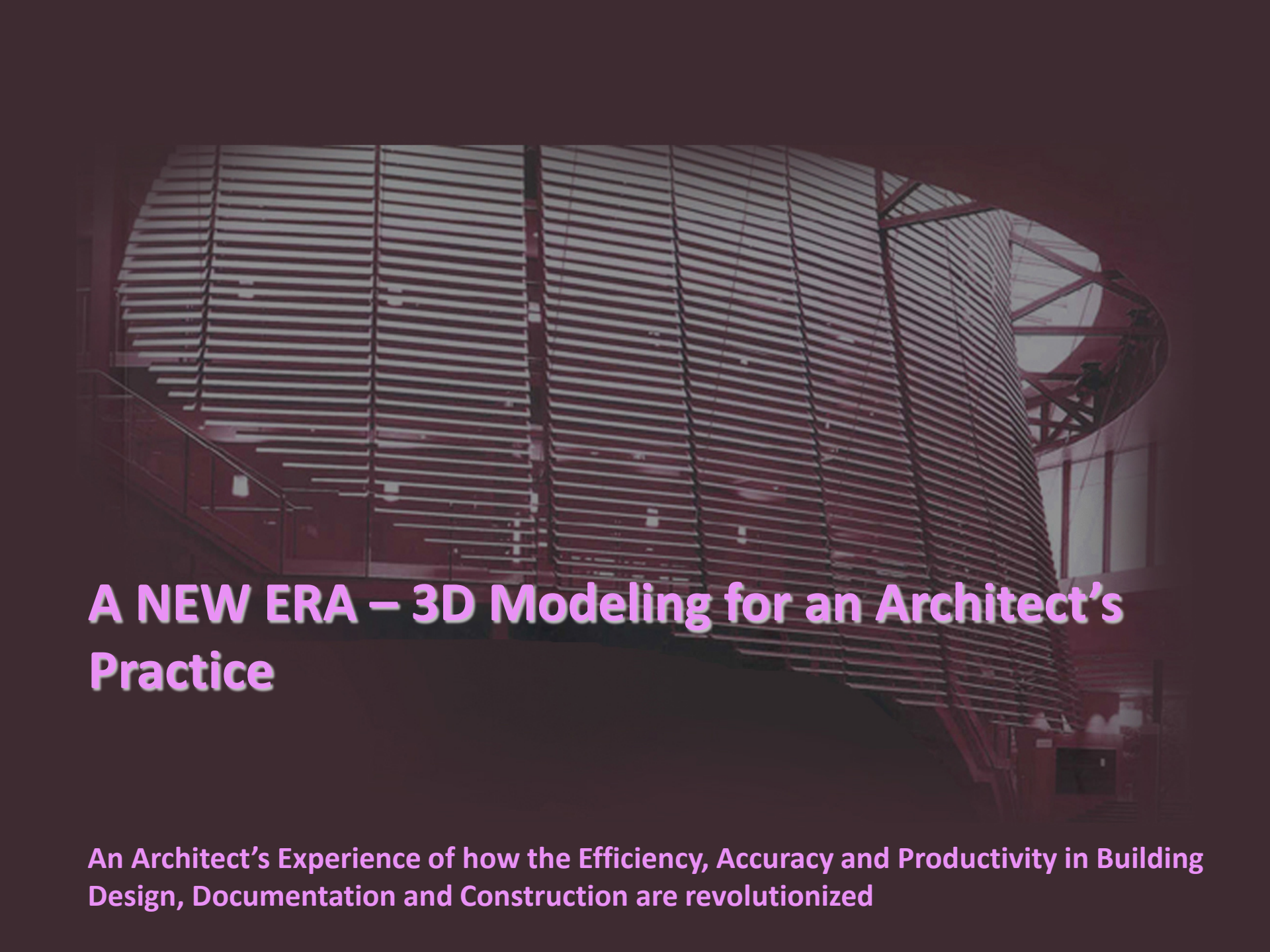
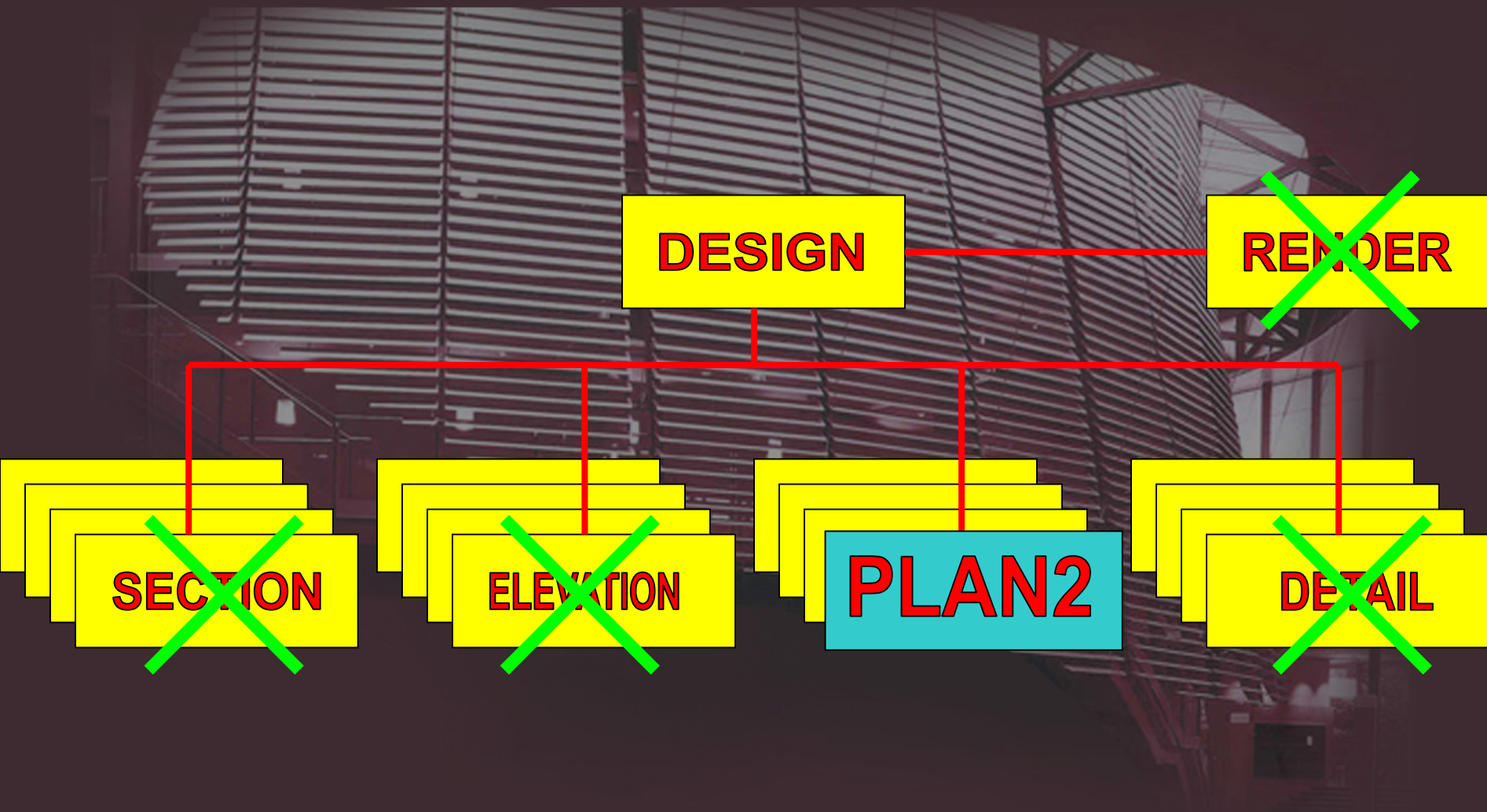




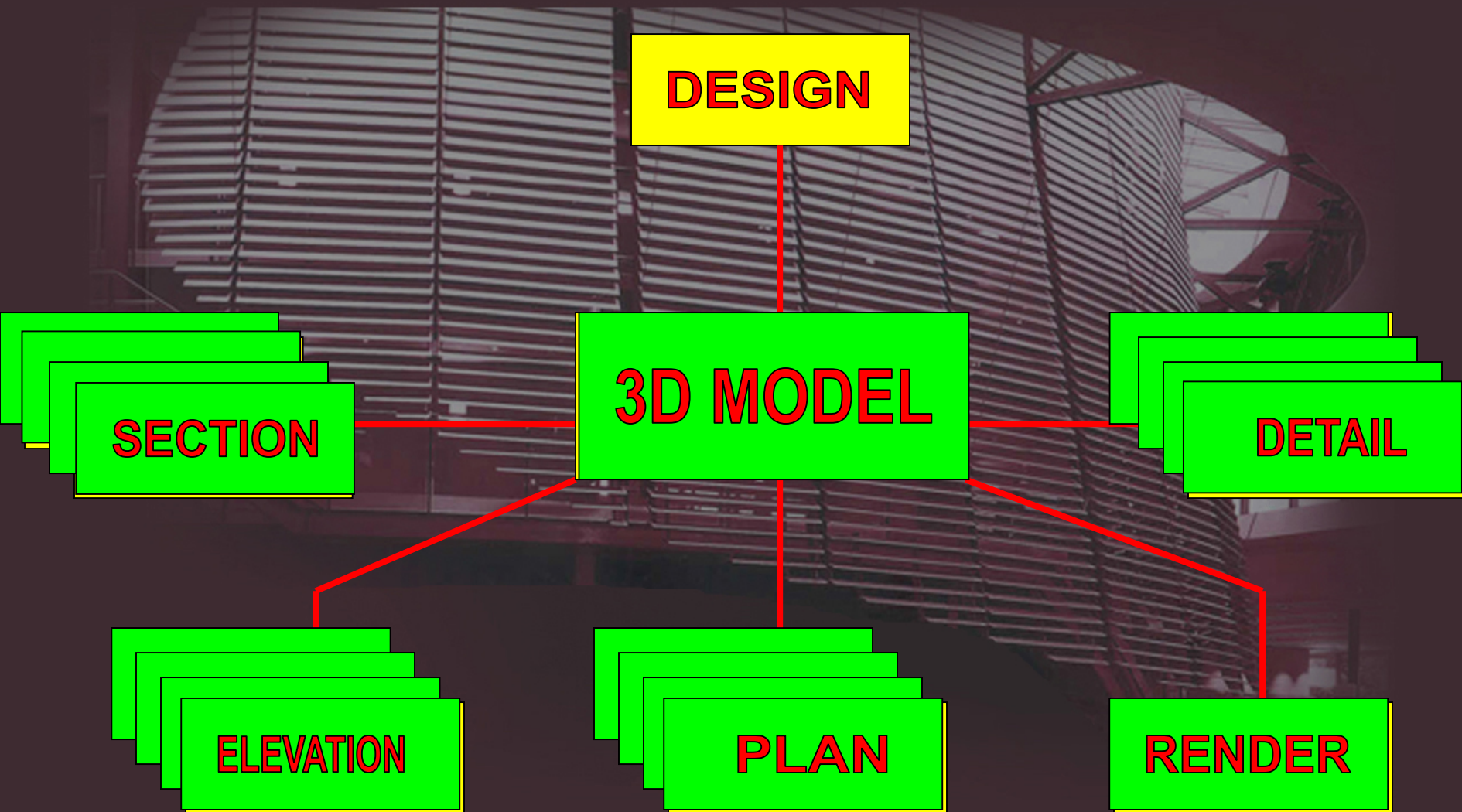
A NEW ERA – 3D Modeling for an Architect's Practice

An Architect's Experience of how the Efficiency, Accuracy and Productivity in Building Design, Documentation and Construction are revolutionized

