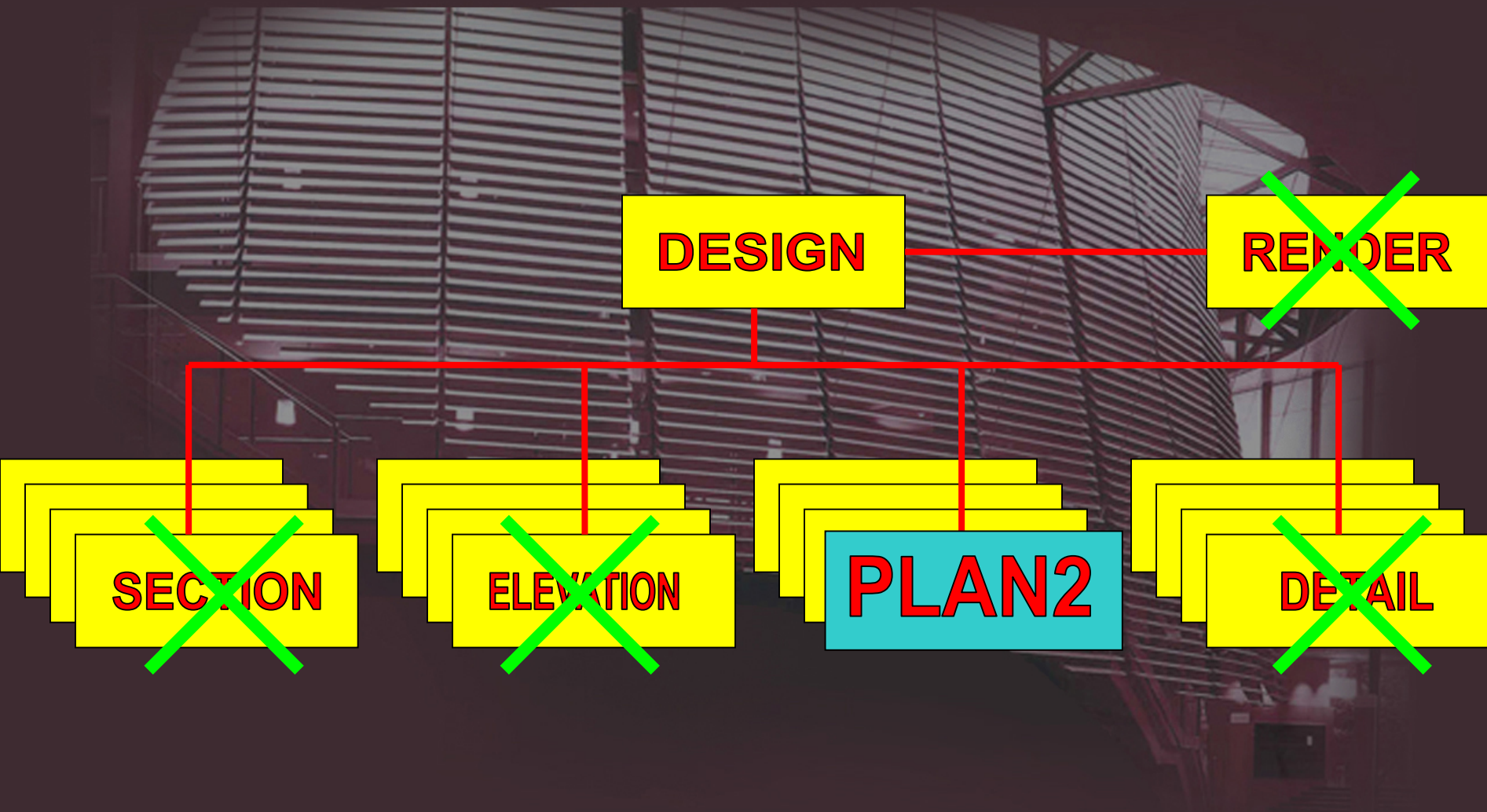


The background image shows a modern architectural structure. It features a large, curved facade composed of numerous horizontal, metallic-looking slats or ribs that create a textured, almost sculptural effect. To the right, a portion of the building is enclosed in glass, revealing an interior space with structural elements. The overall color palette is dominated by the metallic tones of the facade and the dark, muted colors of the surrounding environment.

