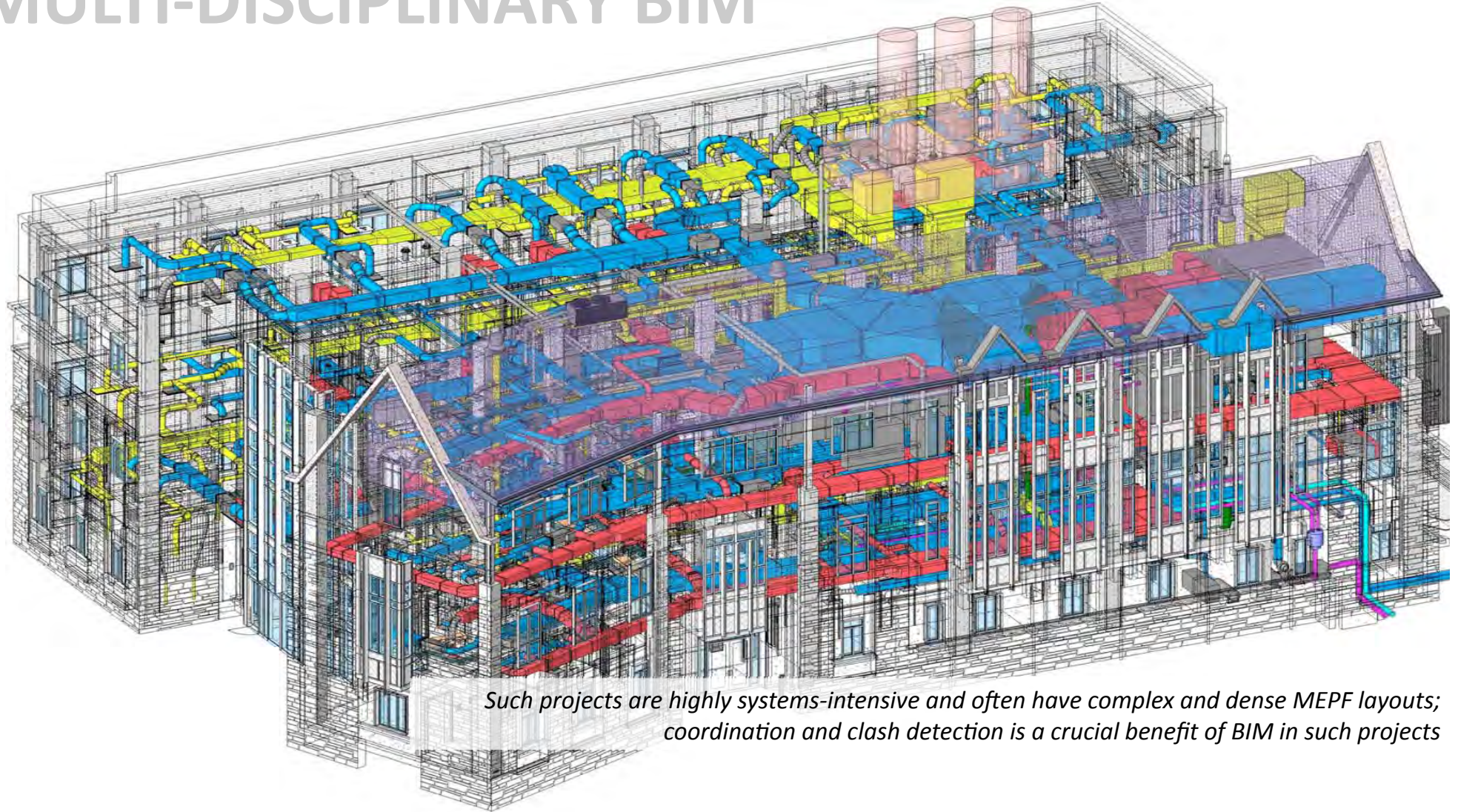
Existing

Demolition

New Construction



MULTI-DISCIPLINARY BIM

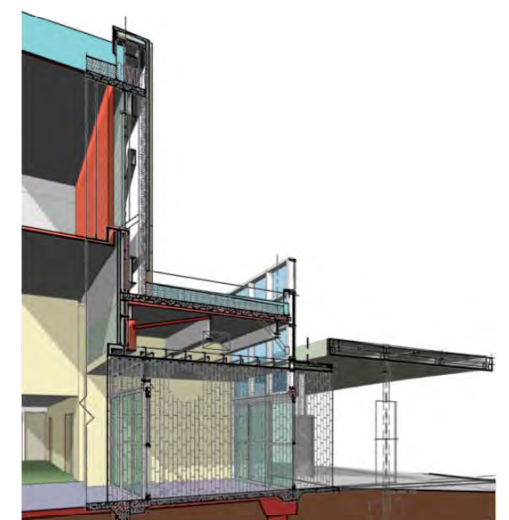
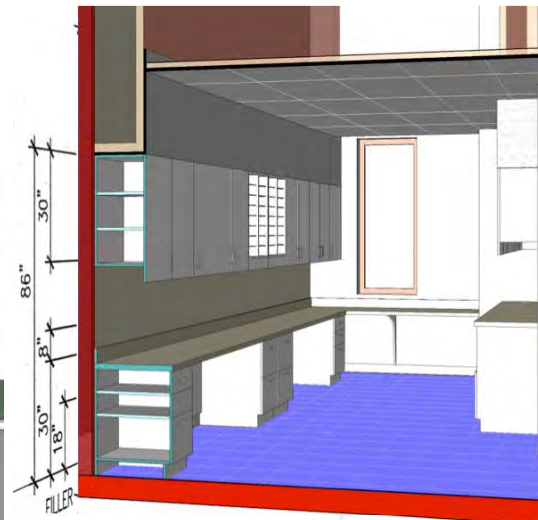
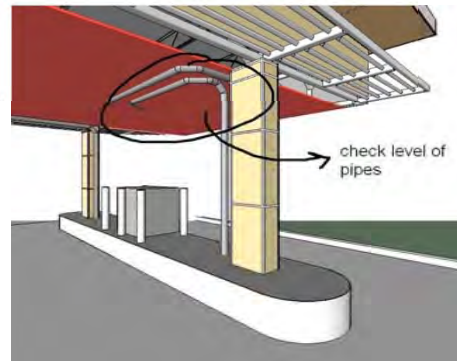
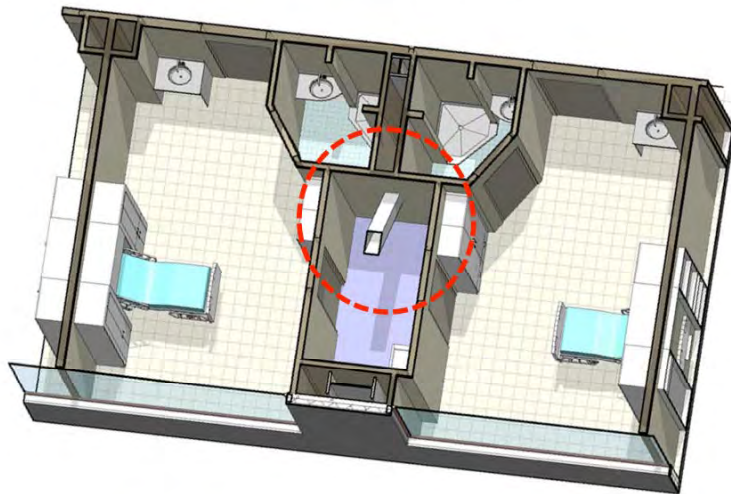
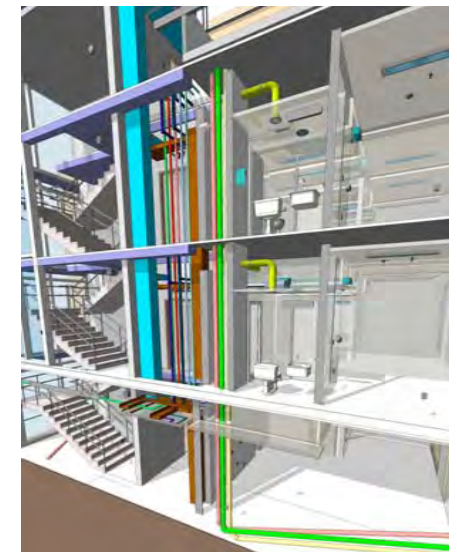
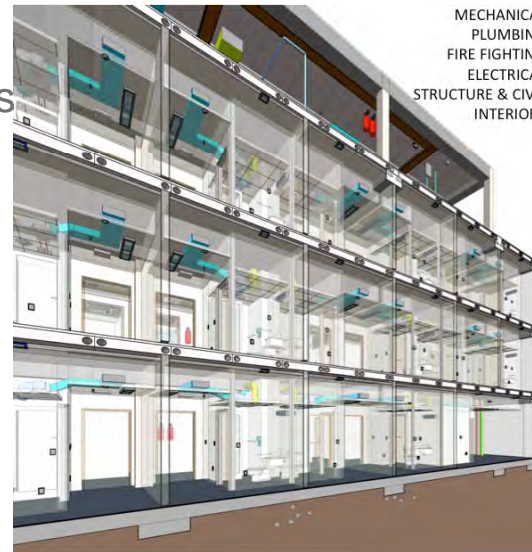