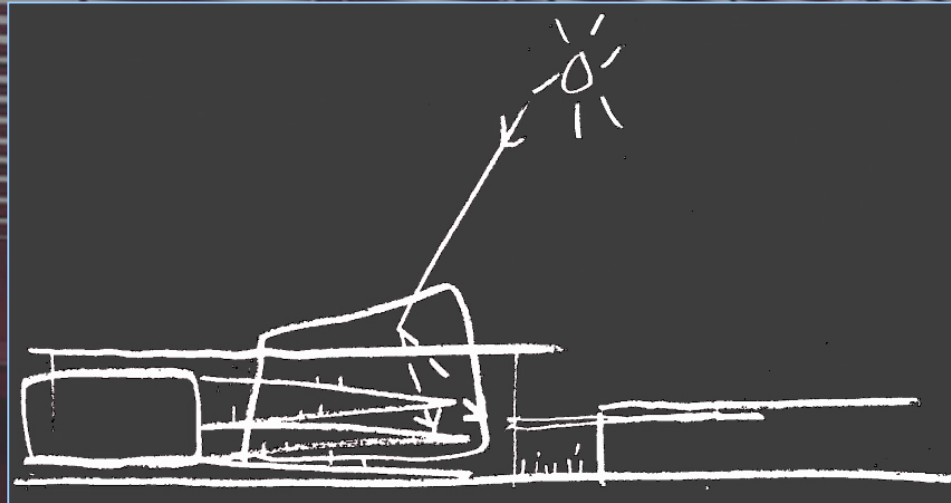
EXISTING DRAWING PRACTICE



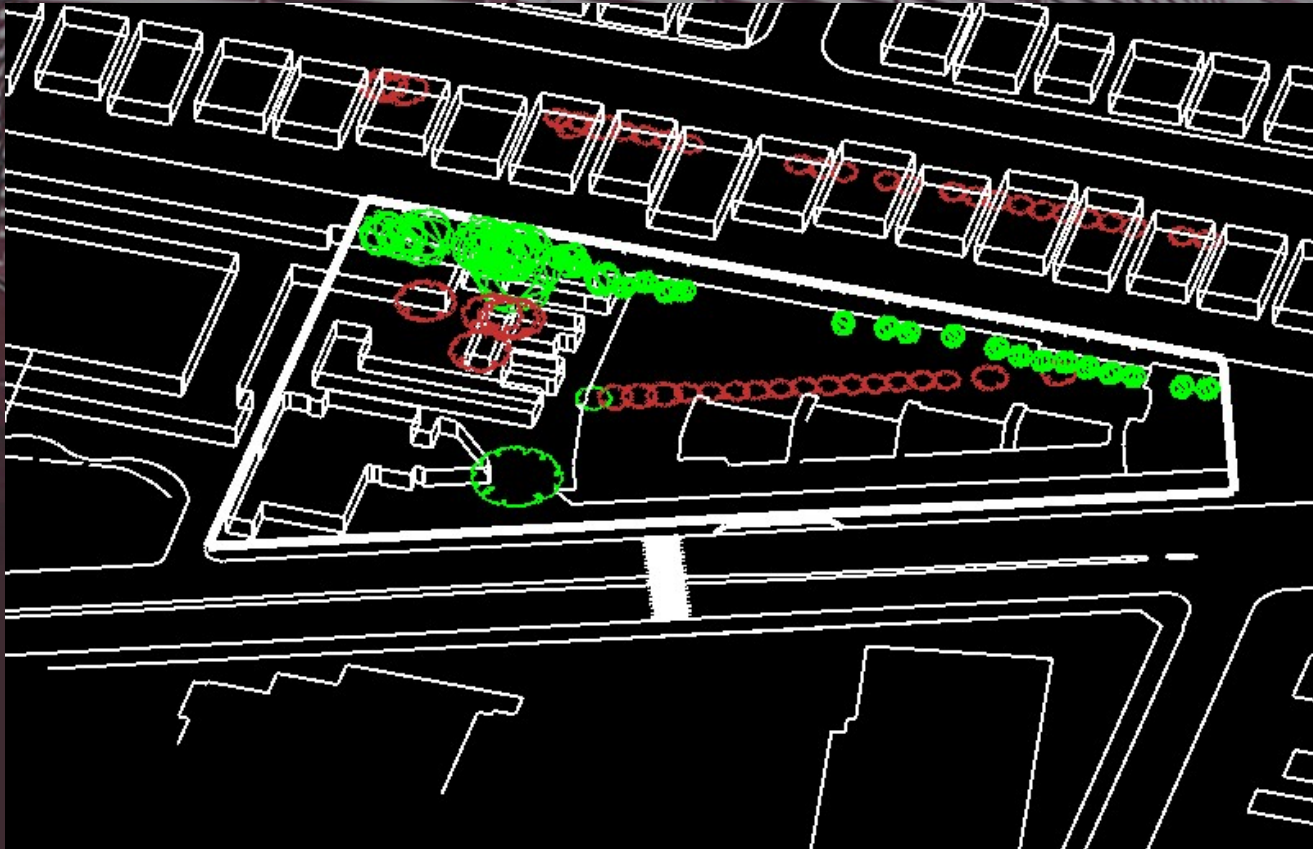
3D DRAWING CONCEPT



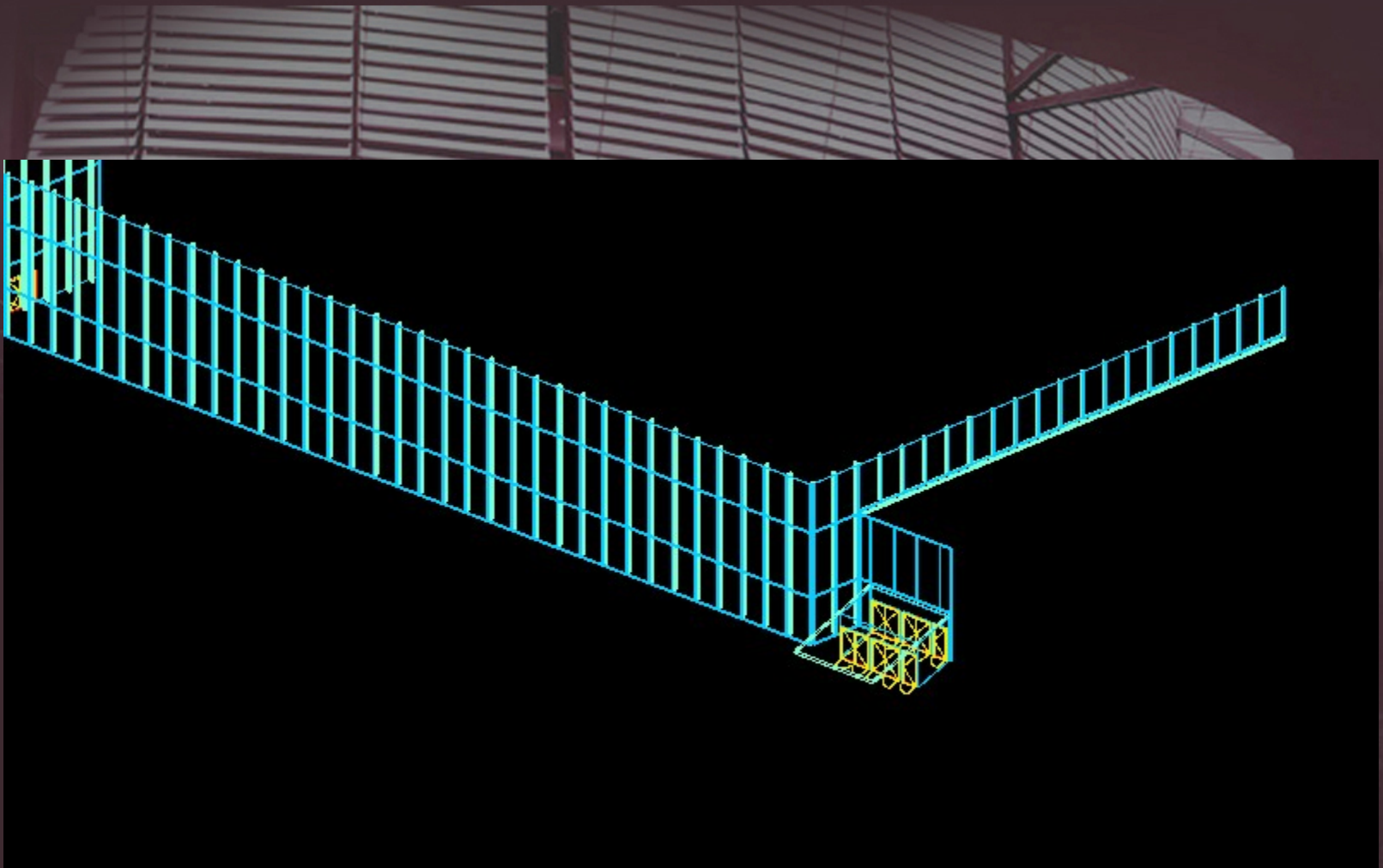
NATIONAL INSTITUTE OF DRAMATIC ARTS (NIDA) SYDNEY, AUSTRALIA



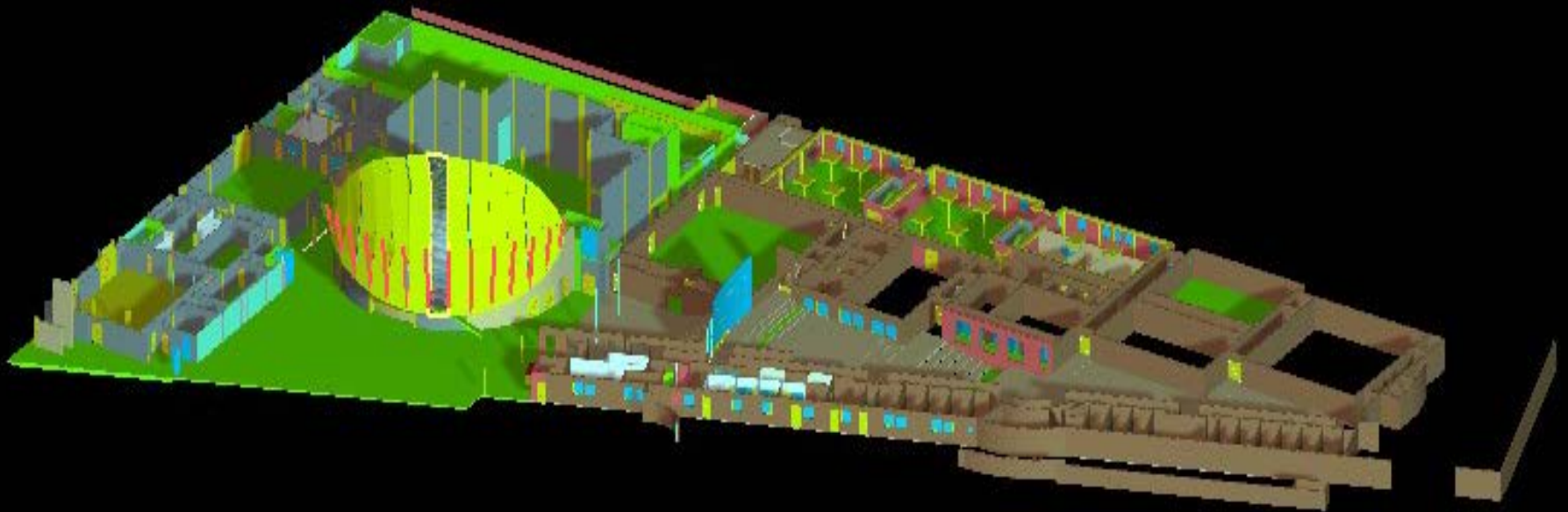
3D SITE



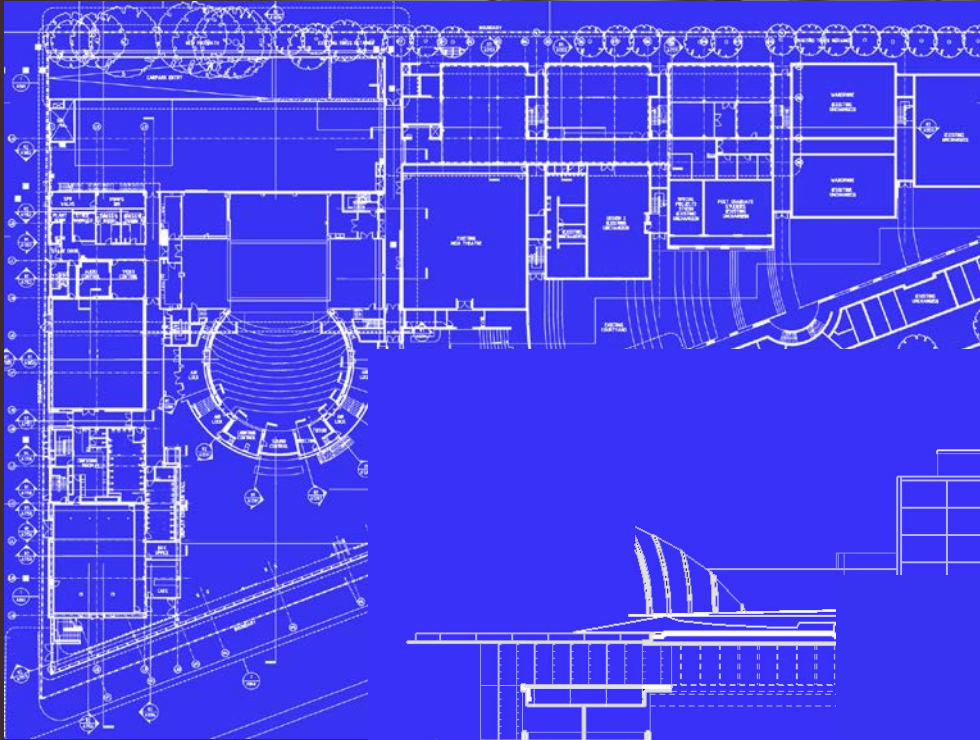
DESIGN IN 3D



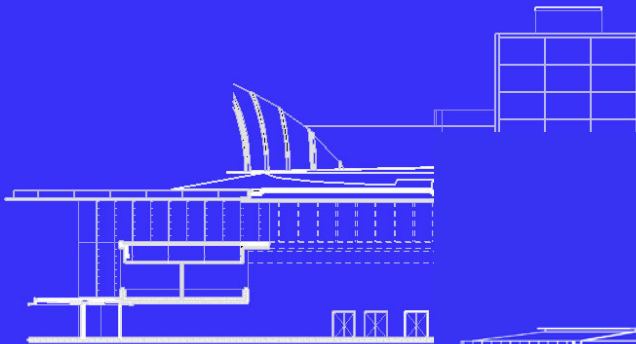
BUILDING 3D MODEL



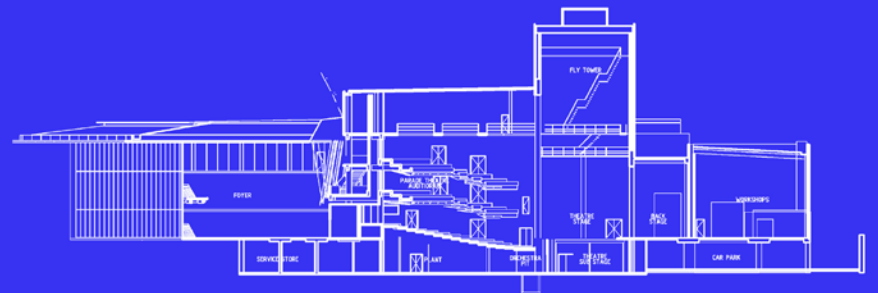
SELF-GENERATED ...



PLANS



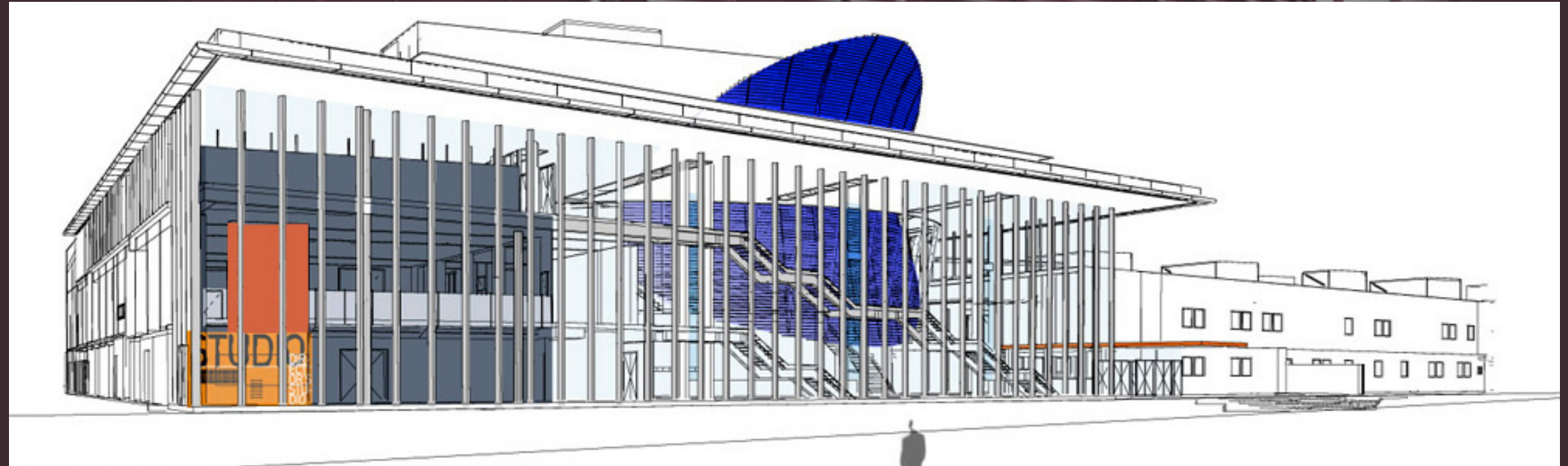
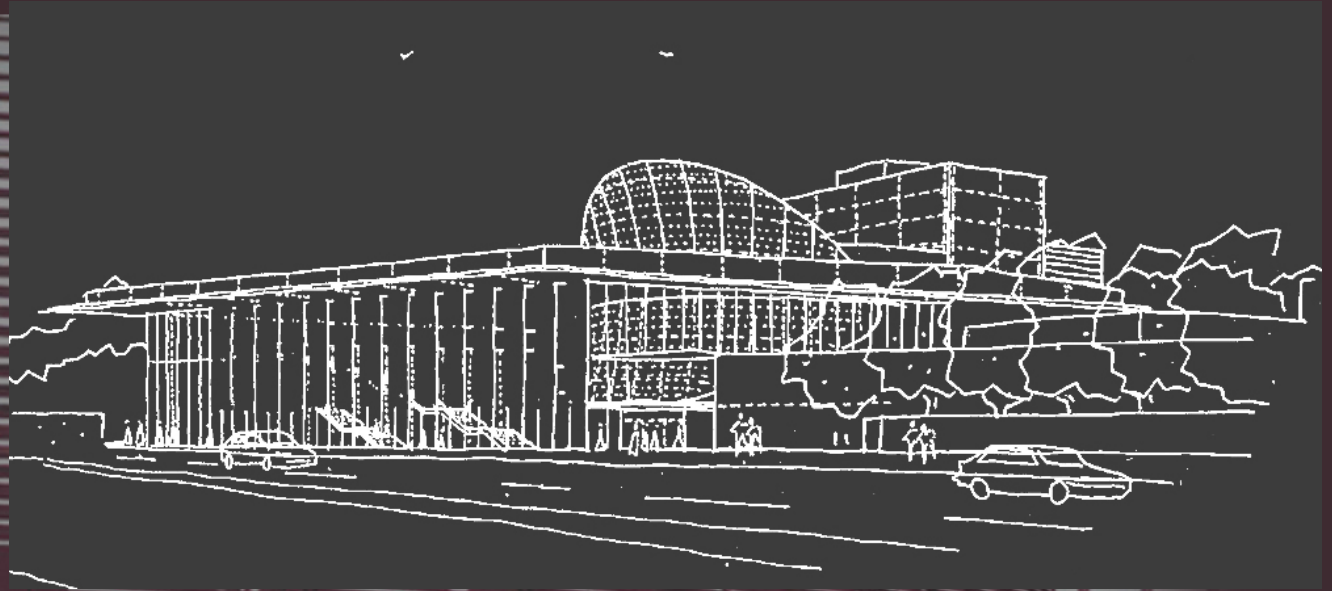
ELEVATIONS



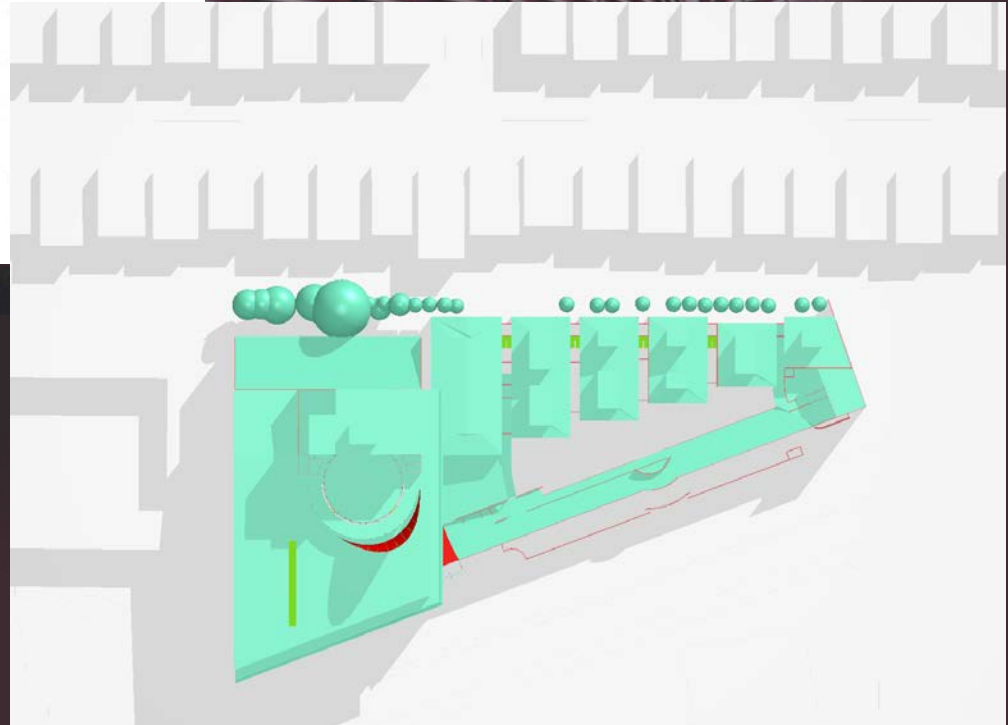
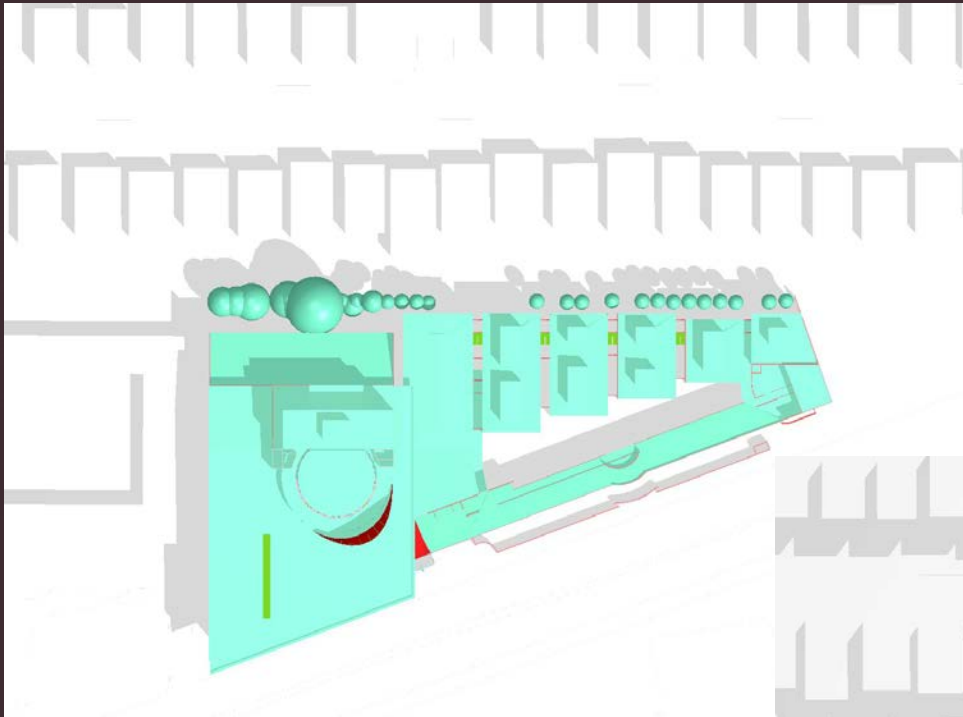
SECTIONS