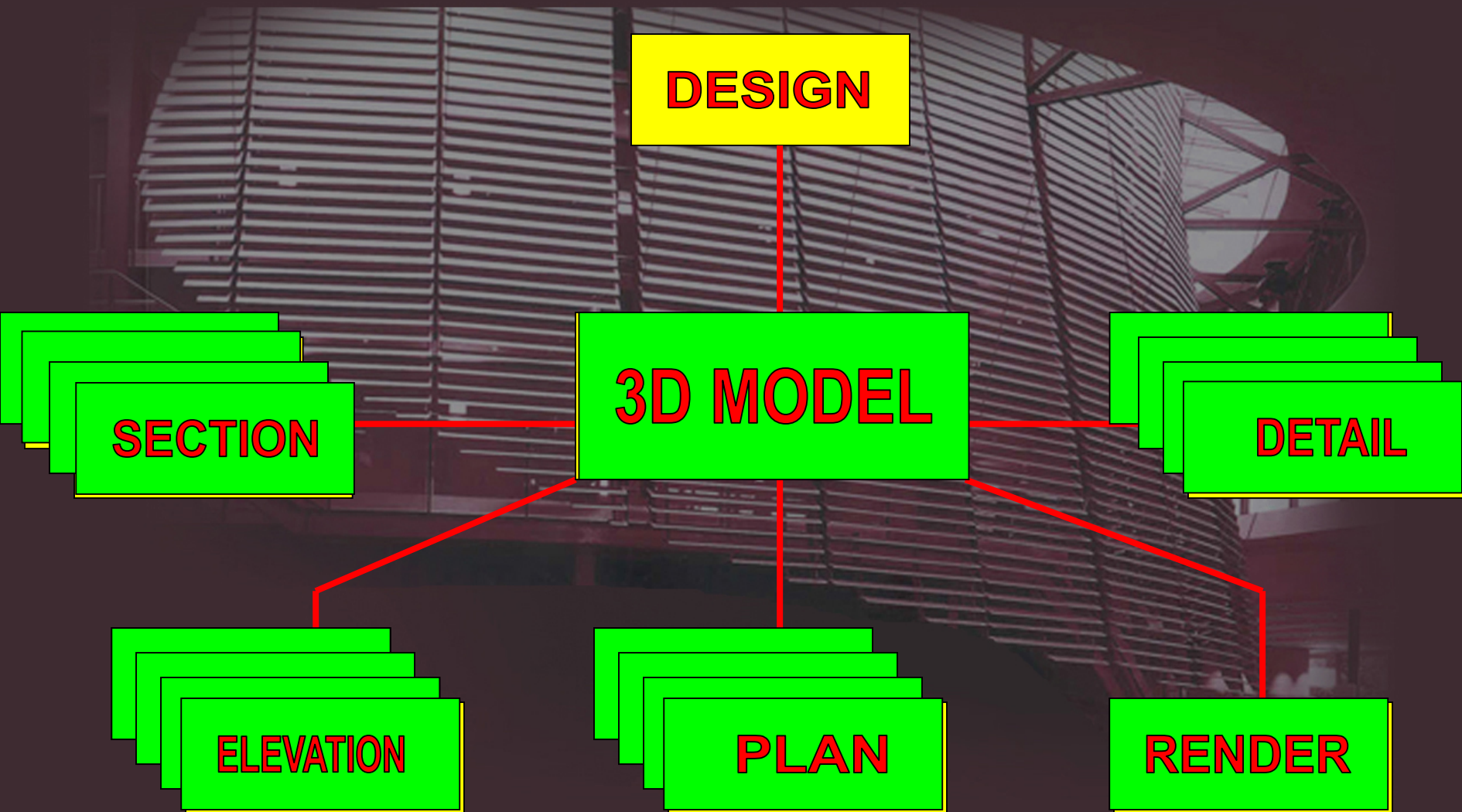
Building Information Modeling

An Architect's Experience of how the Efficiency, Accuracy and Productivity in Building Design and Building Services are integrated