Such projects are highly systems-intensive and often have complex and dense MEPF layouts; coordination and clash detection is a crucial benefit of BIM in such projects

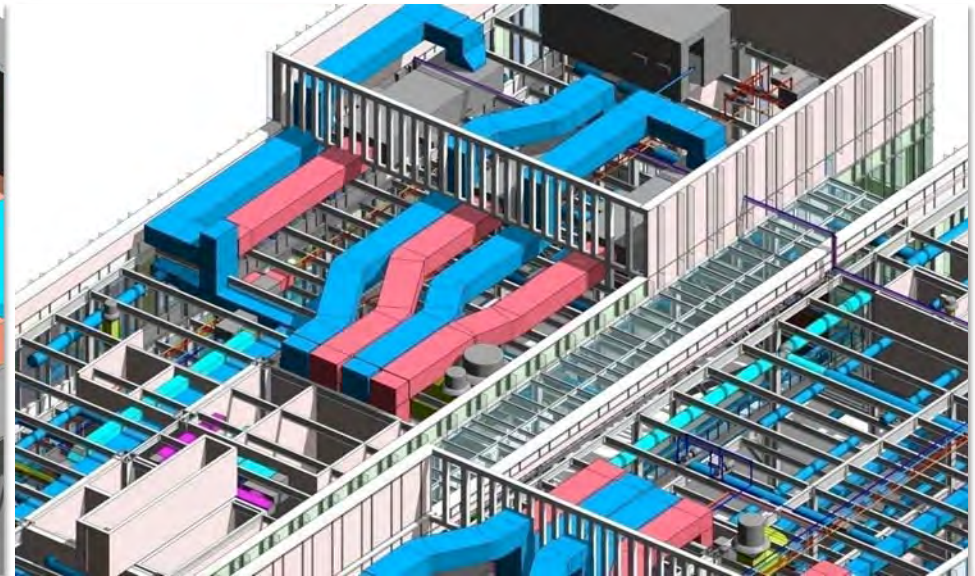
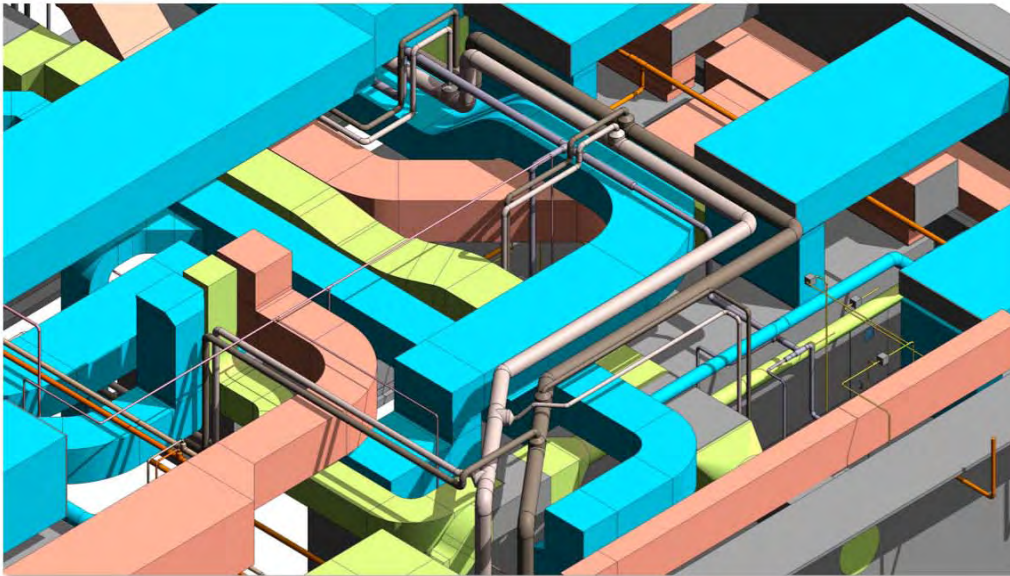
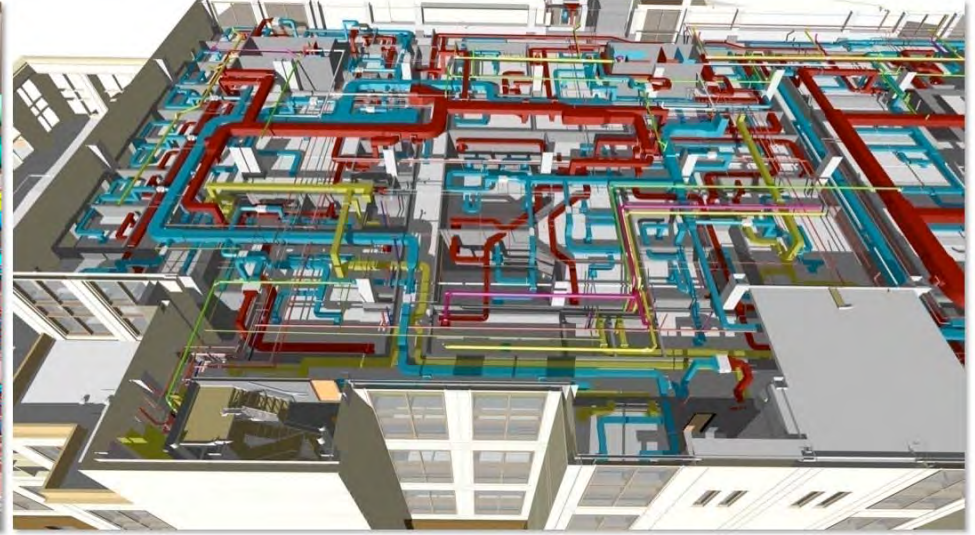
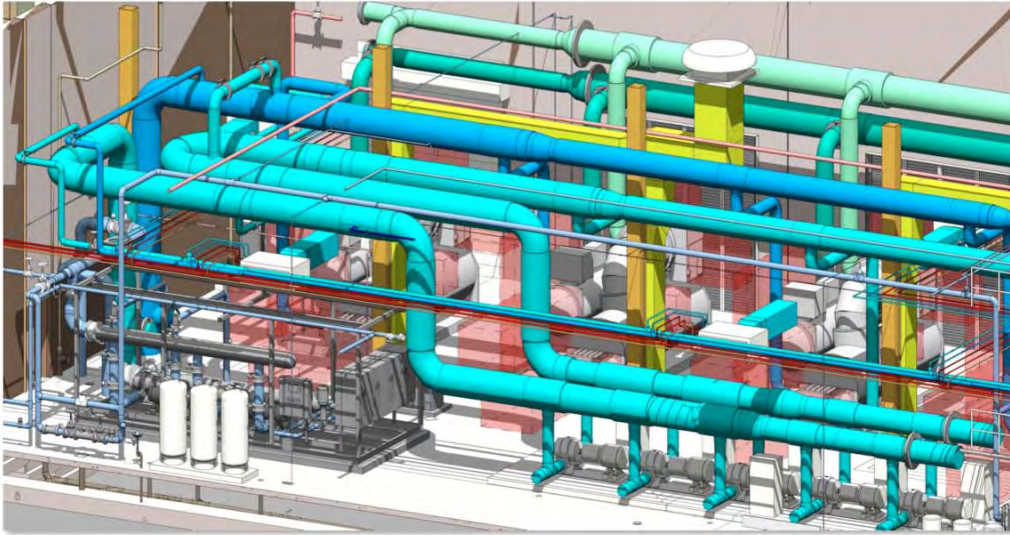
INTEGRATE multiple disciplines