GENERATED PERSPECTIVES



SHADOW ANALYSIS



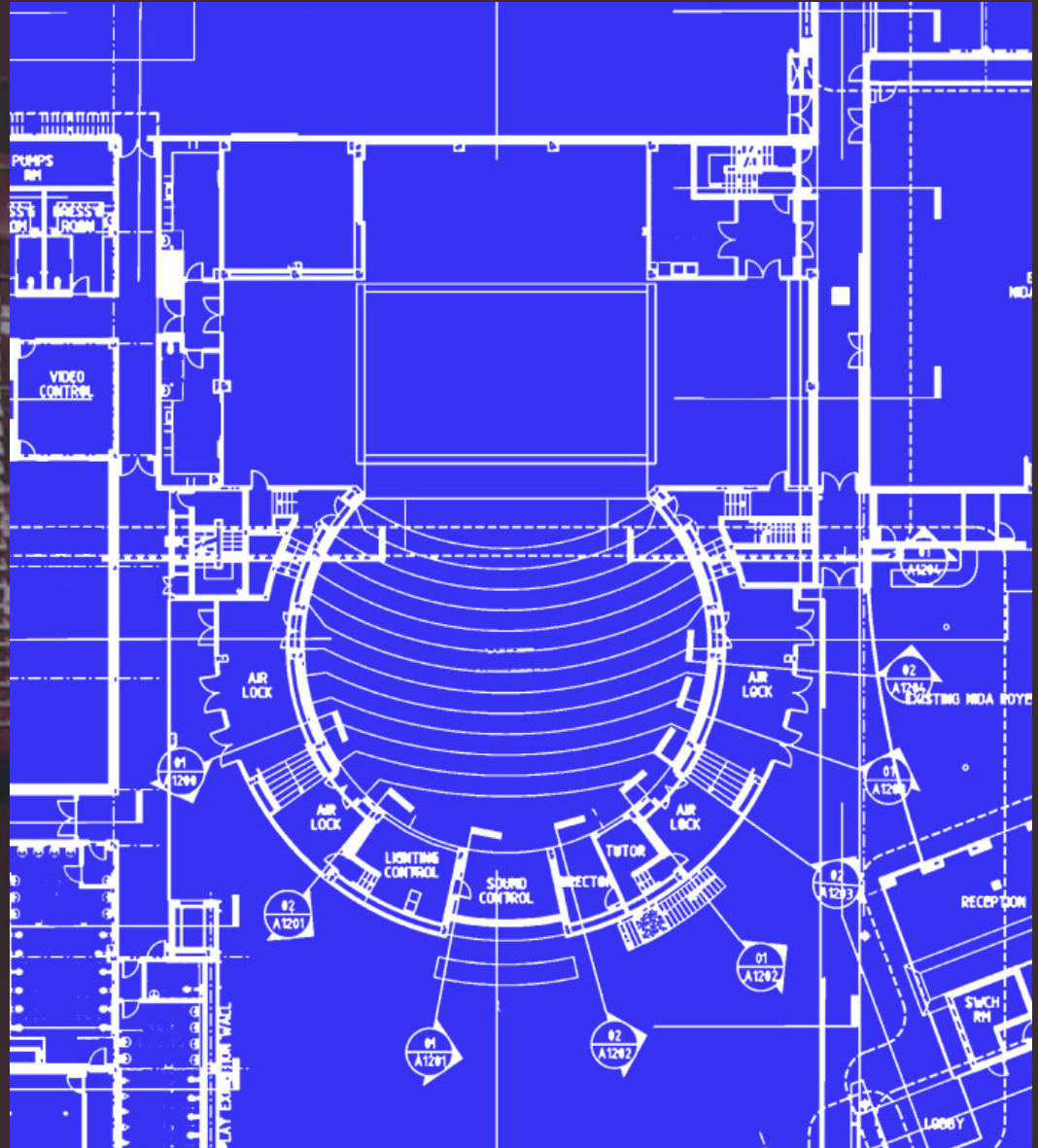
SAME MODEL RENDERING



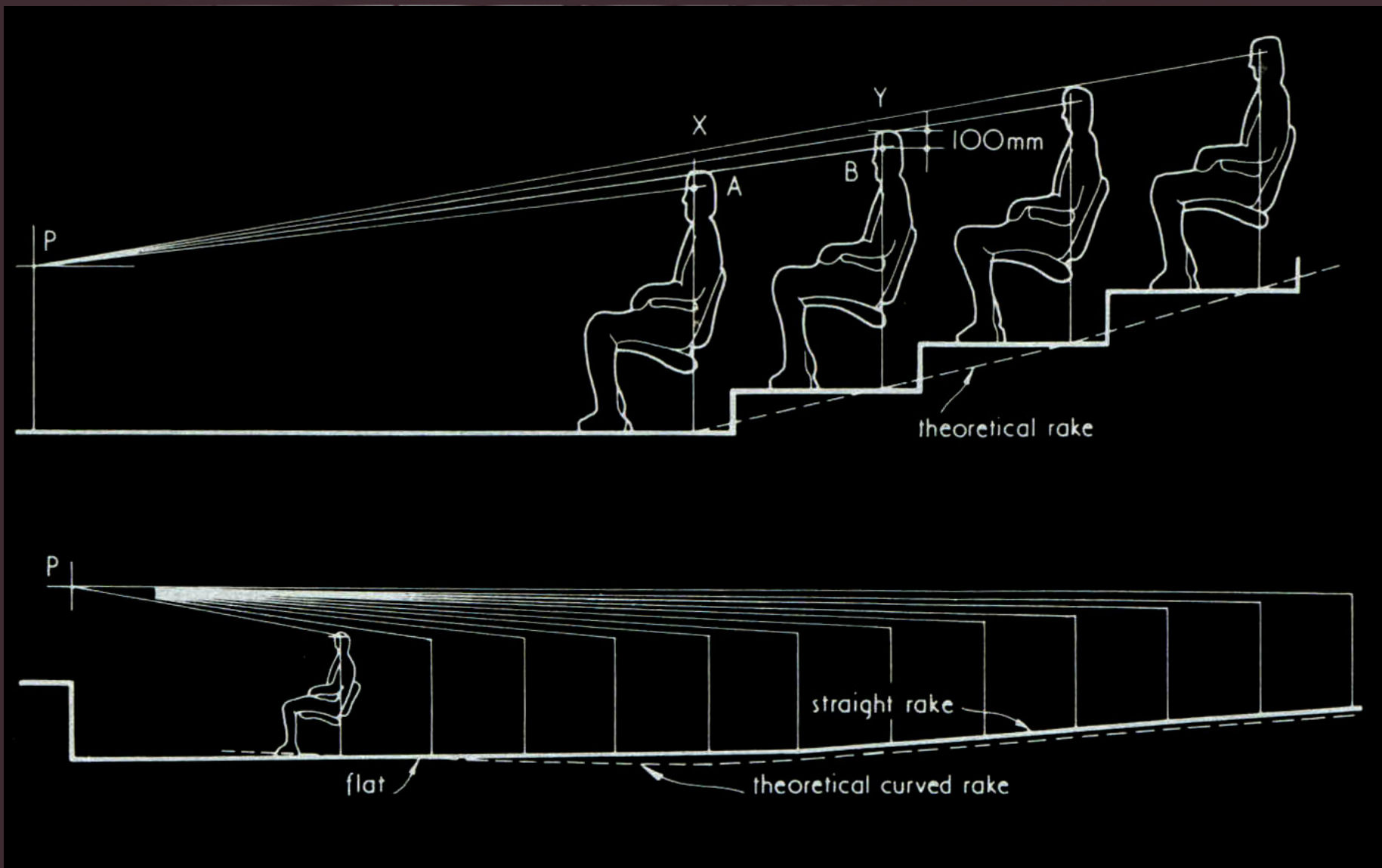
COMPLETED PROJECT



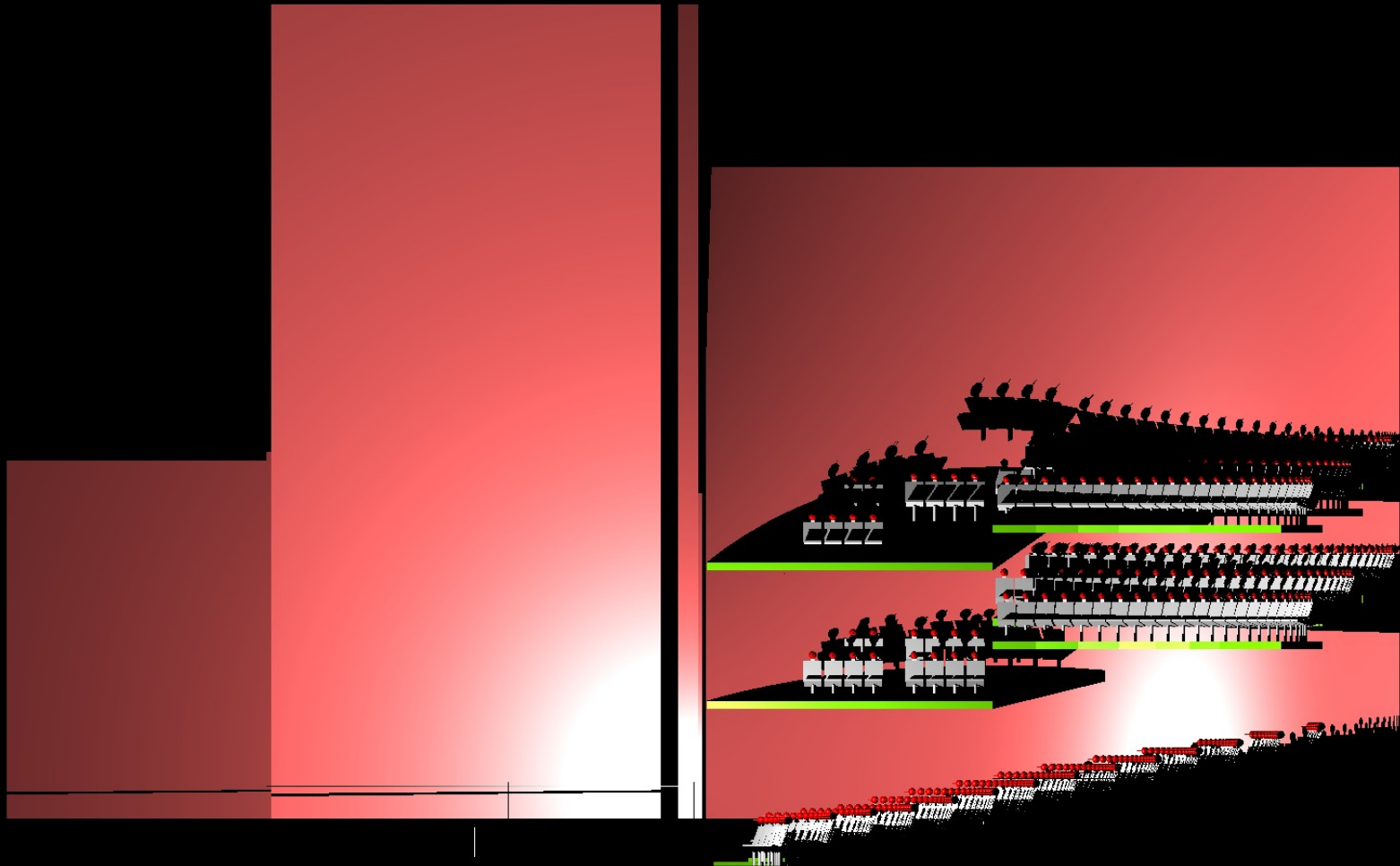
THEATRE DESIGN



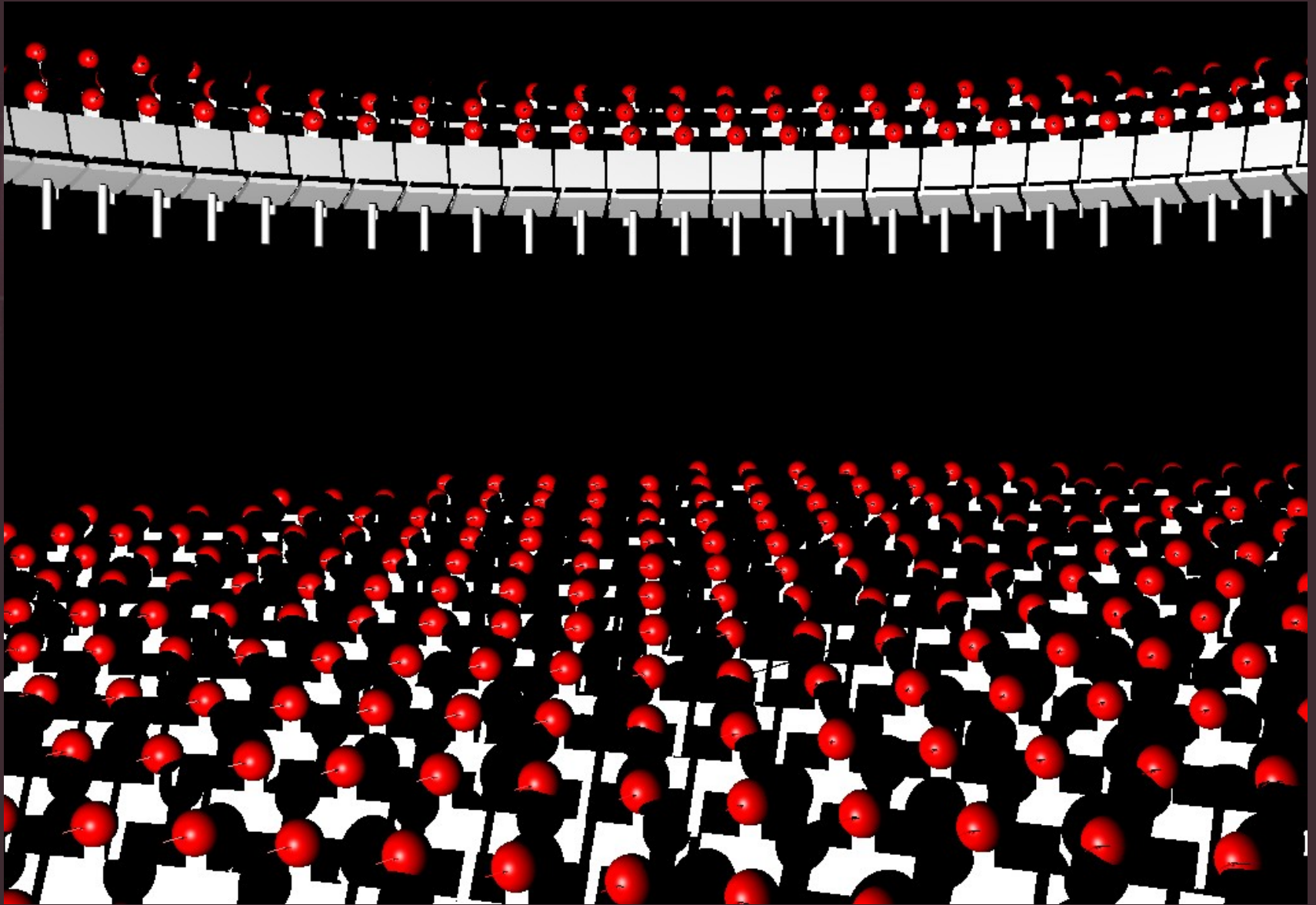
THEORETICAL SIGHTLINE ANALYSIS (METRIC HANDBOOK)