EXISTING DRAWING PRACTICE

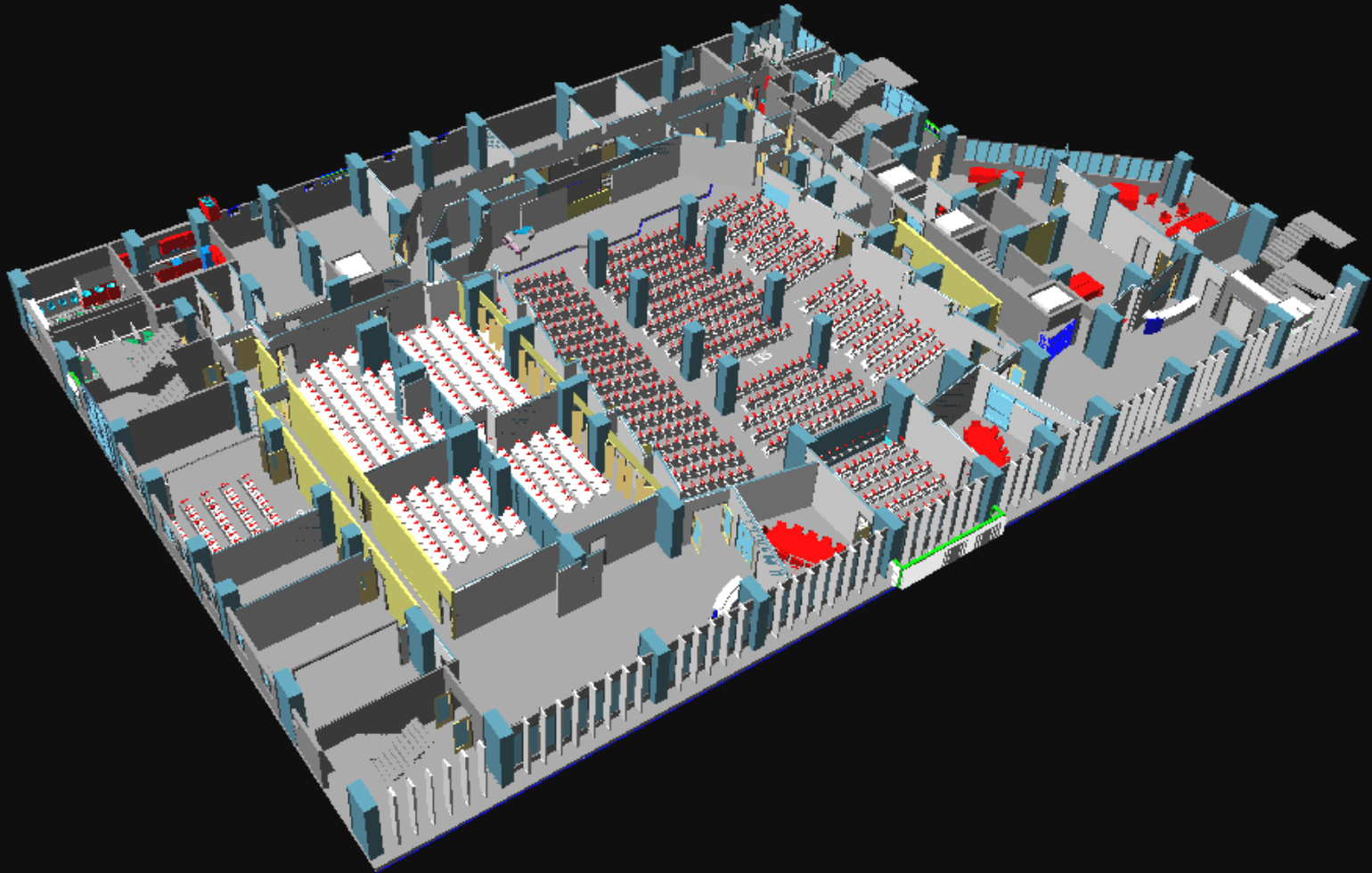


3D DRAWING CONCEPT

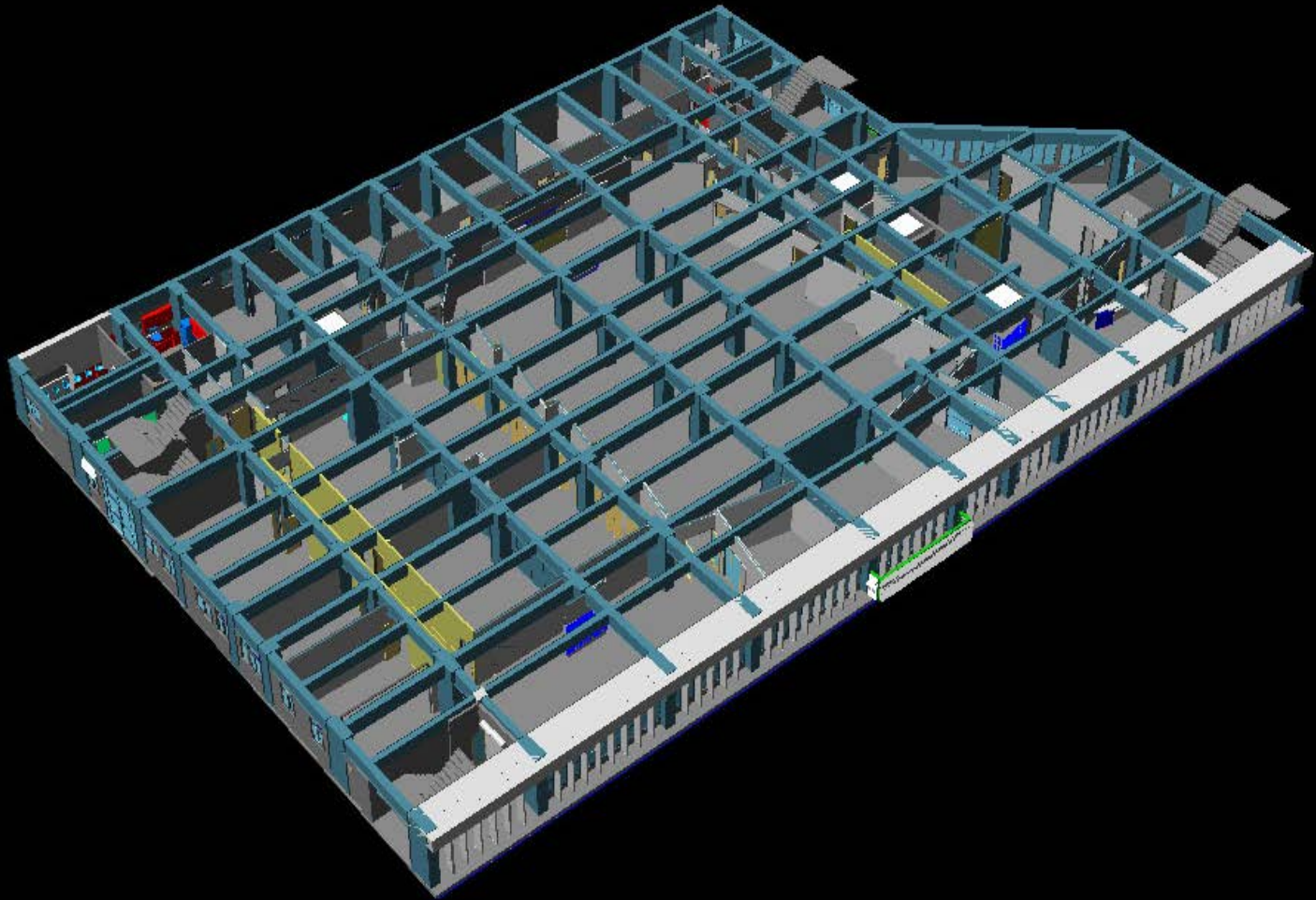


EVANGELICAL FREE CHURCH OF CHINA

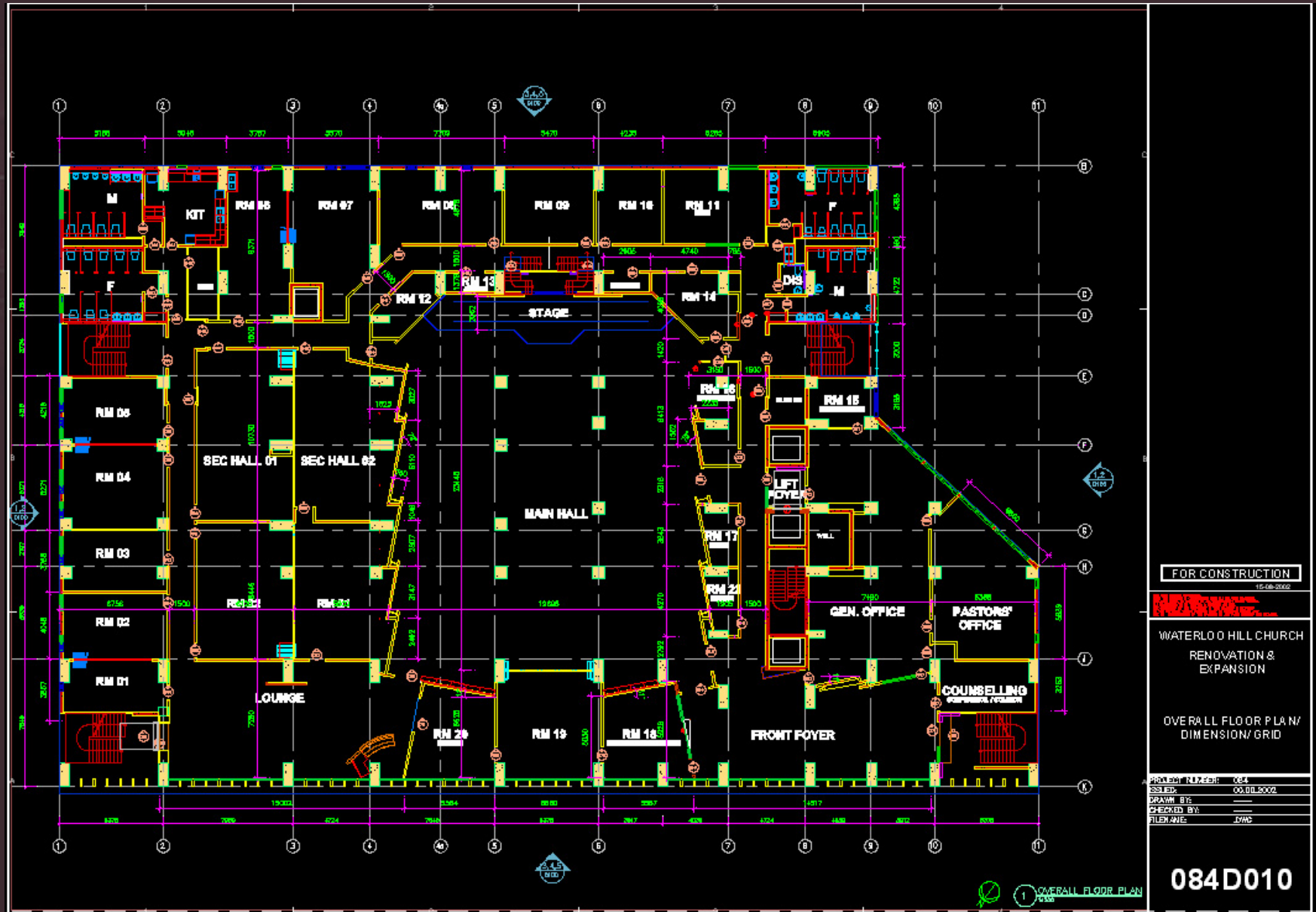
WATERLOO HILL CHURCH



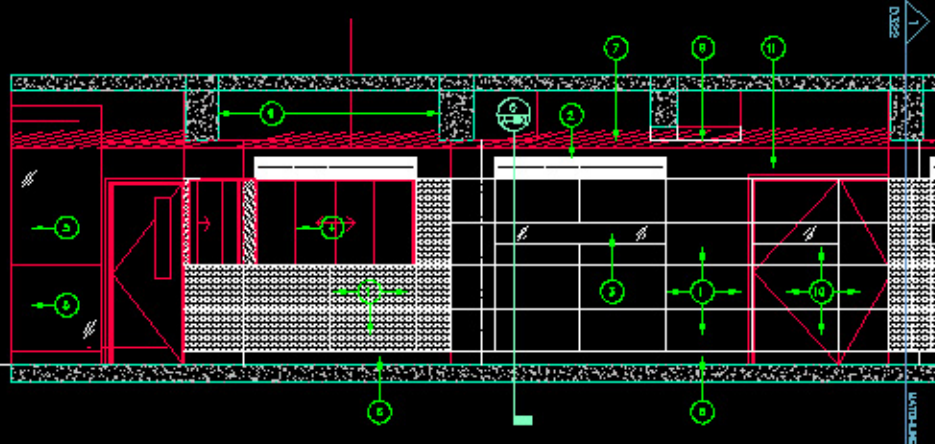
STRUCTURAL CONSTRAINTS