DESIGN coordination

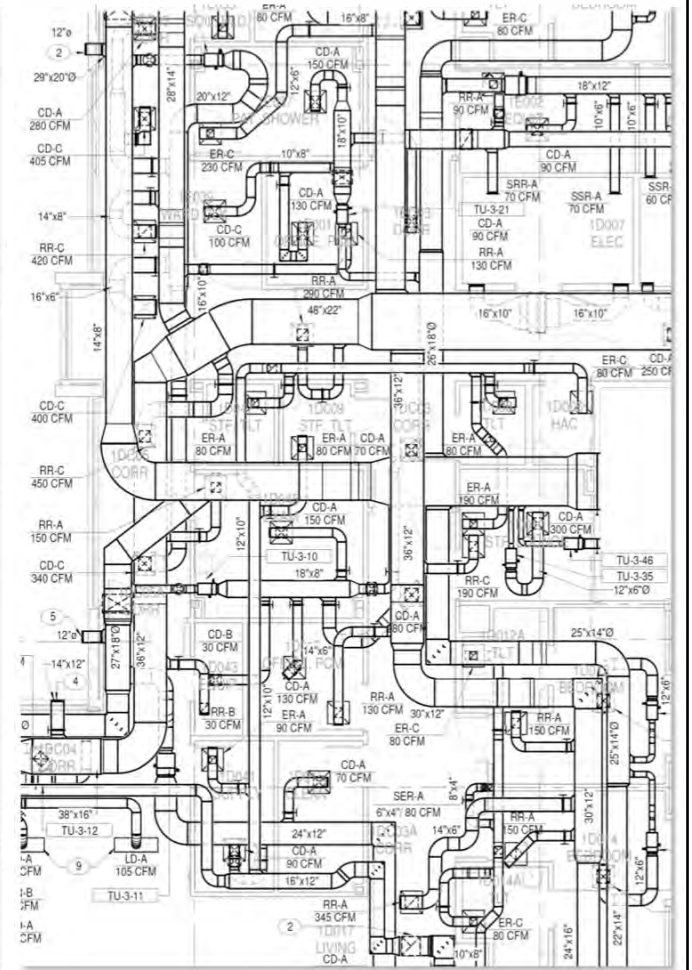
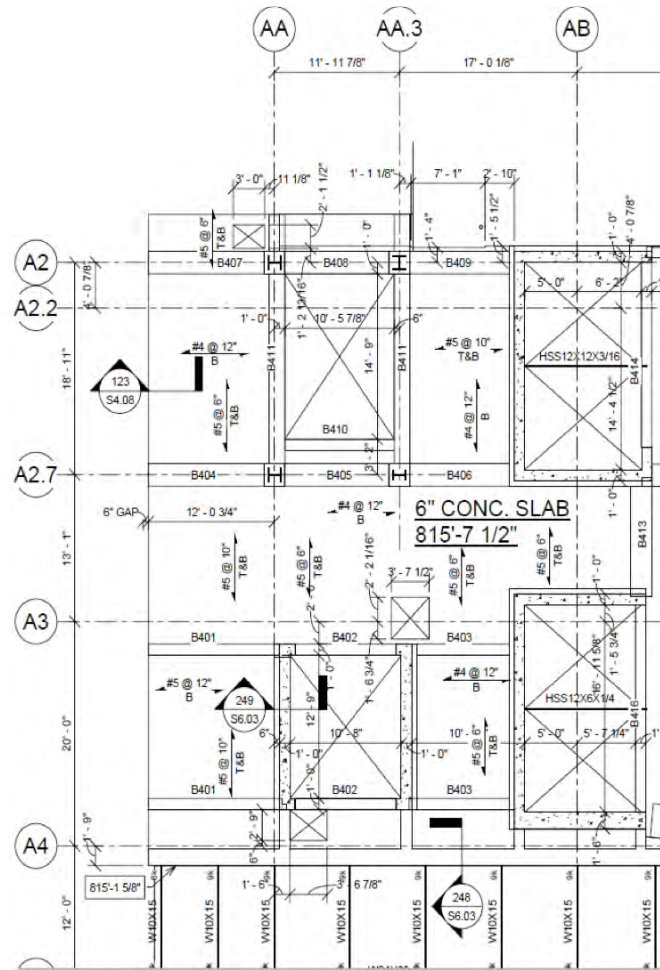
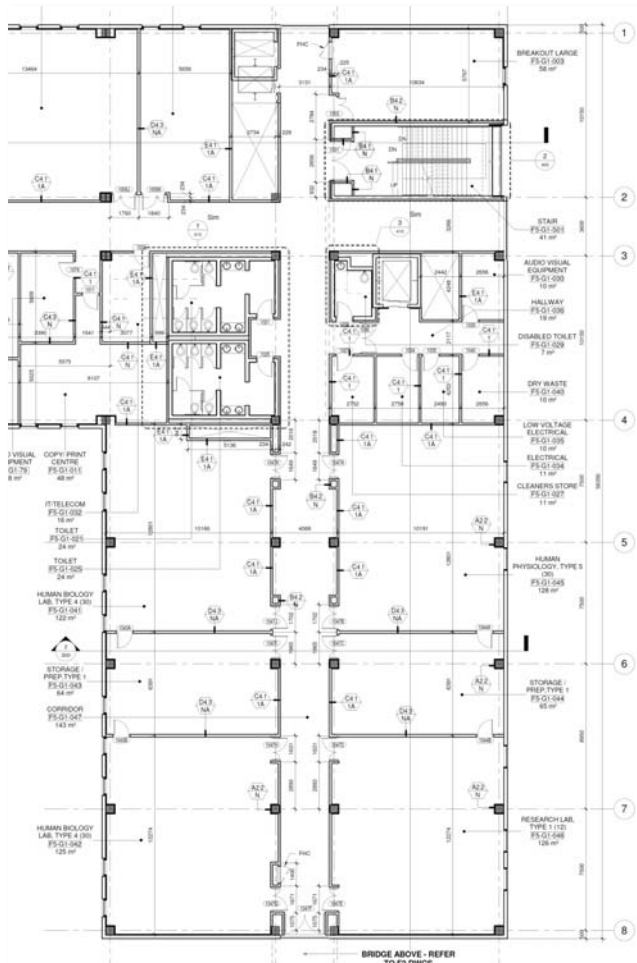
MECHANICAL
PLUMBING
FIRE FIGHTING
ELECTRICAL
STRUCTURE & CIVIL
INTERIORS