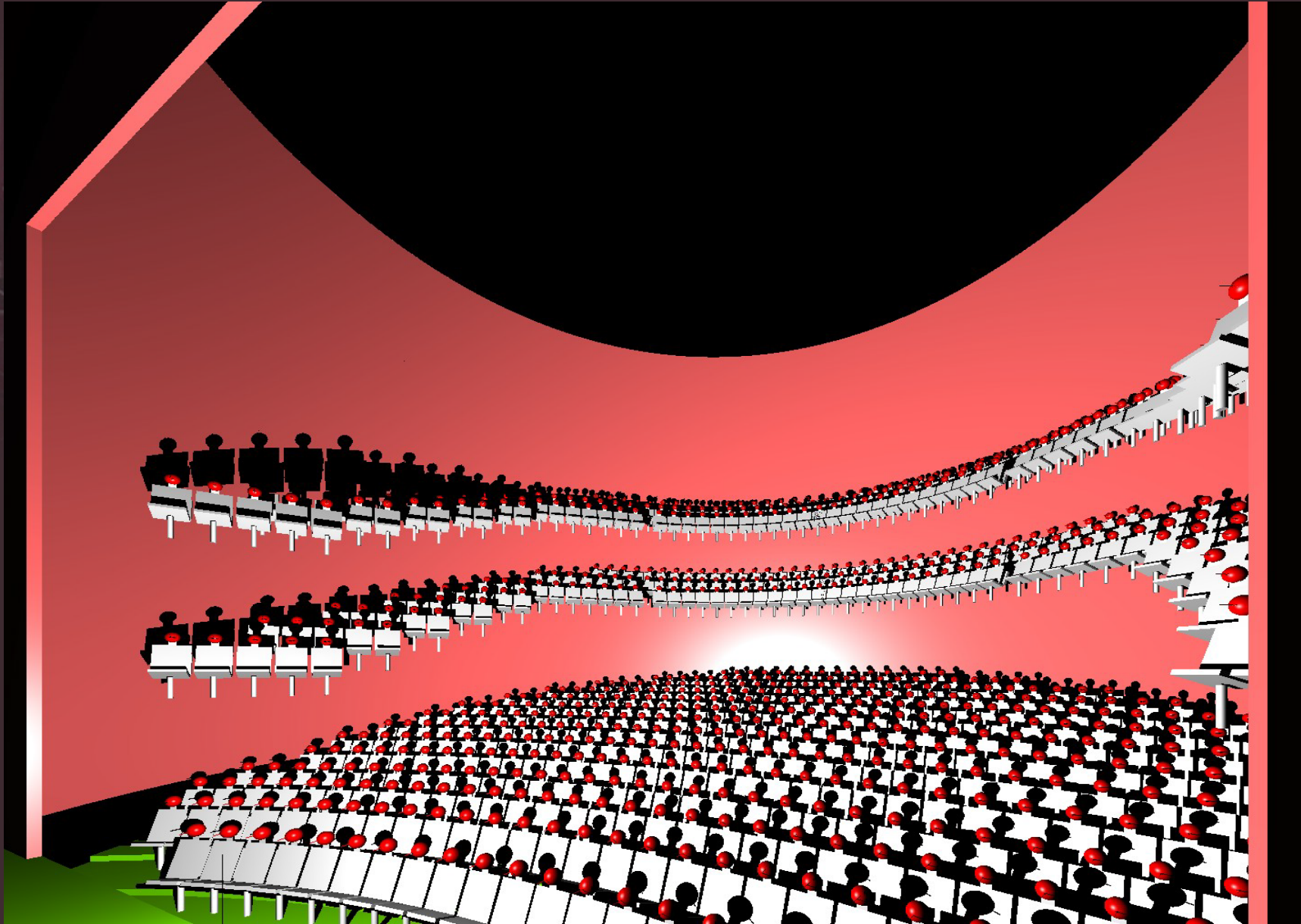
RADIATION SIGHTLINE ANALYSIS



RADIATION SIGHTLINE ANALYSIS



RADIATION SIGHTLINE ANALYSIS



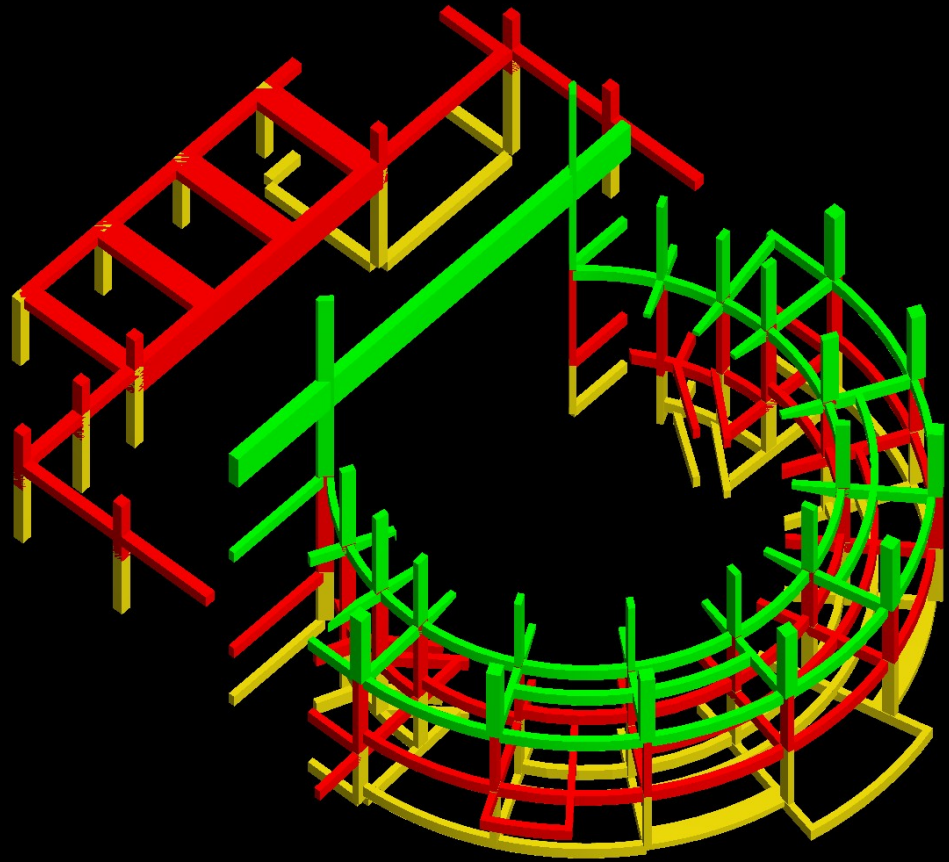
THEATRE



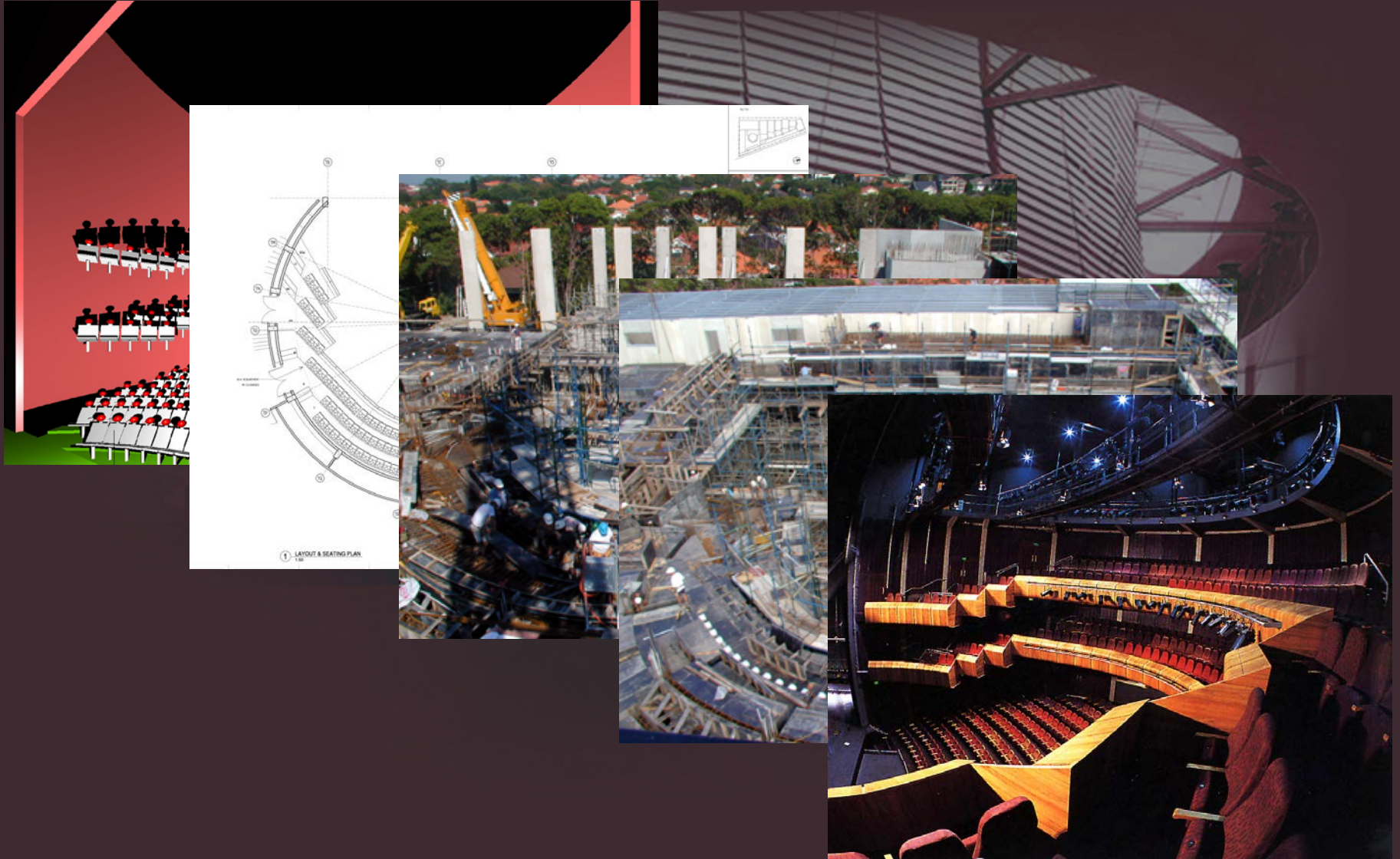
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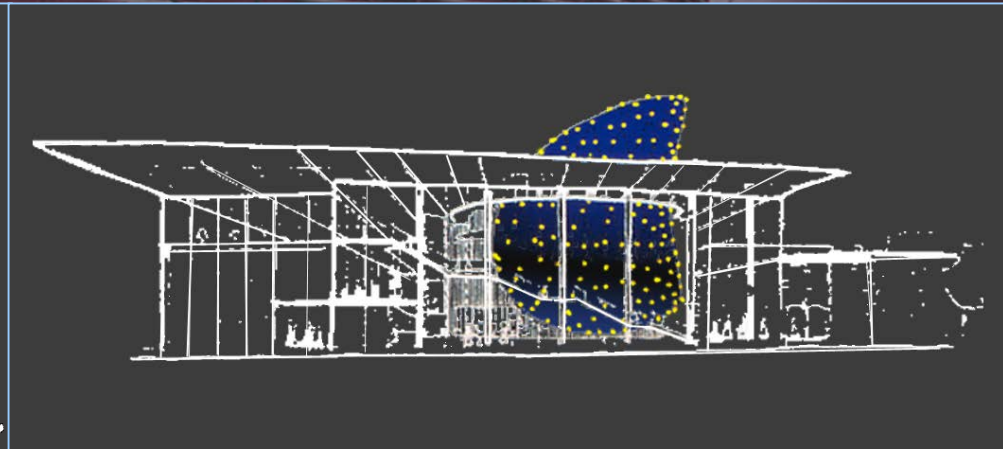
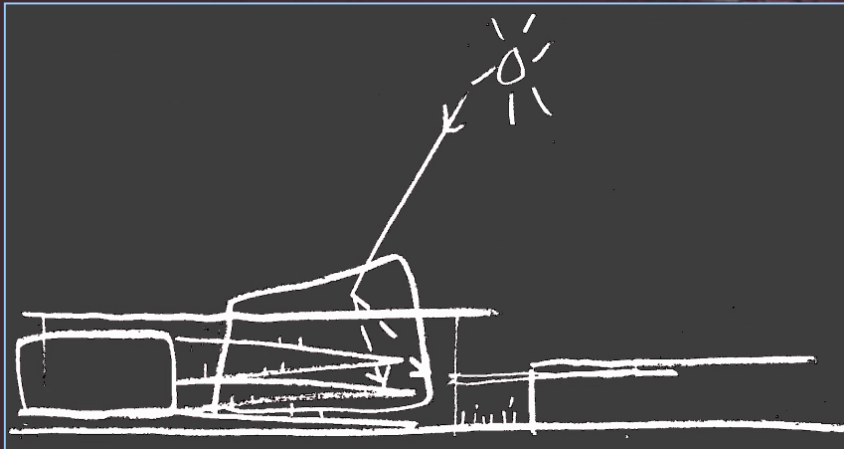
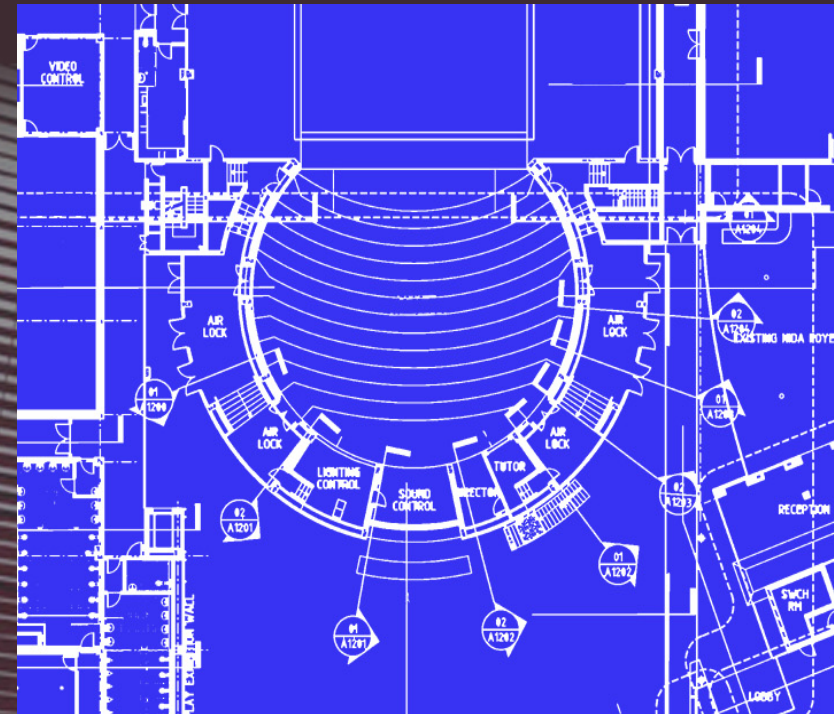
STRUCTURAL ANALYSIS



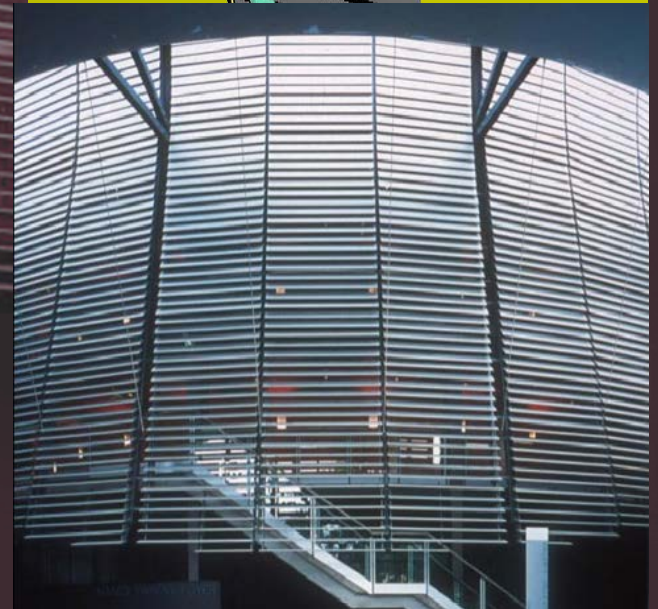
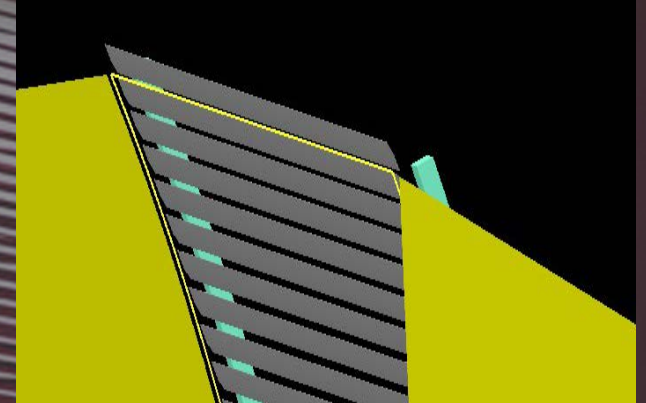
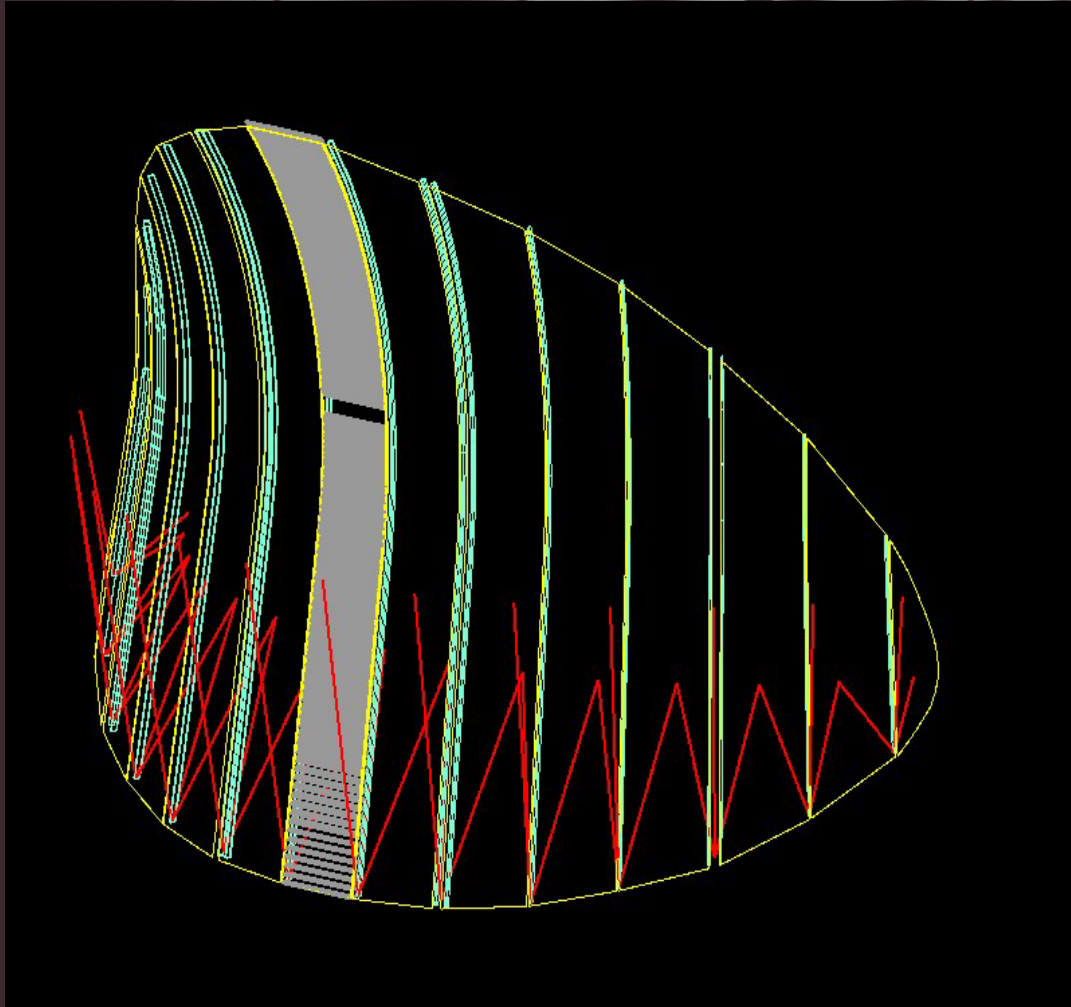
DESIGN – DOCUMENTATION – CONSTRUCTION