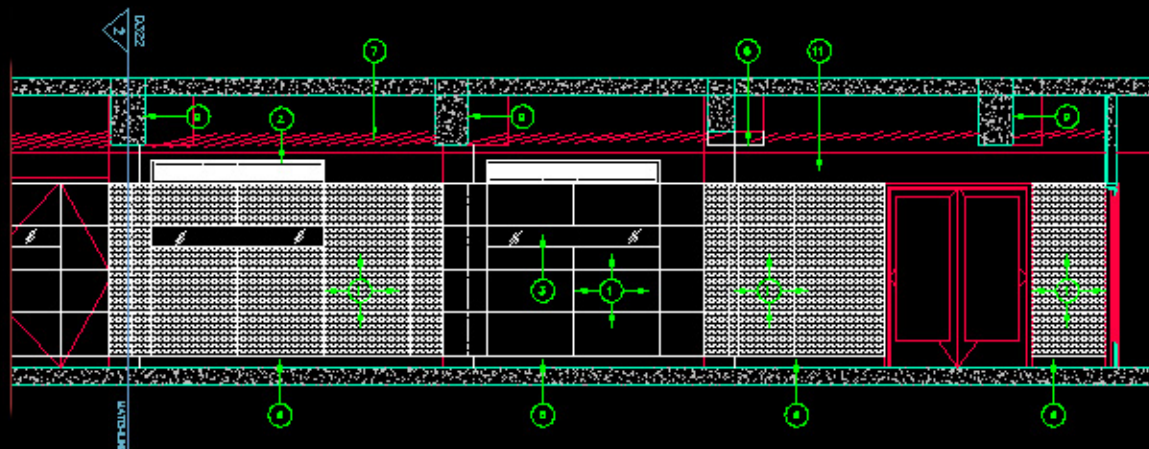
SELF GENERATED DOCUMENTATION – SIMPLE, VISUAL



SELF GENERATED DOCUMENTATION – SIMPLE, VISUAL



2 MAIN HALL SECTION



1 MAIN HALL SECTION

- ① FABRIC (FIB) MOUNTED ON 25MM 3/4X3/4X3/4 MINERAL WOOL ADHESIVE PANELS
- ② SPRAY APPLIED ALL LEAVES
- ③ 3mm COLOURED BACK
- ④ 25mm 3/4X3/4X3/4 MINERAL WOOL ADHESIVE PANELS
- ⑤ 19mm 500 MBS POLYMER SUSPENDED TRUCK (TR46)
- ⑥ 19mm 1/2 FIBRE (FIB) EXTERNAL SIDE & PLASTIC LAMINATE (PLT) INTERNAL SIDE. HANDWORK EDGE
- ⑦ 3mm THERMOPLASTIC FILM TO INTERIOR 5000 NBS MAG
- ⑧ 19mm 500 MBS SPORTING LOCKER. PAINTED
- ⑨ 1800 X 300 PERFORATED ALL COLLING STRIP (CS)
- ⑩ BACK WITH REARS W/ NEP BOARD TO MOUNTAIN AT 3/4mm REPTILE LEAF/NORTH AS REPTILE INSPIRED, LEAF TEXTURED PAINT FINISH (PS)
- ⑪ ALL EXPOSED BEAM TO BE 3/4mm COLOURED AND TEXTURE PAINTED (TR46)
- ⑫ FABRIC (FIB) MOUNTED ON 25MM 3/4X3/4X3/4 MINERAL WOOL ADHESIVE BOARD W/ VERON PANEL
- ⑬ TEXTURE PAINTED (TR46)