Integrated Disciplines

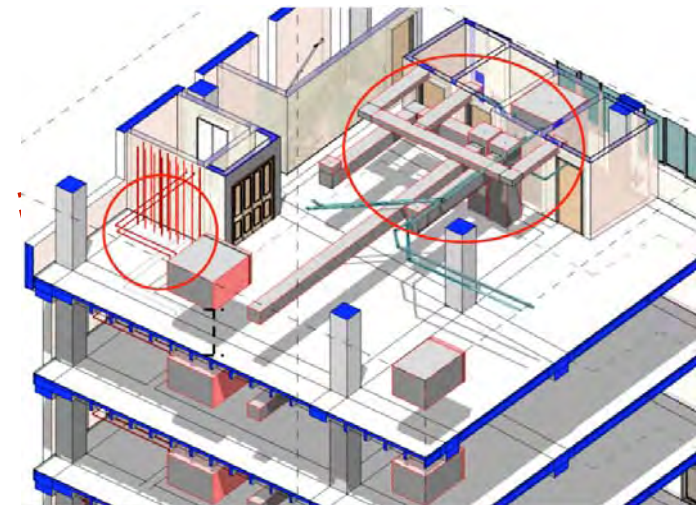
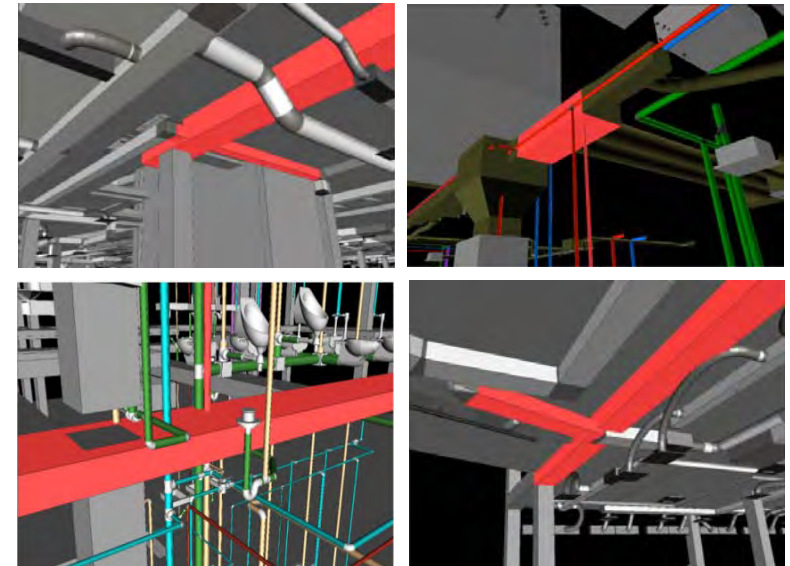


DOCUMENTATION



CLASH detection & coordination

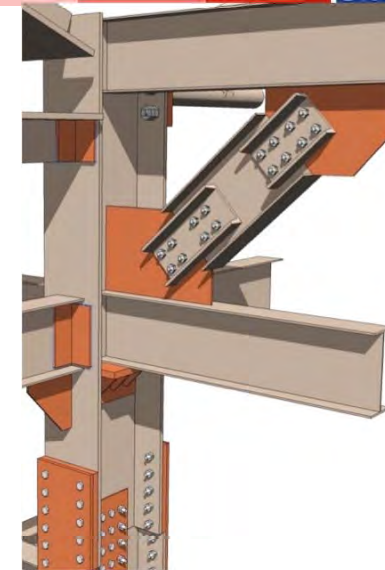
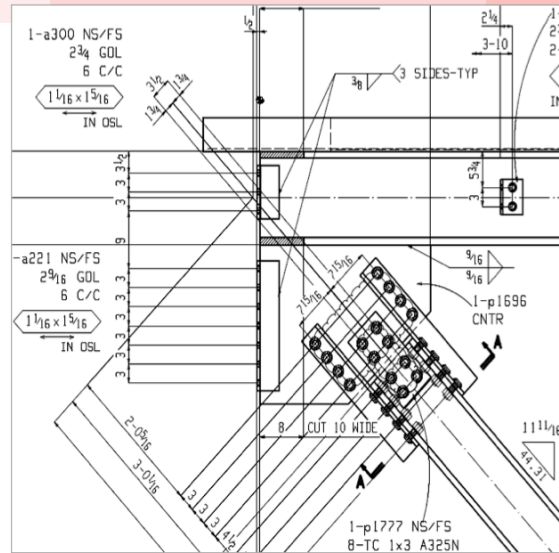
4D construction simulation



Benefits of BIM for Construction Managers

SHOP drawings integration

AS-BUILT documentation



Equipment Schedule			
Grp.	ADB No.	Qty	Description
	3615-029	1	Chair, Clinical, Recliner
	06277	1	Cat. Procedure, Open Type with Wire Basket Storage Compartments
	14318	1	Monitor, Flat Panel, Medical Grade, 48.3cm Color Display, High Resolution, for Arm Mounting
	14361	1	Television, LCD, 1168 mm Flat Panel, High Definition Multimedia, VESA mounting holes. Use with M620 Wall Mount
	19164	1	Bed, Critical Care, Electric, Adjustments. Includes Mattress, Side Com
	19378	1	Docking Station, Physiological Monitor
	19790	1	Table, Overbed, General
	20170	1	Flowmeter, Air, 1-1.5 lpm, with Quick Connect Fitting and Tubing Nipple
	20162	1	Flowmeter, Oxygen, 1-1.5 lpm, with Quick Connect Fitting and Tubing Nipple
	30402	1	Receptacle, Waste, Fire Resistant, 2.5 liters Capacity
	30408	1	Receptacle, Plastic, Biohazard Waste, Foot Operated Cover, 30
	M620	1	Wall Mount, Includes Mounting Brackets with Tap Swivel Adapter, LCD Plasma Screens 30" to 65"
	55-201	1	Sleeping Sofa with Arms
	X	1	Cabinet
	XXX	1	



COST reduction

TIME saved

COORDINATED
delivery of the project

MANAGING construction

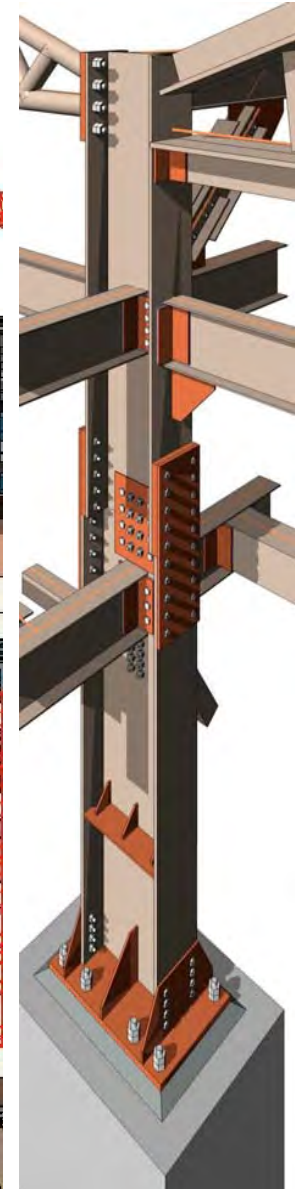
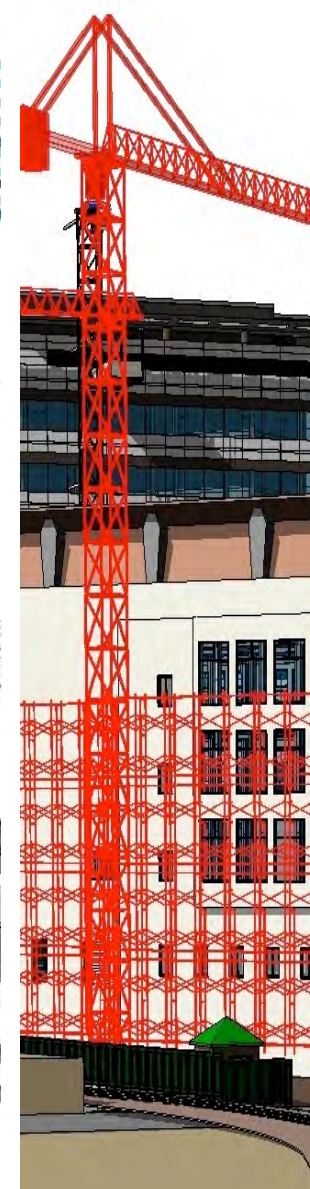
PROCUREMENT
efficiency