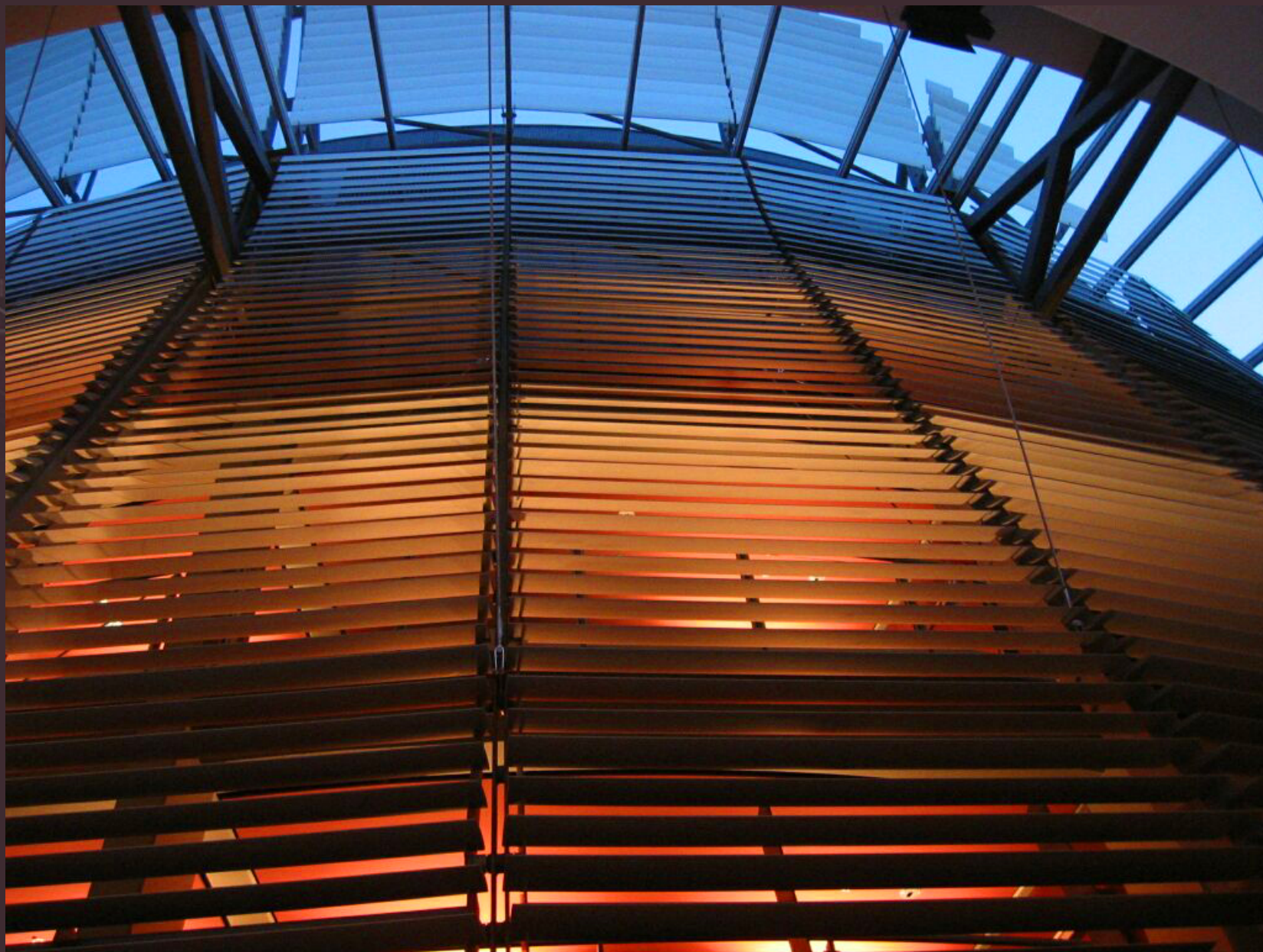


VEIL – SCIENTIFICALLY DERIVED CURVATURE



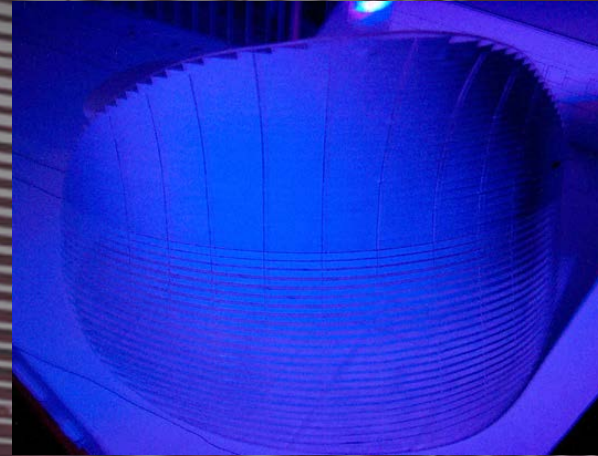
VEIL – COMPLICATED GEOMETRY







NIGHT SCENE







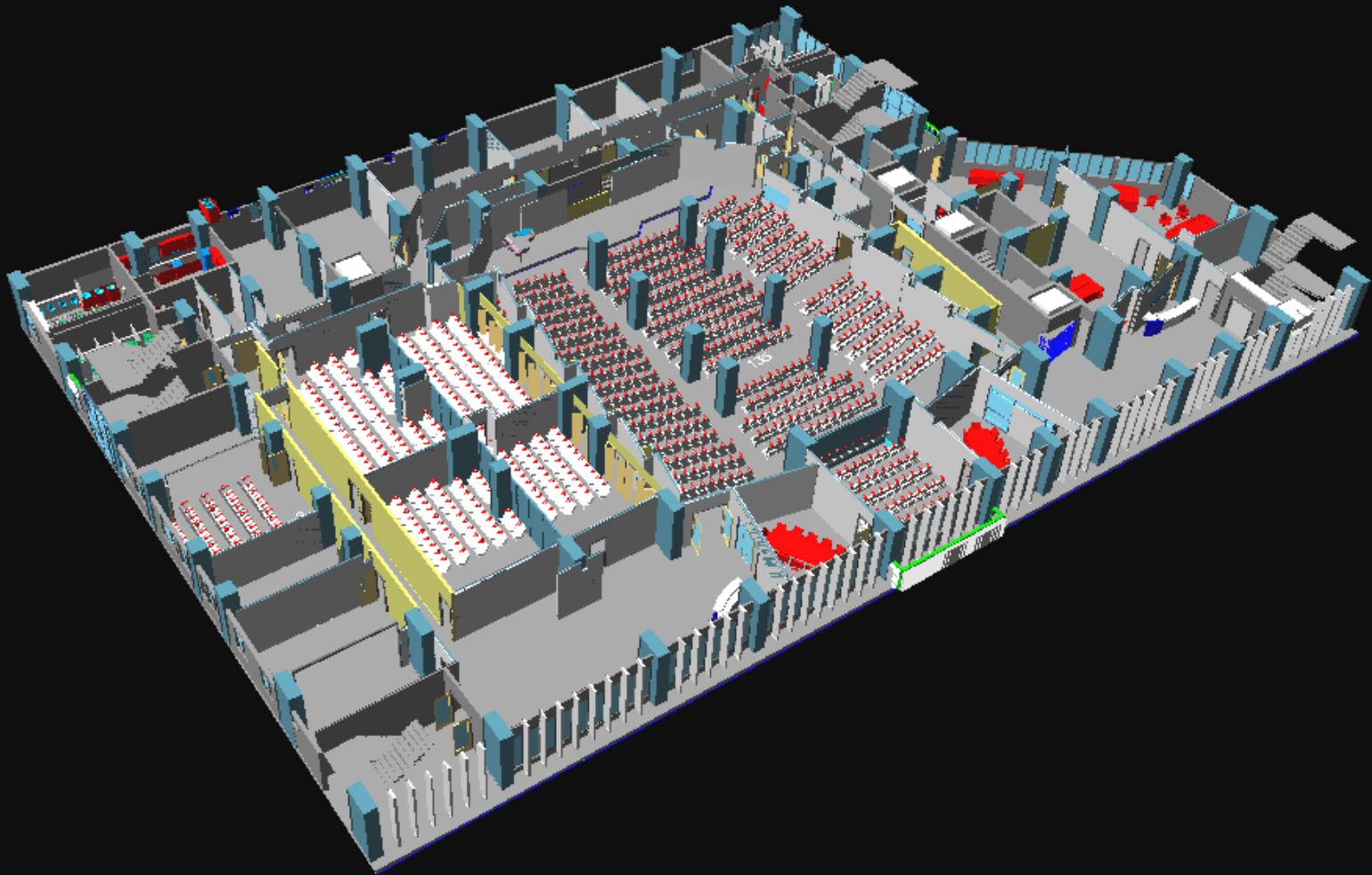
NATIONAL INSTITUTE OF DRAMATIC ARTS (NIDA)