FOR CONSTRUCTION

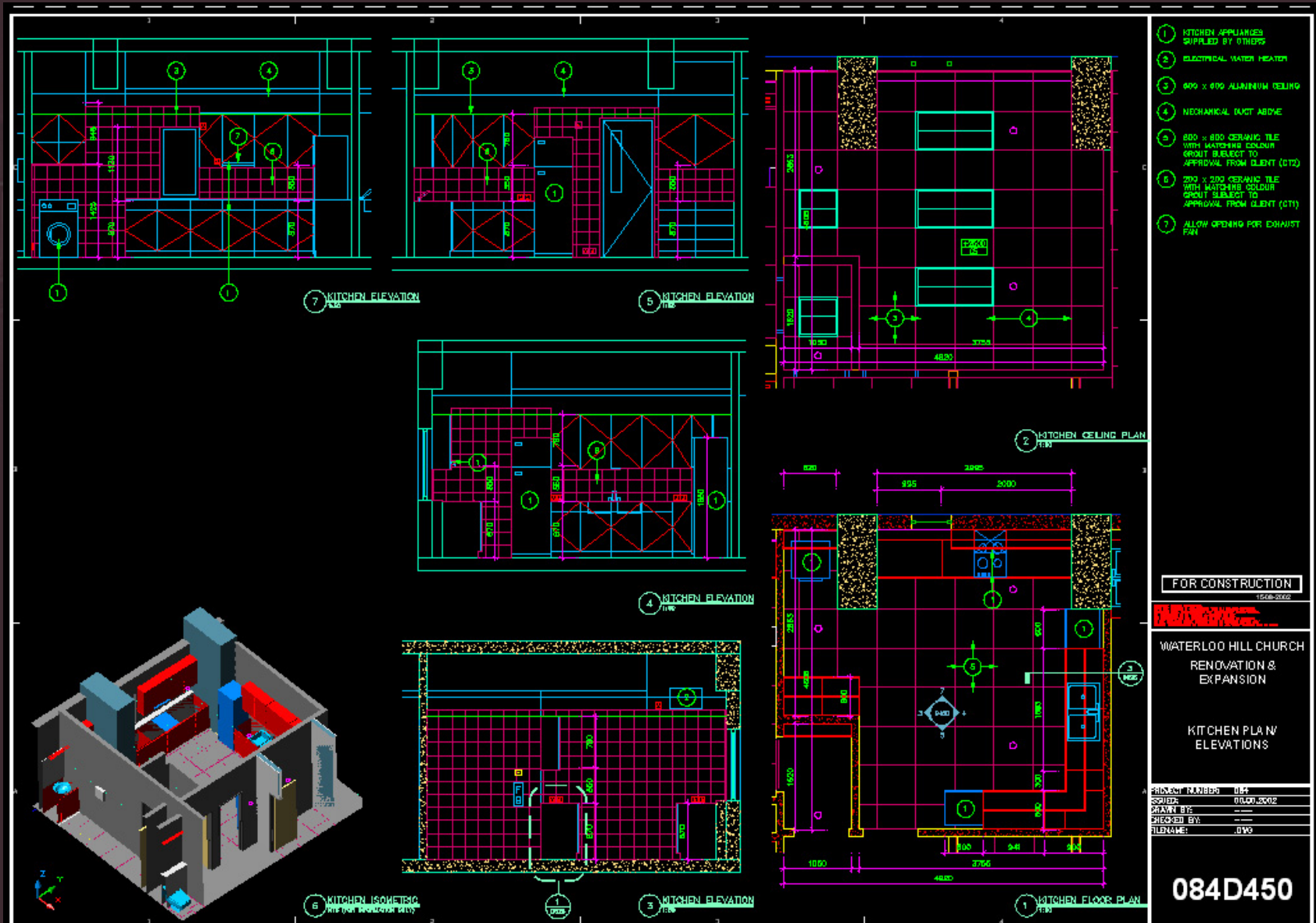
**WATERLOO HILL CHURCH
RENOVATION &
EXPANSION**