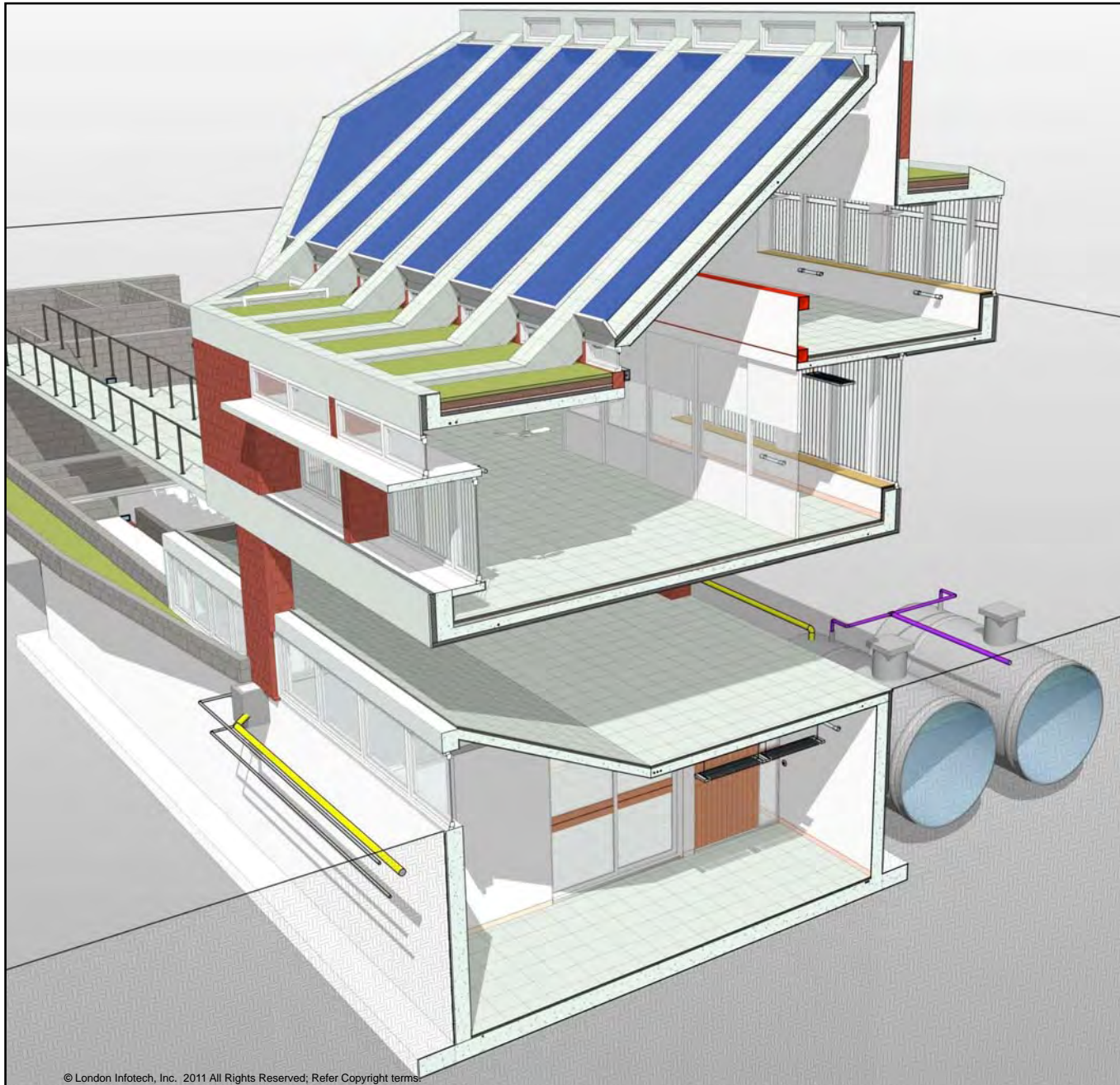
QUALITY of construction

FACILITY management



Field	Value
Project Name	Example Project
Client	Example Client
Location	Example Location
Start Date	2010-01-01
End Date	2010-12-31
Status	In Progress
Manager	Example Manager
Contact	Example Contact
Phone	Example Phone
Email	Example Email
Website	Example Website
Address	Example Address
City	Example City
State	Example State
Country	Example Country
Postal Code	Example Postal Code





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NET ZERO ENERGY BUILDING

BIM

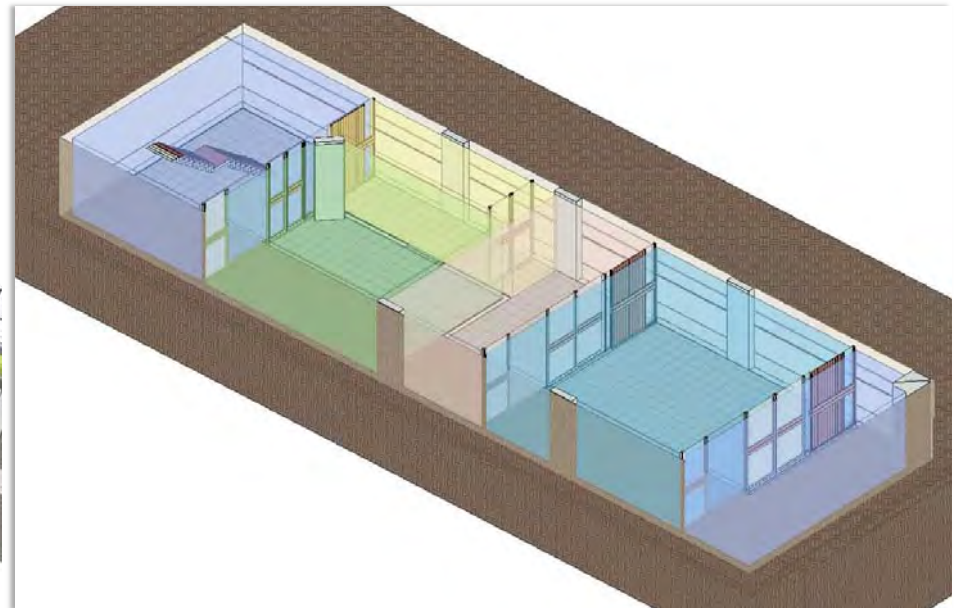
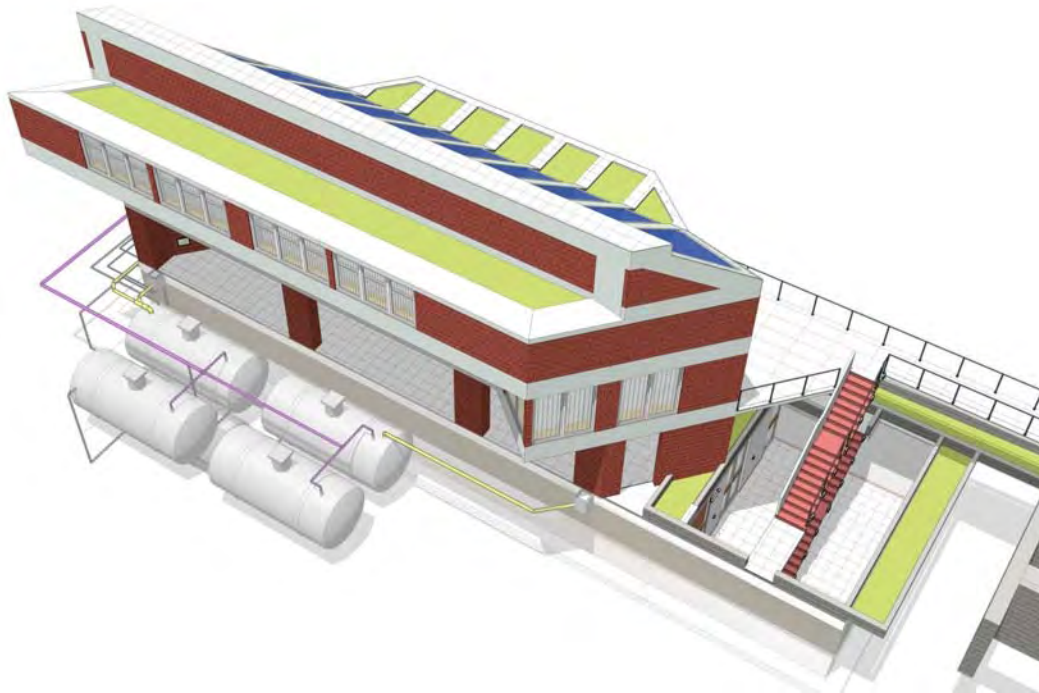
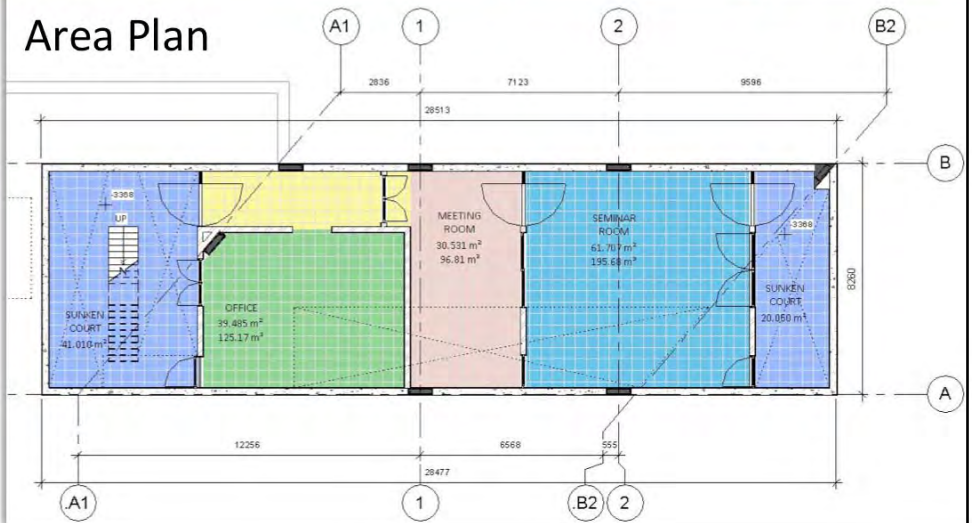
COLLABORATION