RAIA (NSW) Sulman Award 2002

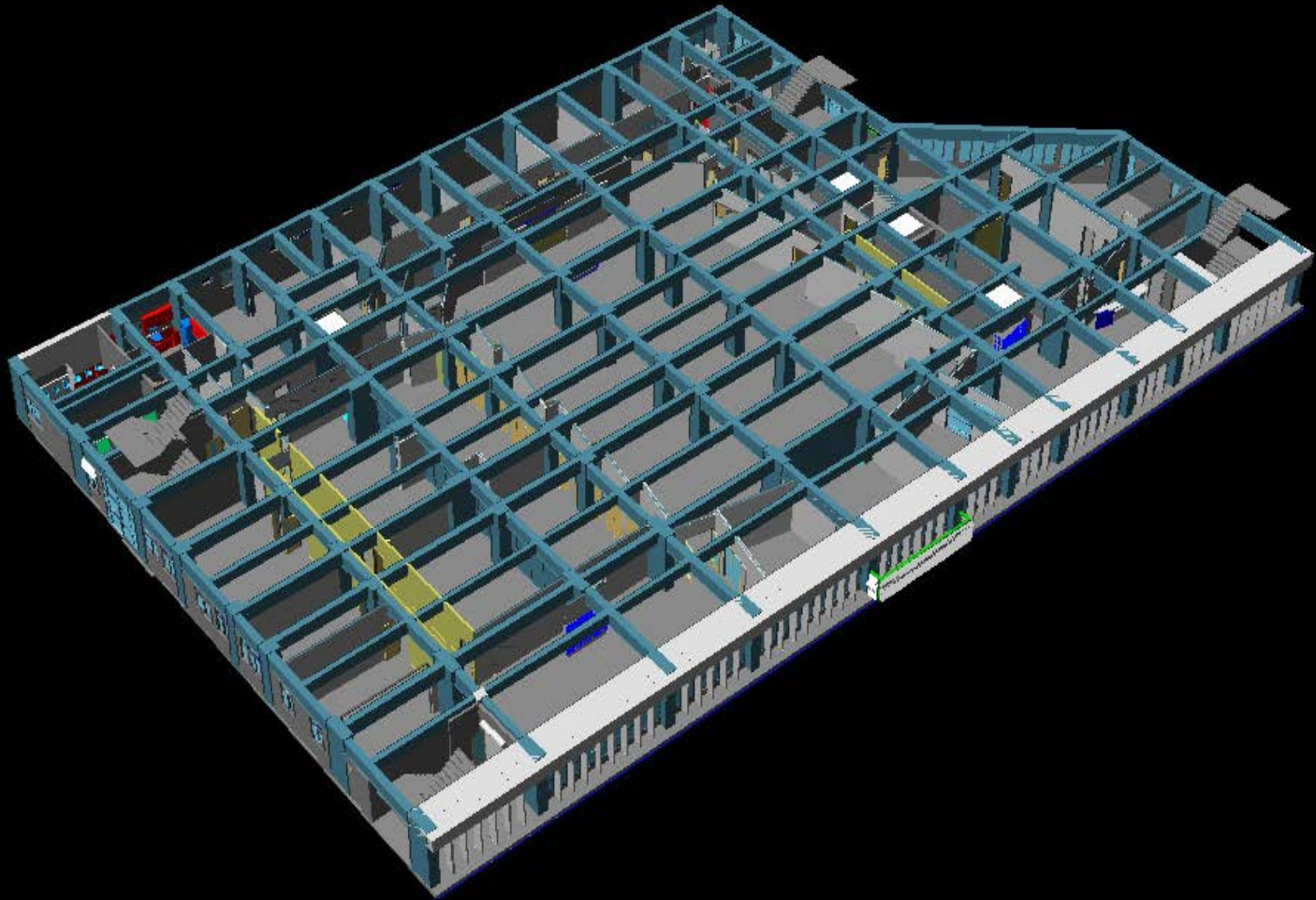


EVANGELICAL FREE CHURCH OF CHINA

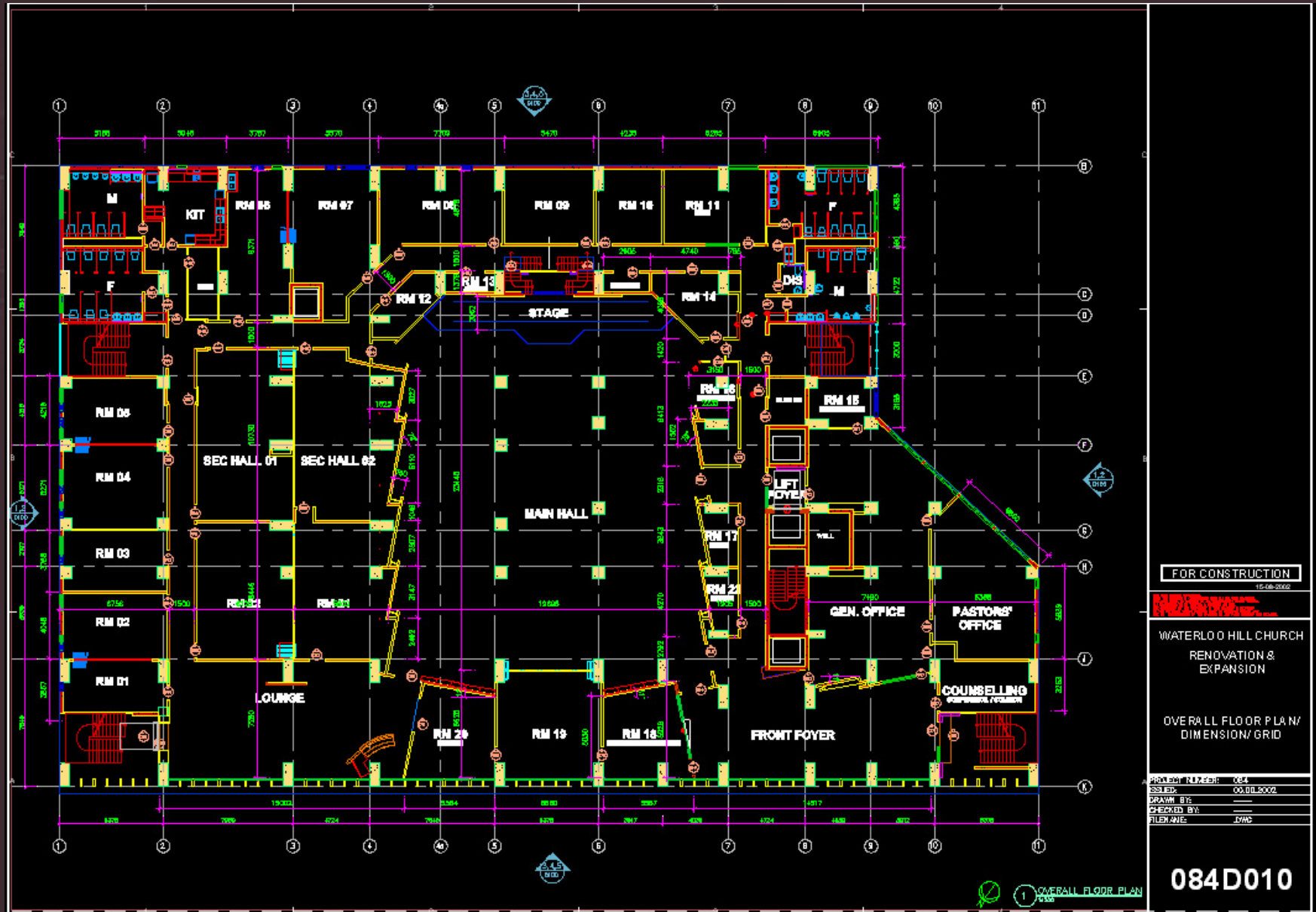
WATERLOO HILL CHURCH



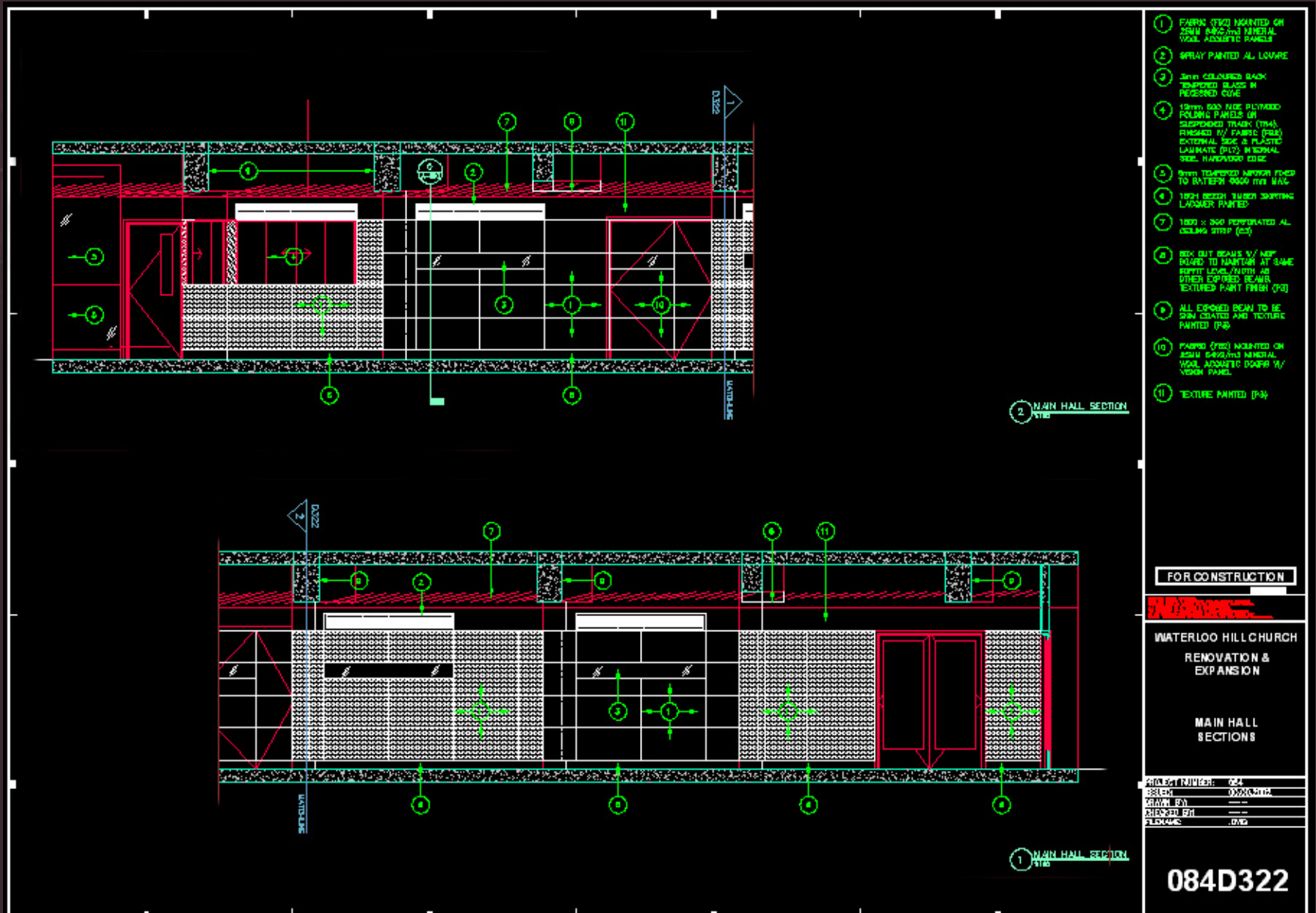
STRUCTURAL CONSTRAINTS



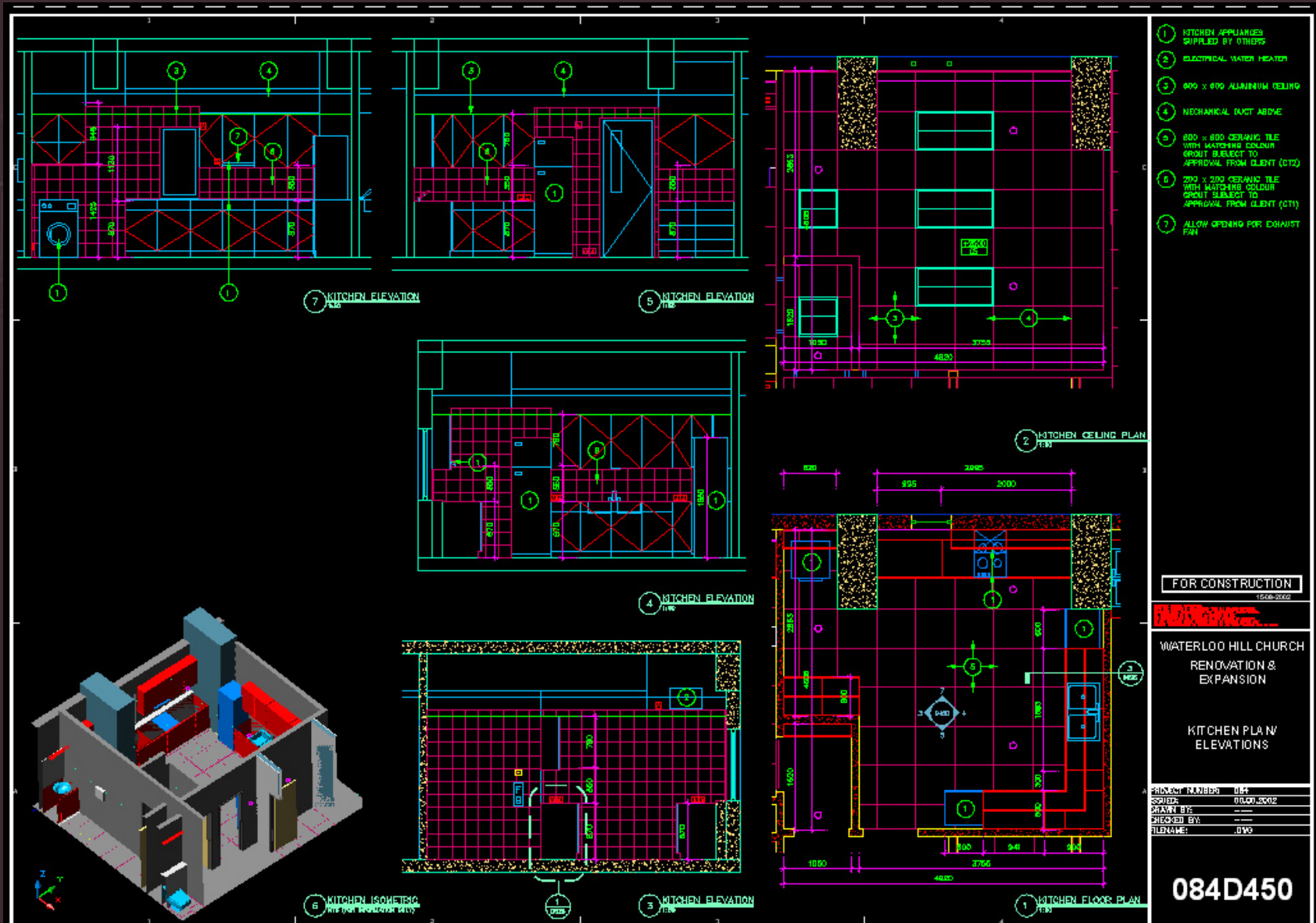
SELF GENERATED DOCUMENTATION – SIMPLE, VISUAL



SELF GENERATED DOCUMENTATION – SIMPLE, VISUAL



SELF GENERATED DOCUMENTATION – SIMPLE, VISUAL



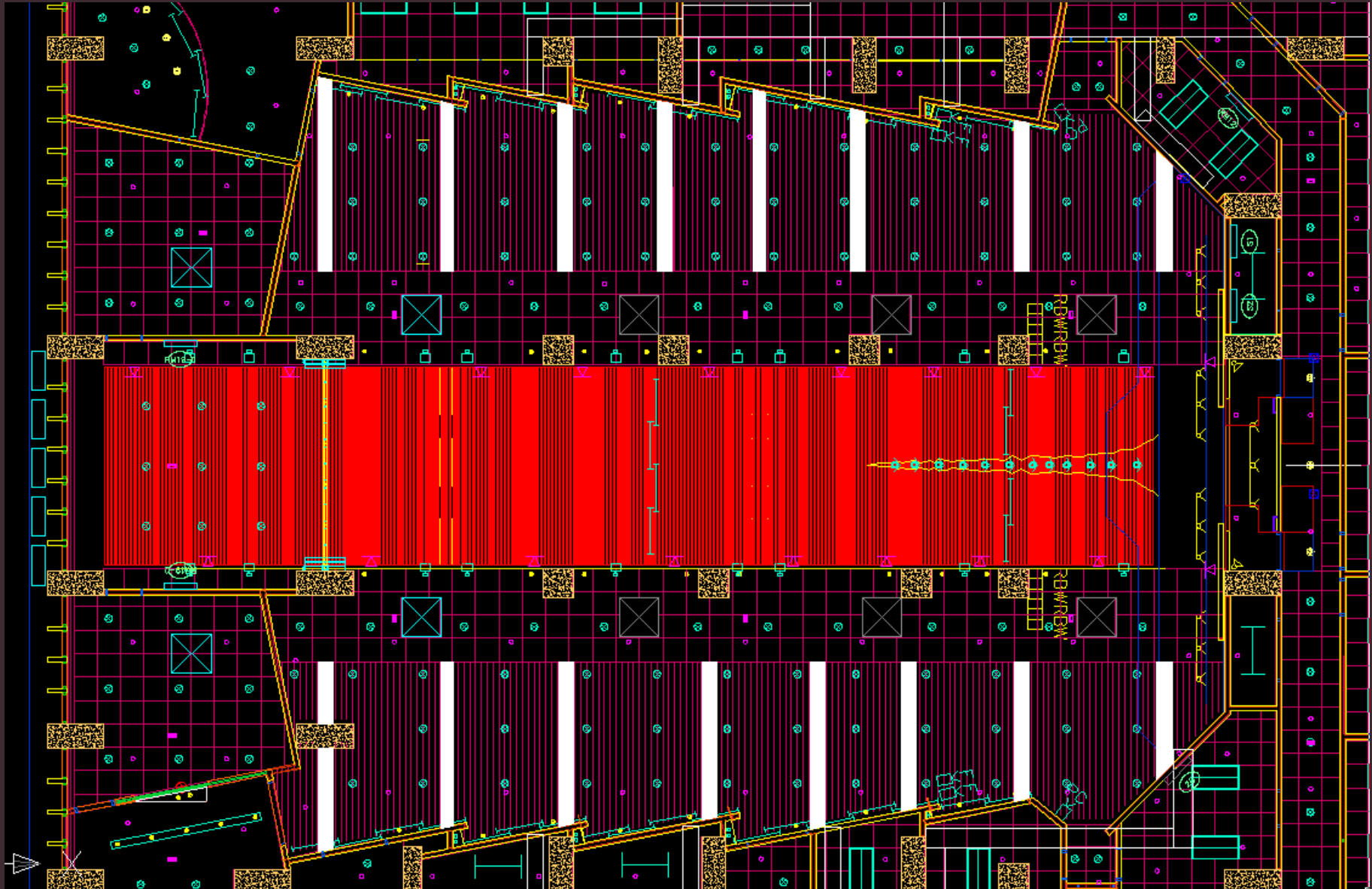




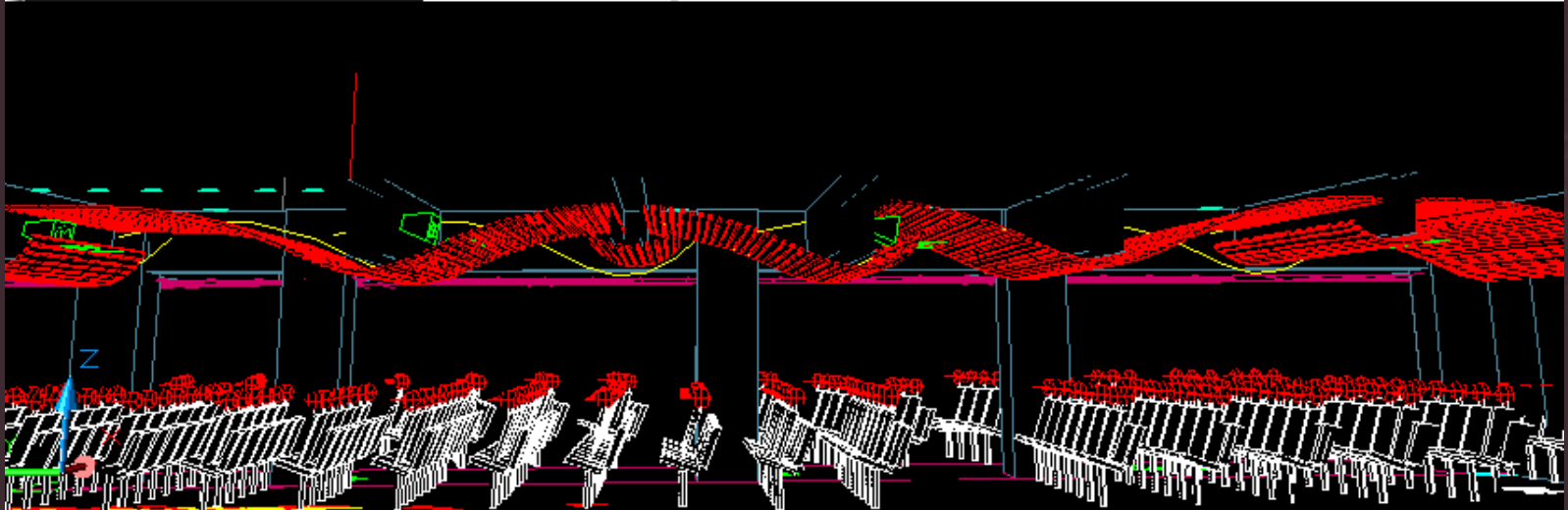
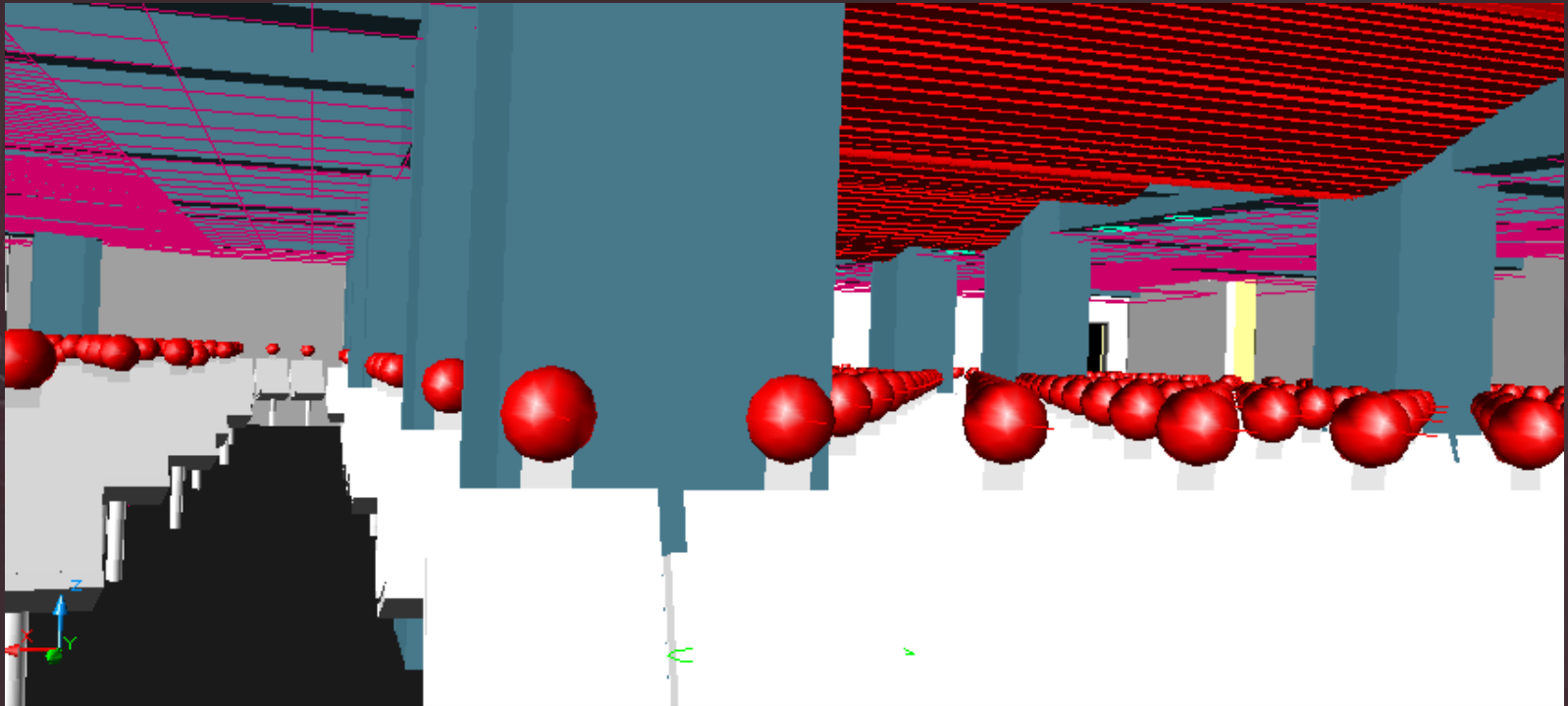