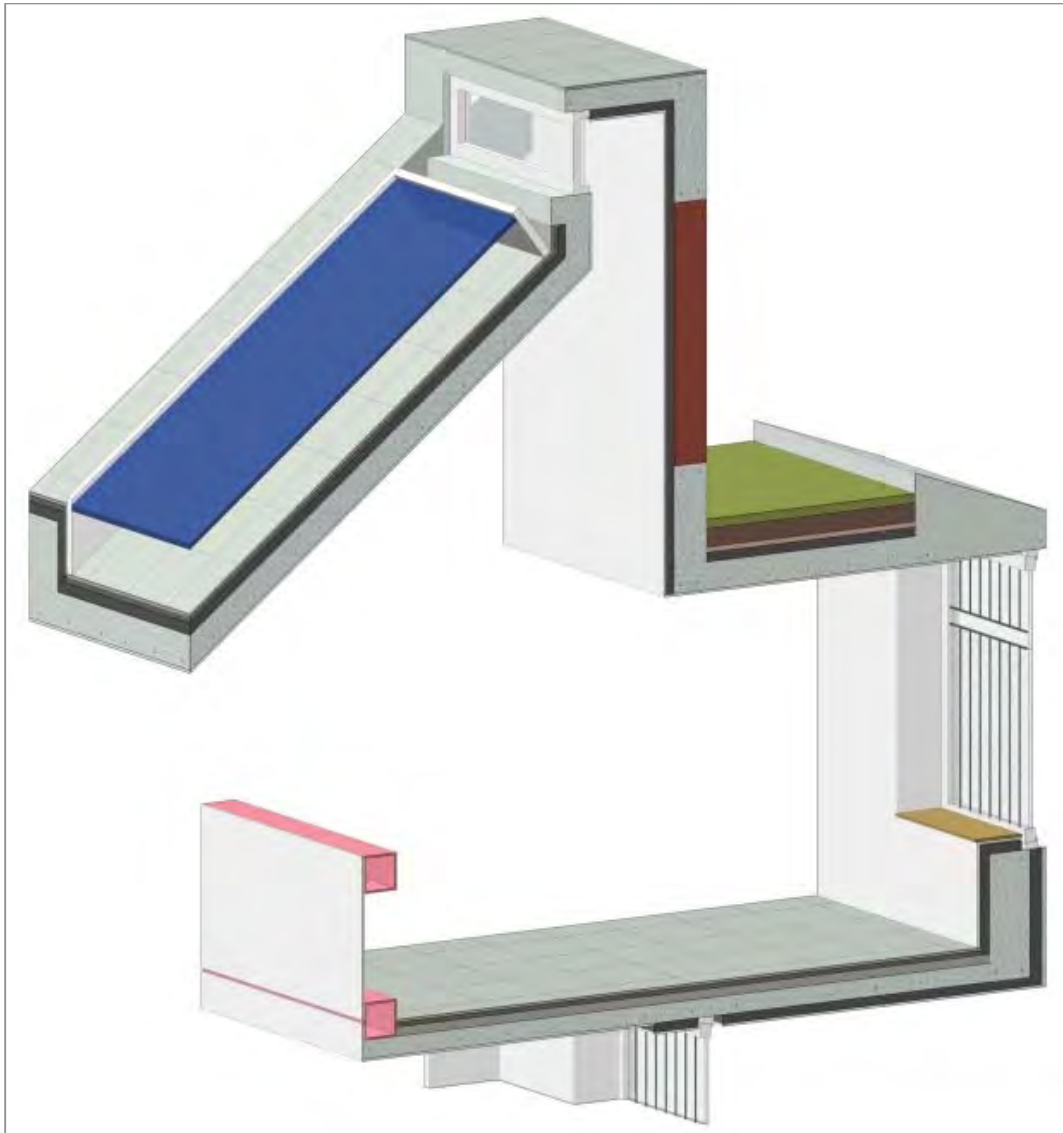
 NZEB BIM Model Extracts

-  Architecture
-  Structure
-  MEP
-  Integration
-  Quantities

ROOM SCHEDULE				
Name	Area	Volume	Occupancy	Comments
BASEMENT FLOOR				
OFFICE	39.485 m ²	125.17 m ³		
MEETING ROOM	30.531 m ²	96.81 m ³		
SEMINAR ROOM	61.707 m ²	195.68 m ³		
SUNKEN COURT	20.050 m ²	76.72 m ³		
SUNKEN COURT	41.010 m ²	159.21 m ³		
PASSAGE	12.701 m ²	40.21 m ³		
PASSAGE	1.659 m ²	5.25 m ³		
	207.144 m ²	699.05 m ³		
FIRST FLOOR				
THERMAL AND OPTICAL LAB	99.582 m ²	261.14 m ³		
SECOND FLOOR				
SIMULATION LAB	77.465 m ²	212.23 m ³		
Grand total: 9	384.191 m ²	1172.42 m ³		