MAIN HALL DESIGN



MAIN HALL DESIGN







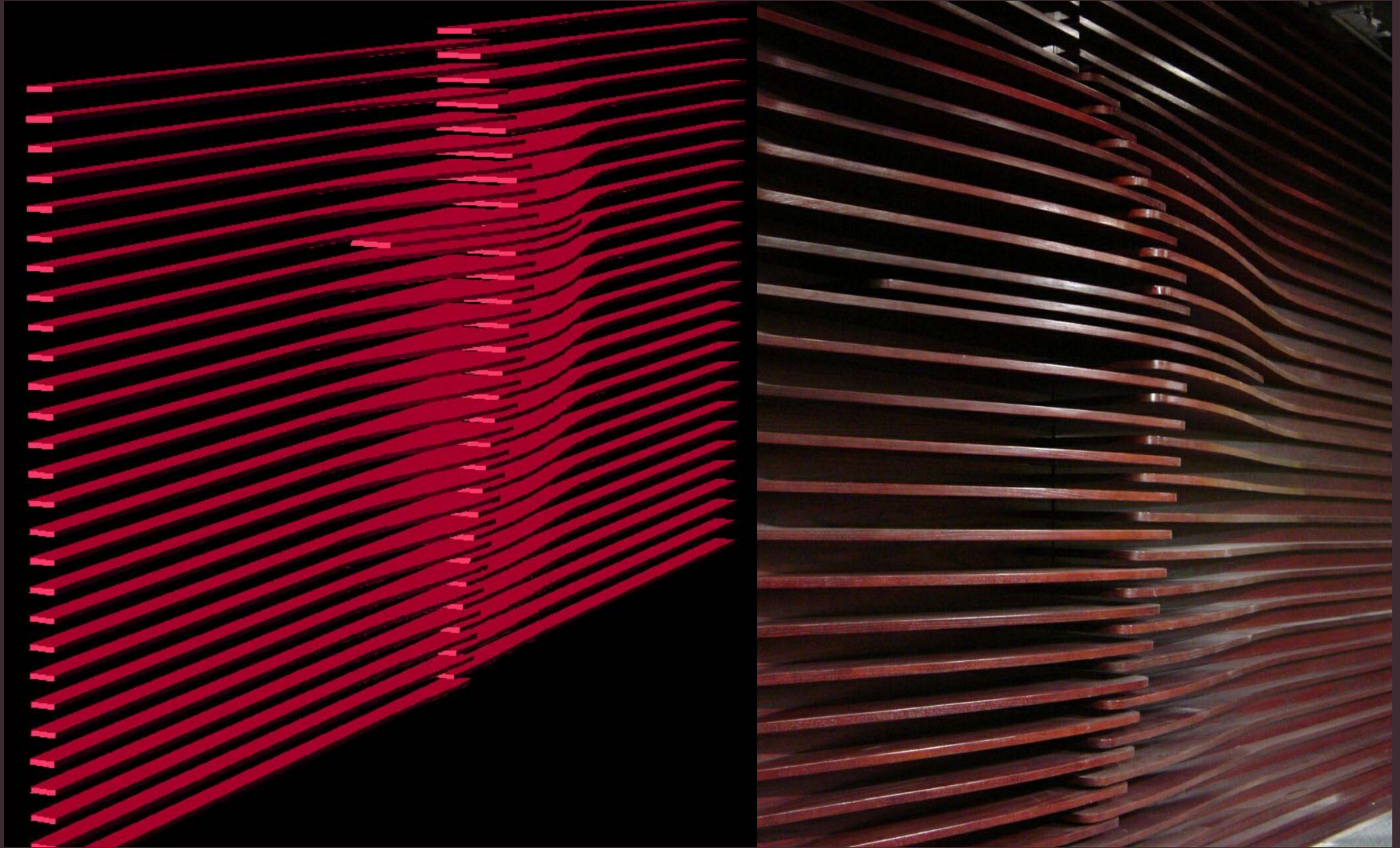




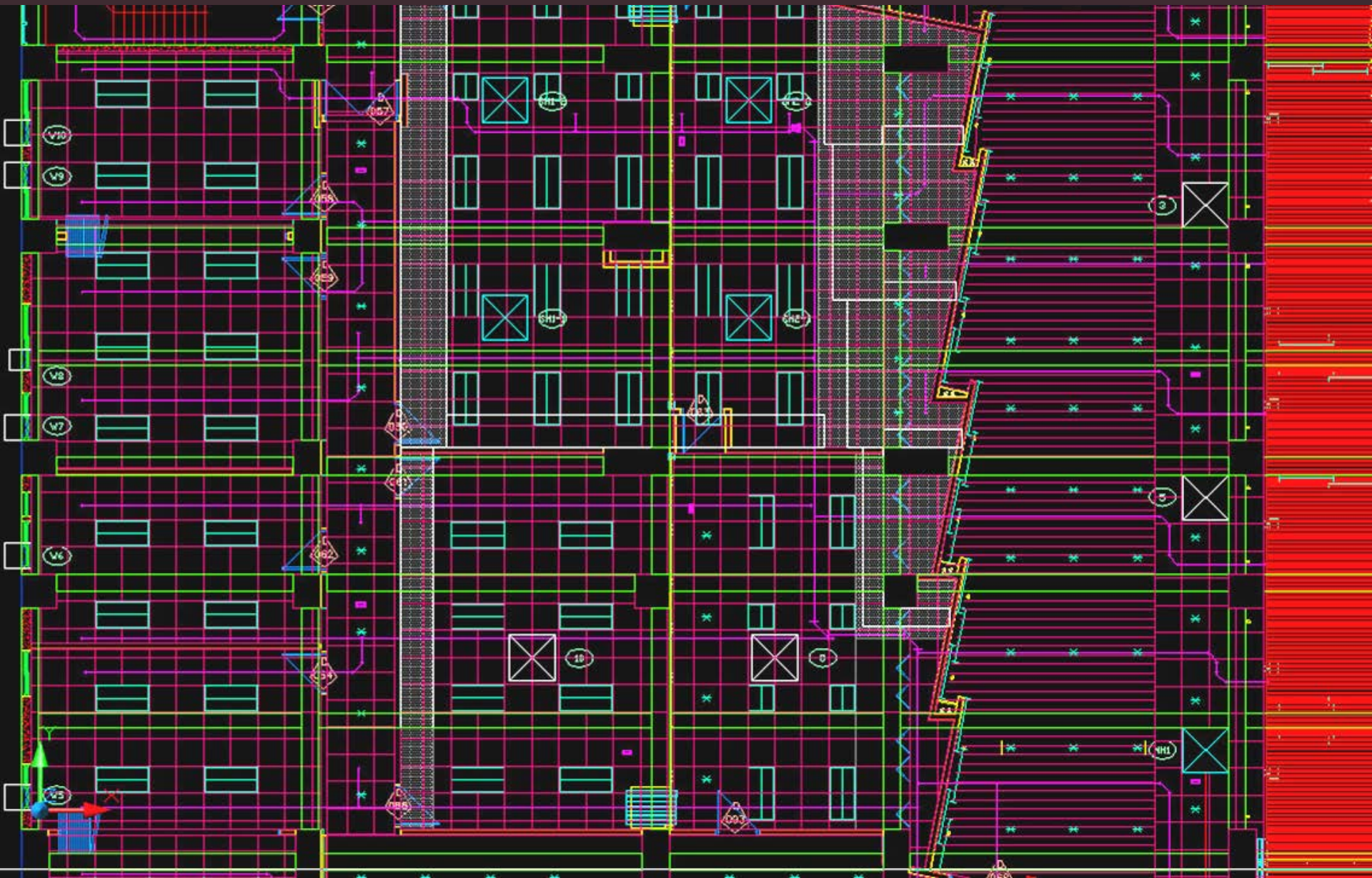
WYSIWYG – What You See Is What You Get



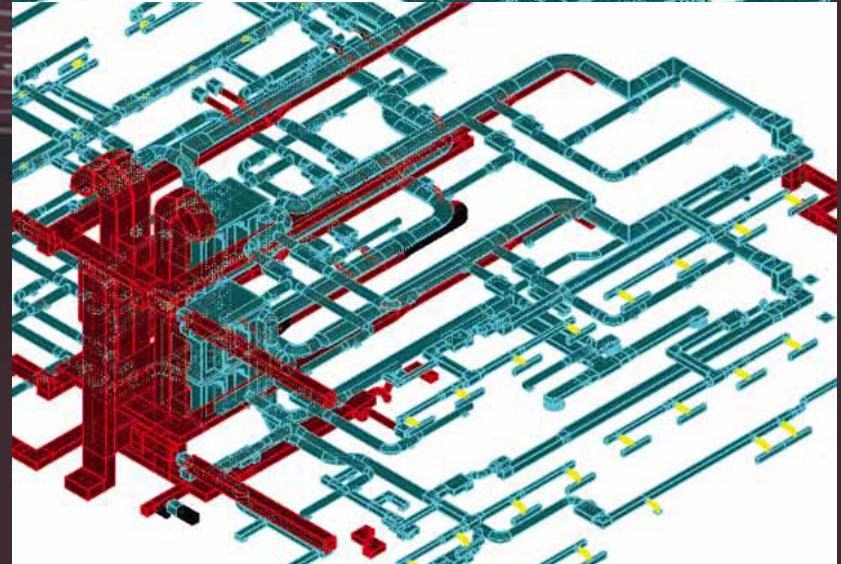
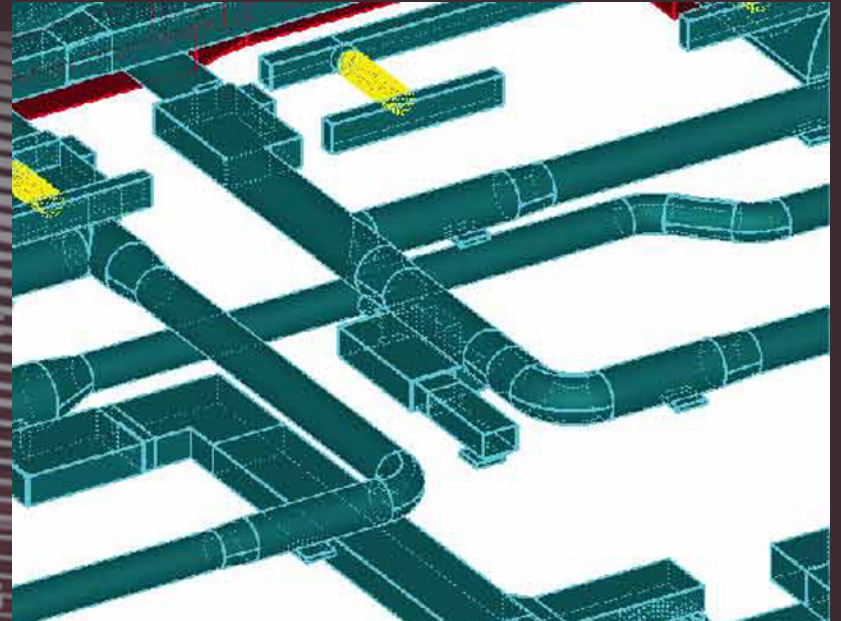
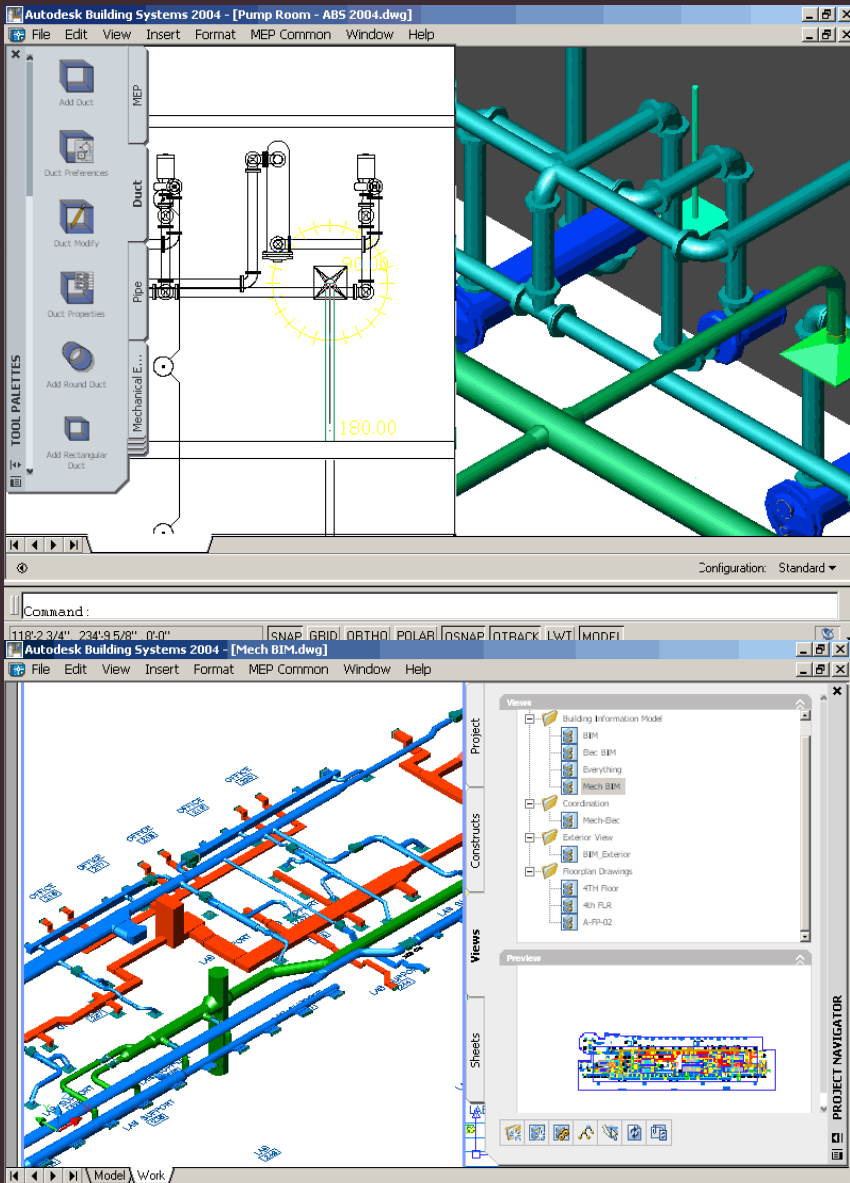
WYSIWYG – What You See Is What You Get



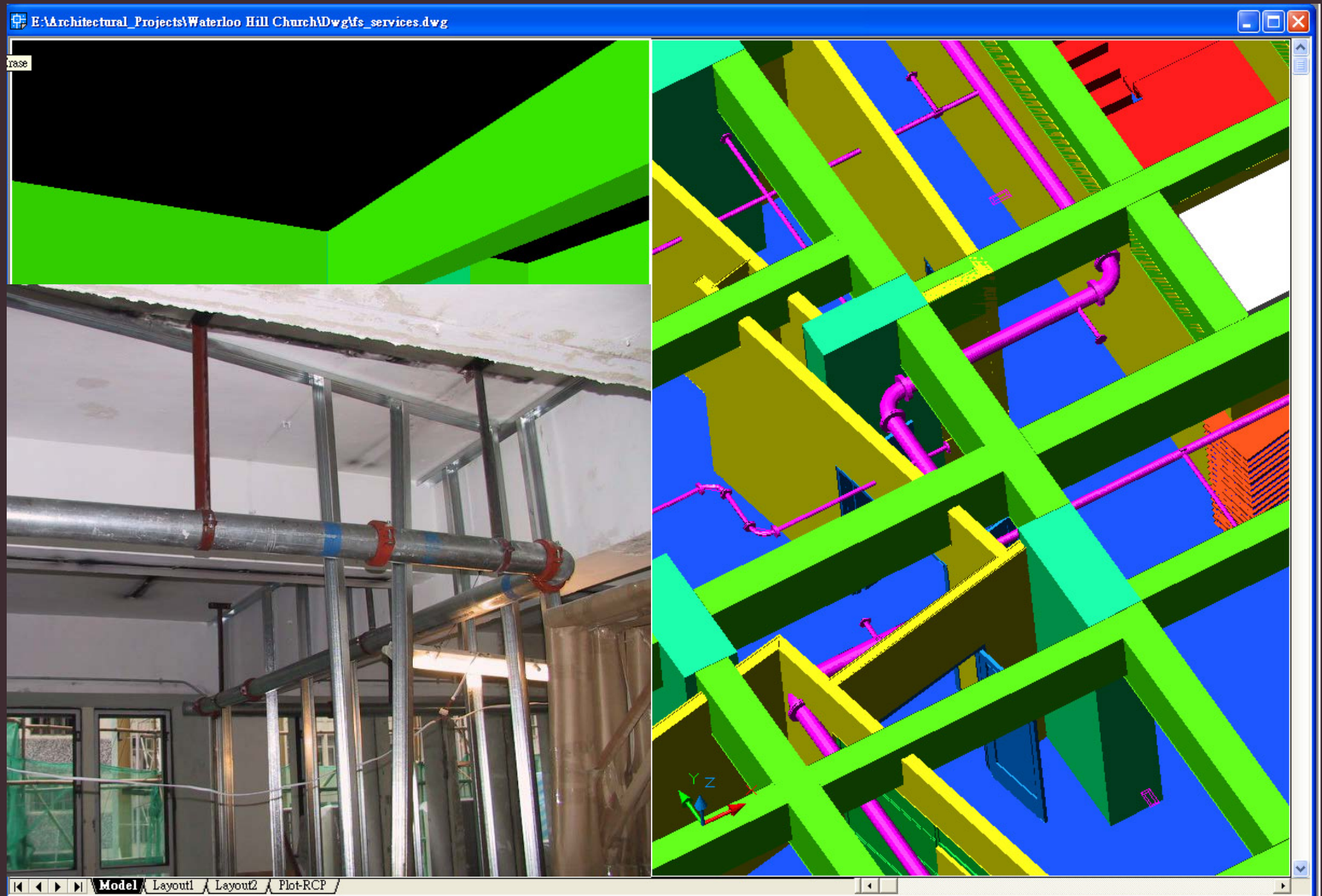
CO-ORDINATION OF SERVICES



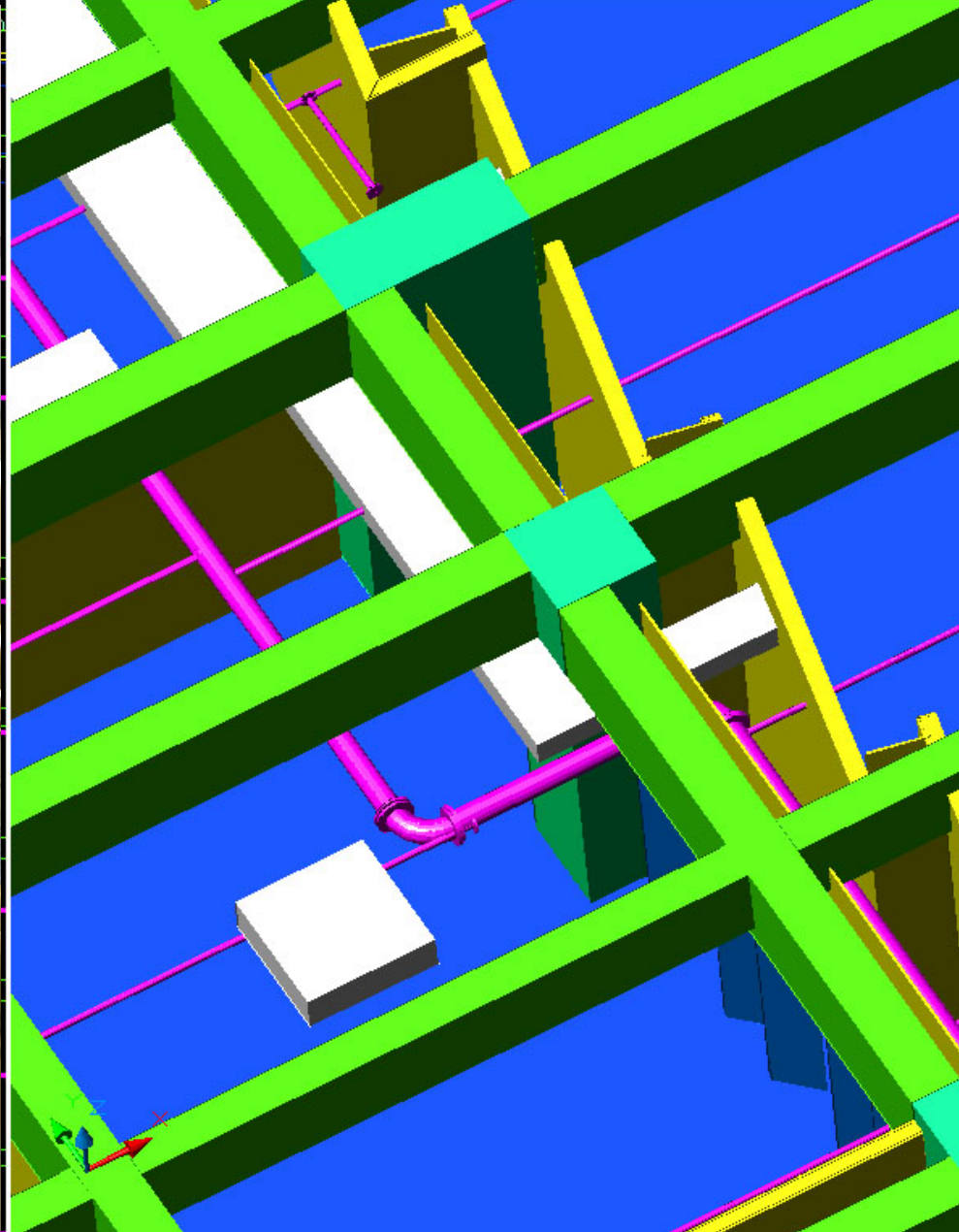
LATERAL PRODUCTS



CO-ORDINATION OF SERVICES



CO-ORDINATION OF SERVICES



SCHEDULES

Autodesk Architectural Desktop 3.3 - [E:\Architectural_Projects\Waterloo Hill Church\dwg\plan_1.00.dwg]

Edit View Insert Format Tools Draw Dimension Modify Image Concept Design Documentation Desktop Window Help

ByLayer ByLayer 0.05 mm

RM 23 STORE1

D 016

D 015

D 014

MARK	SIZE			MATL	FINISHES			LOUVER		MATL	EL	HEAD
	WD	HGT	THK		PULL	PUSH	GLAZING	WD	HGT			
?	1600	2260	25.4	---	?	?	?	0	0	GMS	F	?
001	PR 750	2200	6	GL	---	---	---	0	0	---	K	---
002	750	2100	40	HC	PL	PL	VP	0	0	TM	A	H1
003	750	2100	40	HC	PL	PL	VP	0	0	TM	A	H1
011	750	2100	40	HC	PL	PL	VP	0	0	TM	A	H1
012	750	2100	40	HC	PL	PL	---	0	0	TM	B	H1
013	900	2450	8	GL	---	---	---	0	0	SS	I	H8
014	PR 800	2100	40	GL	---	---	---	0	0	TM	D	H8
015	PR 800	2100	40	GL	---	---	---	0	0	TM	D	H8
016	750	2100	40	HC	PL	PL	---	0	0	TM	B	H1
017	750	2100	40	HC	PL	PL	---	0	0	TM	B	H1
018	600(1000)	2150	40	HC	PL	FB	VP	0	0	TM	L	H9
019	850	2450	40	HC	PL	PL	---	0	0	SS	B	H3
020	1600	2250	25.4	---	---	---	---	0	0	GMS	F	---
022	850(930)	2100	40	HC								
023	850	2100	40	SC								
024	PR 900	2100	40	SC								
025	850	2100	40	HC								
026	340(1240)	2100	40	HC								
027	750	2100	40	HC								
028	750	2100	40	HC								
029	750	2100	40	HC								
030	750	2100	40	HC								
031	750	2100	40	HC								
032	850	2100	40	HC								
033	850	2100	40	HC								
034	PR 750	2100	40	HC								
035	850	2100	40	HC								
036	850	2100	40	HC								
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039	850	2100	40	HC								

Model Space Mass-Group Work-3D Work-FLR Work-SEC Work-RCP Plot-FLR Plot-SEC Plot-RCP Template-C

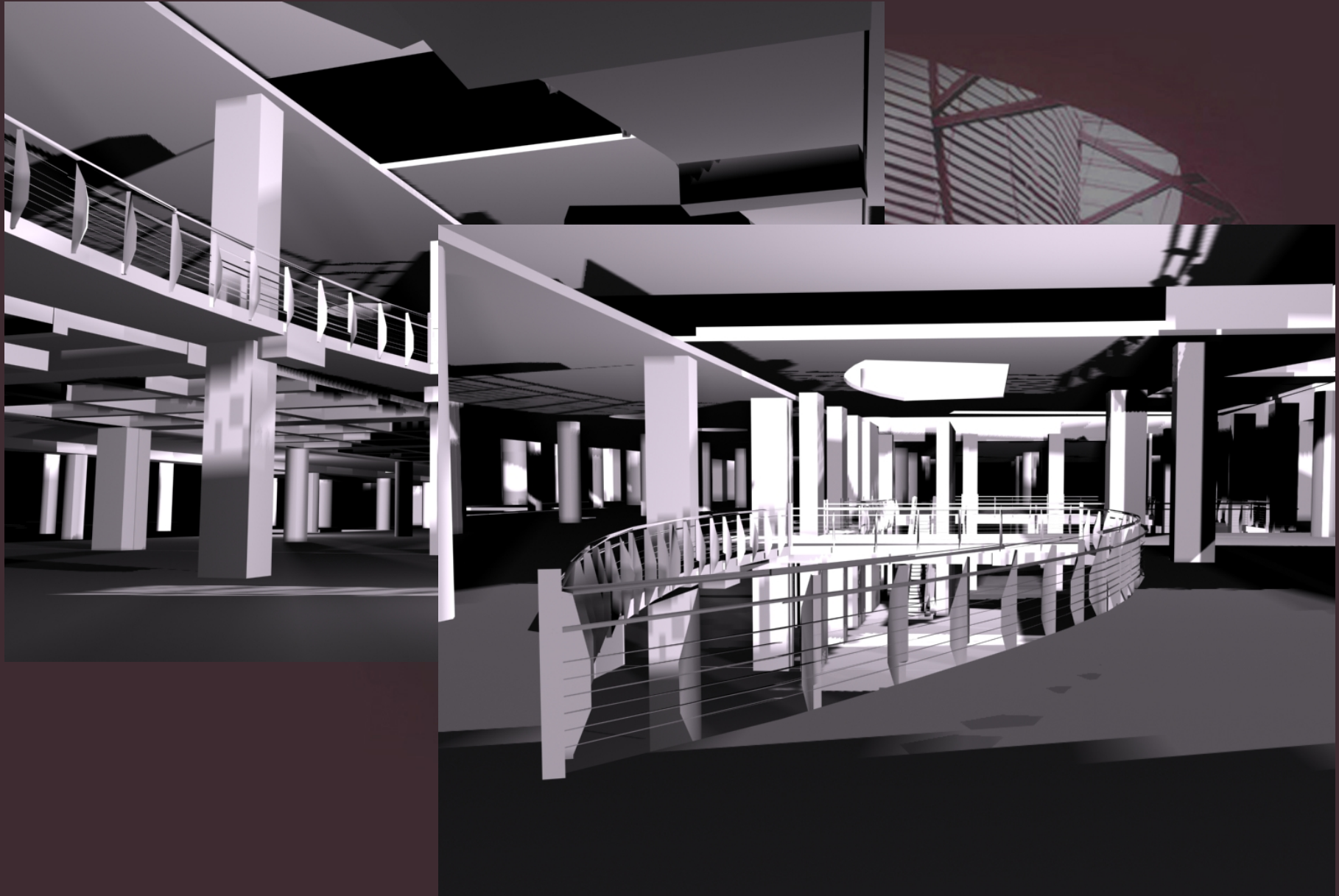
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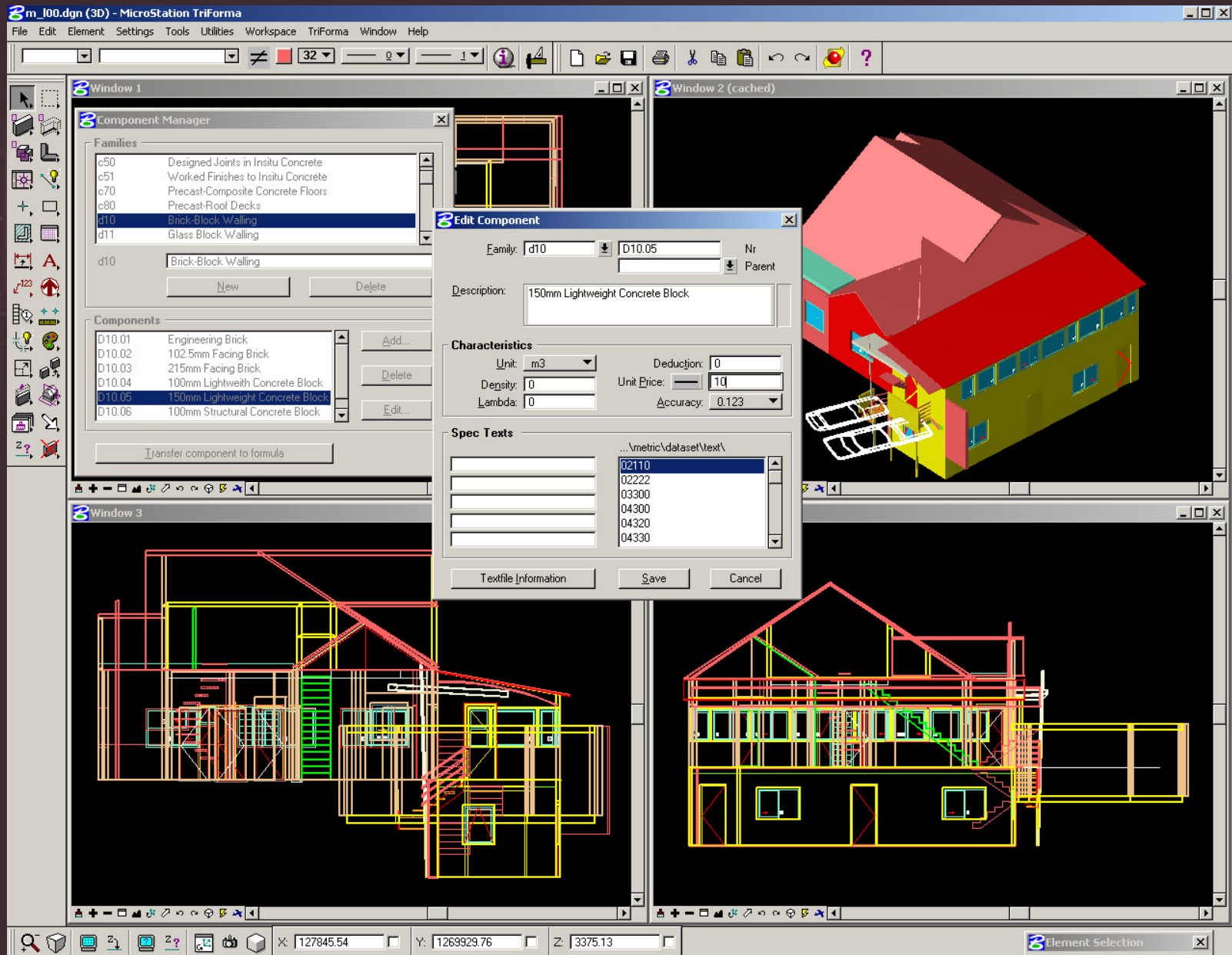
SNAP GRID ORTHO POLAR OSNAP OTRACK LWT MODEL



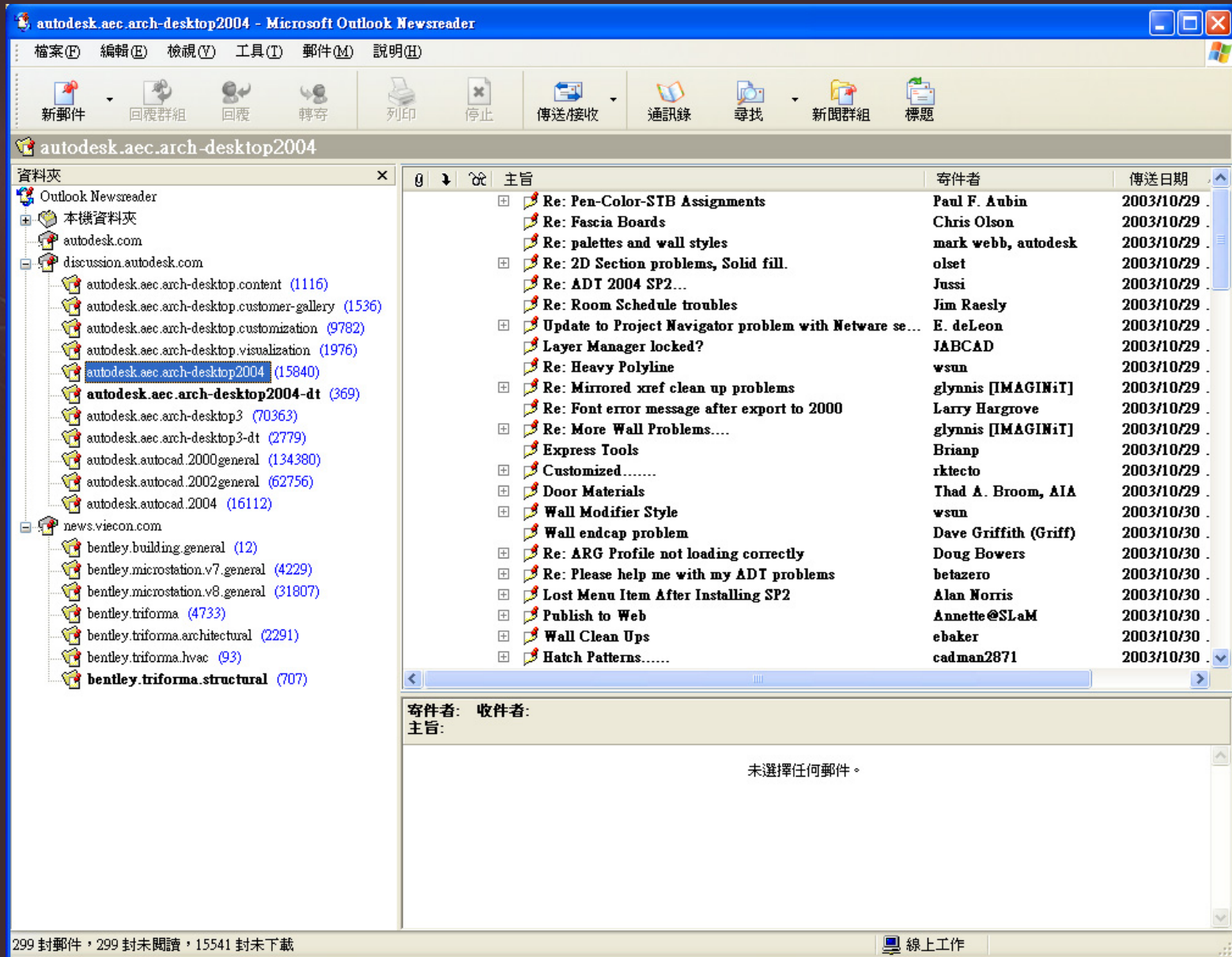
QUICK RENDERED EXAMPLES FOR PRESENTATION



COST



WE ARE NOT ALONE!!!



DEMONSTRATION



3D MODELLING IN BUILDING DESIGN IS.....

- Multiple Efficiency (Double productivity – easy!)
- WYSIWYG
- More Time in Design, Not Drafting
- Coherence in Information
- Collaboration among Disciplines
- Resolves Problem in Early Phase

.... the way to go!!!

OBSTACLES in HONG KONG PRACTICE

- CAD = Computer Aided **DESIGN**,
NOT Computer Aided Drafting
- Heavier Time Investment upfront vs Overall efficiency
- Resistance of downstream Disciplines
- Powerful Software vs Customized Industry Needs

.... End...!!!