Area Plan





INT. FLOOR FINISH			
Type	Area	Cost	Comments

BASEMENT FLOOR

15mm Ceramic Tile	212.419 m ²		Floor Finish
	212.419 m ²		

GROUND FLOOR

15mm Ceramic Tile	97.460 m ²		Floor Finish
	97.460 m ²		

FIRST FLOOR

15mm Ceramic Tile	122.311 m ²		Floor Finish
	122.311 m ²		

SECOND FLOOR

15mm Ceramic Tile	67.204 m ²		Floor Finish
	67.204 m ²		

CONCRETE SLAB/WALL/COLUMN			
Material	Material: Volume	Cost	Comments

Exposed Concrete	283.22 m ³		
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XPS/POLY STYRENE FOAM INSULATION			
Material	Material: Area	Cost	Comments

XPS/Poly Styrene Foam Insulation	757.170 m ²		
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ROOF GARDEN			
Type	Area	Cost	Comments

50mm Vegetation	47.340 m ²		Vegetation
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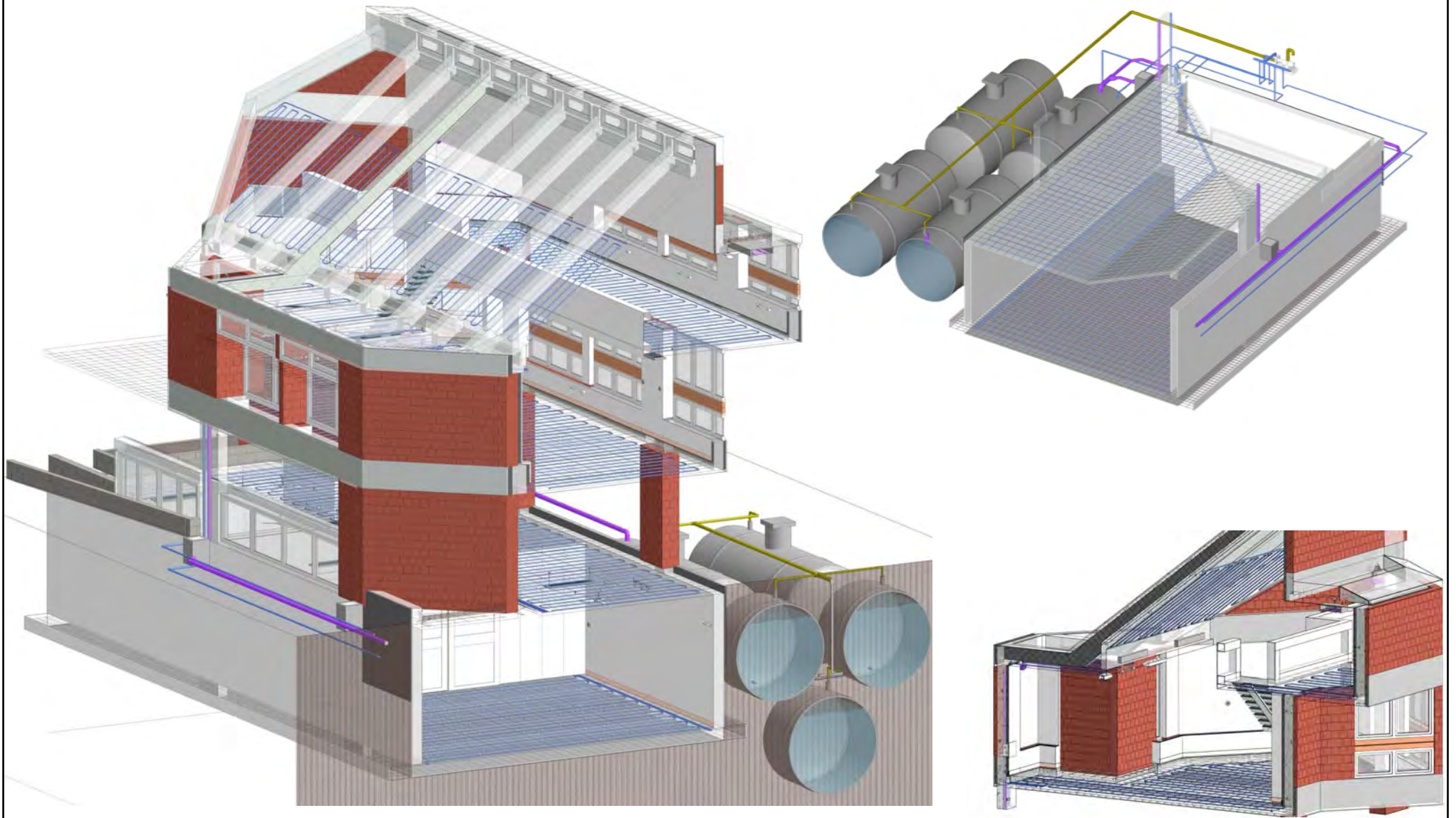
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BUILDING SYSTEMS **LONDON**
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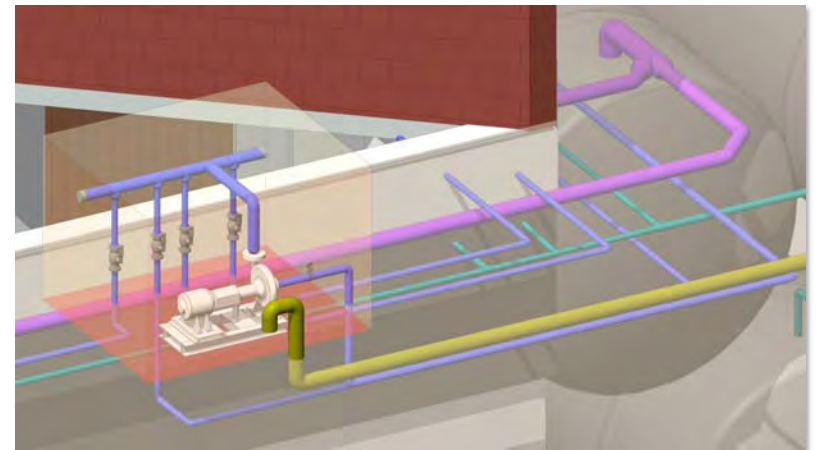
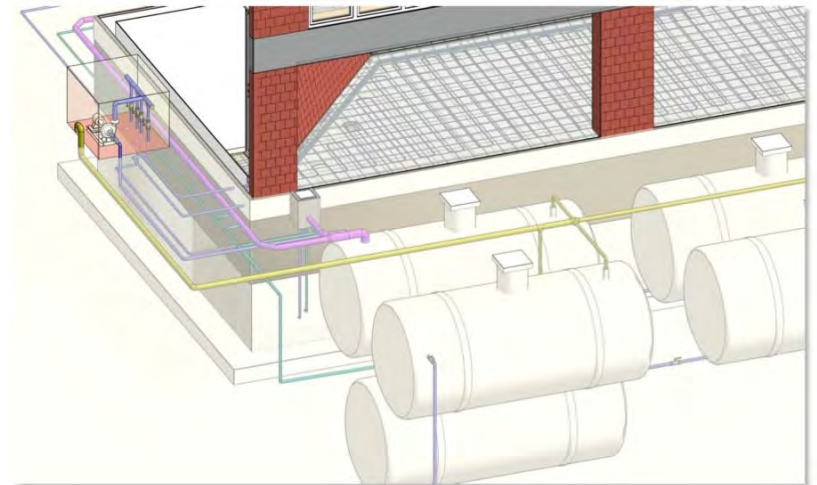


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INTEGRATED DISCIPLINES **LONDON**
INFOTECH



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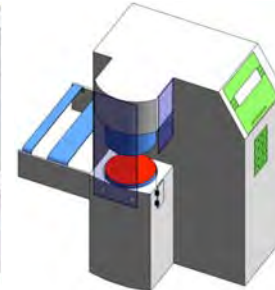
Pipe Schedule		
Pipe Type	Size	Length
CWR	1 1/2"	152' - 3 31/32"
CWR	2"	21' - 7 1/16"
CWS	1 1/2"	191' - 1 9/32"
CWS	2"	75' - 2 3/4"
CWS	3"	4' - 9 1/8"
Radiant Piping	3/4"	6227' - 3 9/16"
Rain water	4"	213' - 3 1/8"
Rain water	6"	1' - 10 13/32"
VENT	2"	32' - 5 7/32"
VENT	3"	19' - 6 13/32"
VENT	4"	46' - 11 9/16"
Grand total: 658		6986' - 4 15/32"

Mechanical Equipment Schedule		
Family	Manufacturer	Count
Access Panel		4
PUMP		1
Water Tank_20000ltr	Sintax	5
Grand total: 10		10

SOLAR PANELS			
Type	Area	Cost	Comments
Solar Panel	67.384 m ²		Solar Panels

WINDOW SCHEDULE					
Type	Width	Height	Area	Count	Comments
B/W1	4092	1495	6.117 m ²	1	
G/W1	1157	1171	10.842 m ²	8	
F/W1	2000	2212	13.272 m ²	3	
F/W2	3009	2212	26.624 m ²	4	
F/W3	2909	1476	8.587 m ²	2	
F/W4	398	2200	0.876 m ²	1	
F/W5	2909	574	3.339 m ²	2	
S/W1	3009	1612	19.402 m ²	4	
S/W2	1320	350	3.234 m ²	7	
R/W1	1319	450	5.342 m ²	9	
Grand total: 41			97.634 m ²	41	

Lighting Fixture Schedule				
Family and Type	Description	WATTS	Lumens	Count
P1-4: P1 4'	Pendant/cable hung single lamp TL5 high output fluorescent luminaire, nominal 75% indirect/25% direct luminaire, minimum 90% efficient, nominal 175mm X 50mm X 1220mm steel housing, semi specular clear high efficiency parabolic louver, baked white enamel finish, integral 0-10V dimming or DALI ballast, mounting height(s) as shown on plans.	60 W	4400	11
P1-8: P1 8'	Pendant/cable hung single lamp TL5 high output fluorescent luminaire, nominal 75% indirect/25% direct luminaire, minimum 90% efficient, nominal 175mm X 50mm X 2440mm steel housing, semi specular clear high efficiency parabolic louver, baked white enamel finish, integral 0-10V dimming or DALI ballast, mounting height(s) as shown on plans.	120 W	4400	4
R1: R1	Wall recessed LED steplight for outdoor wet locations.	6 W		14
S1: S1	Surface mounted solid state lensed adjustable graze-light, nominal 71mm X 84mm X 610mm aluminum extrusion housing, integral driver, 10° X 60° distribution, electronic low-voltage (reverse phase) dimming, length(s) and mounting height(s) as shown on plans. Luminaire to be well shielded to eliminate glare potential. Coordinate color temperature with ambient sources.	30 W	550	5
S3: S3	Ceiling Surface mounted single lamp TL5 high output fluorescent luminaire, direct distribution, minimum 78% efficient, nominal Width 300mm X Height 100 mm X Length 1200mm steel housing, 96% reflective white painted reflector, micro-prismatic frosted acrylic lens, white powder coated housing finish, integral 0-10V dimming or DALI ballast.	60 W	4400	8



Fox50 with AutoFeeder

Family Types

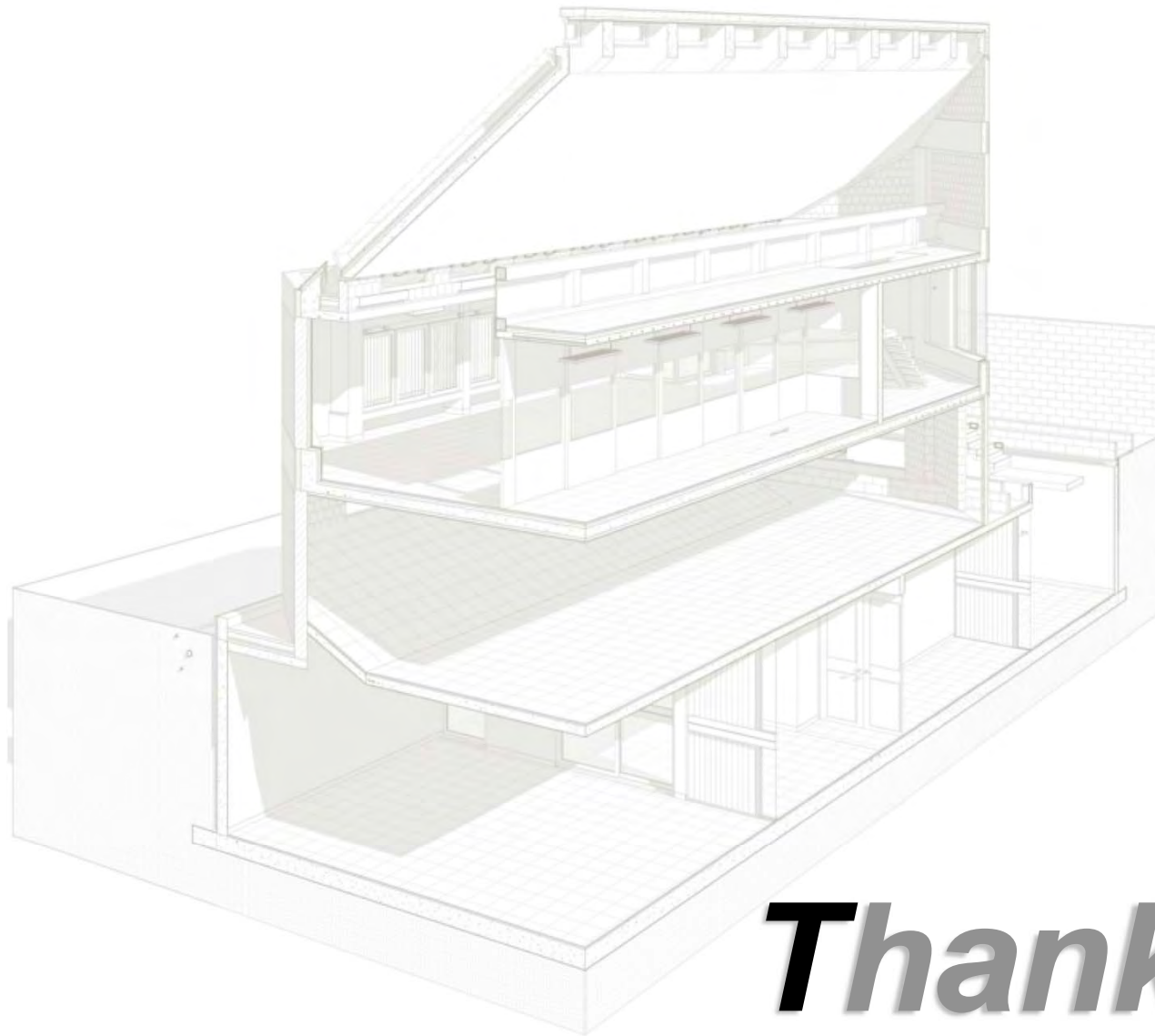
Name:

Parameter	Value	Formula	L
Materials and Finishes			
Material	White	=	
Dimensions			
Width	305.0	=	
Height	254.0	=	
Depth	406.4	=	
Data			
Weight	35lb.s (16kg)	=	
Warranty	one full year parts and labor	=	
Temperature Range	-20°C (-4°F) to 95°C (203°F)	=	
Input Power	115V or 220V / 50/60Hz / user sw itchable at 350VA	=	
Cooling water	18°C or less	=	
Identity Data			
URL	http://www.lasercomp.com/fox200.htm	=	
Model	FOX200	=	
Manufacturer	LaserComp	=	
Keynote		=	
Type Comments		=	
Description		=	
Assembly Code		=	
Cost		=	

OK Cancel Apply Help

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Thank You