MAIN HALL SECTIONS

| | |
|--------------|----------|
| ATTACHED TO: | 044 |
| ISSUED: | 00000000 |
| ATTACHED BY: | -- |
| ATTACHED BY: | -- |
| FILED: | 000 |

084D322

SELF GENERATED DOCUMENTATION – SIMPLE, VISUAL



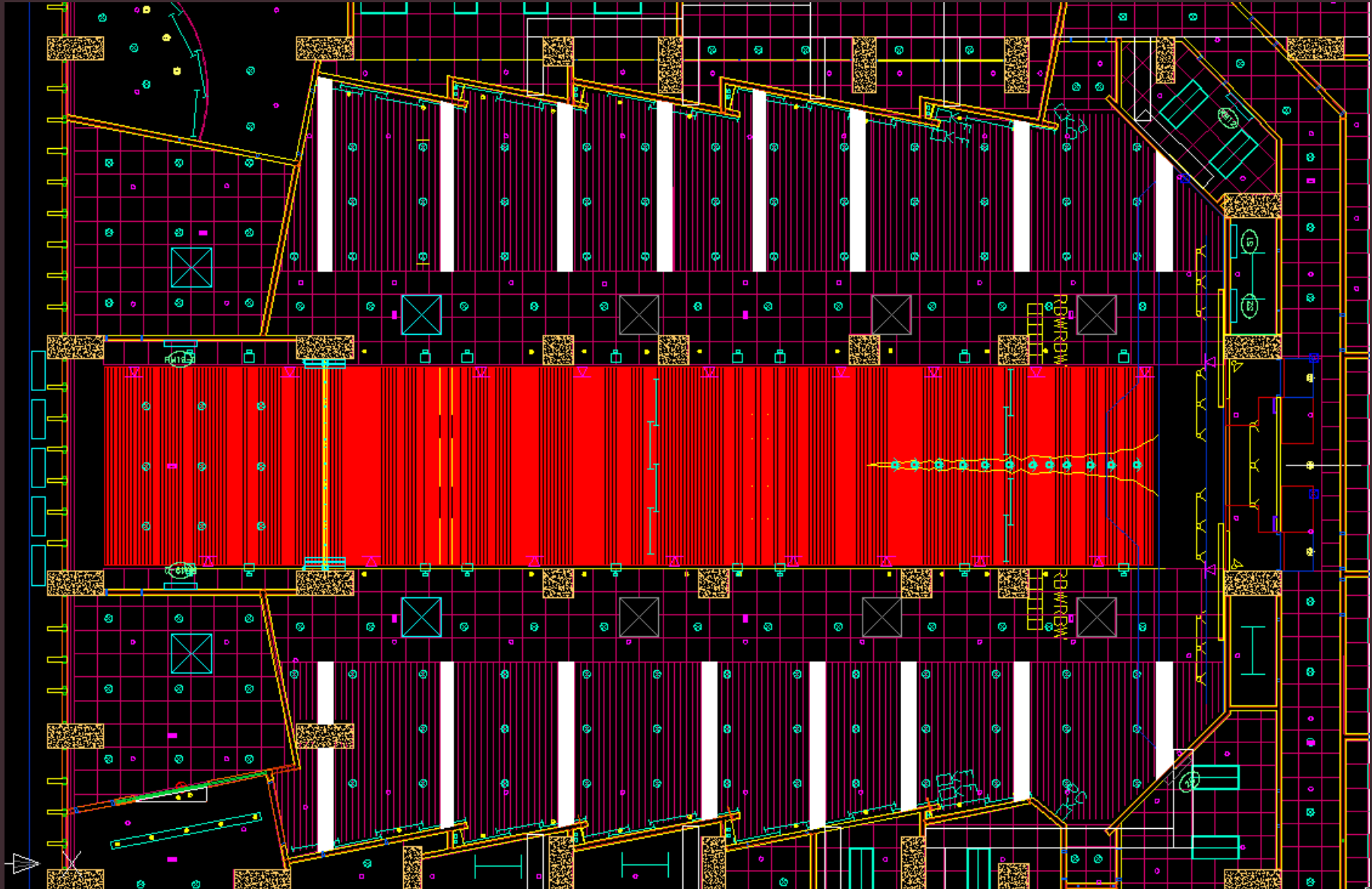




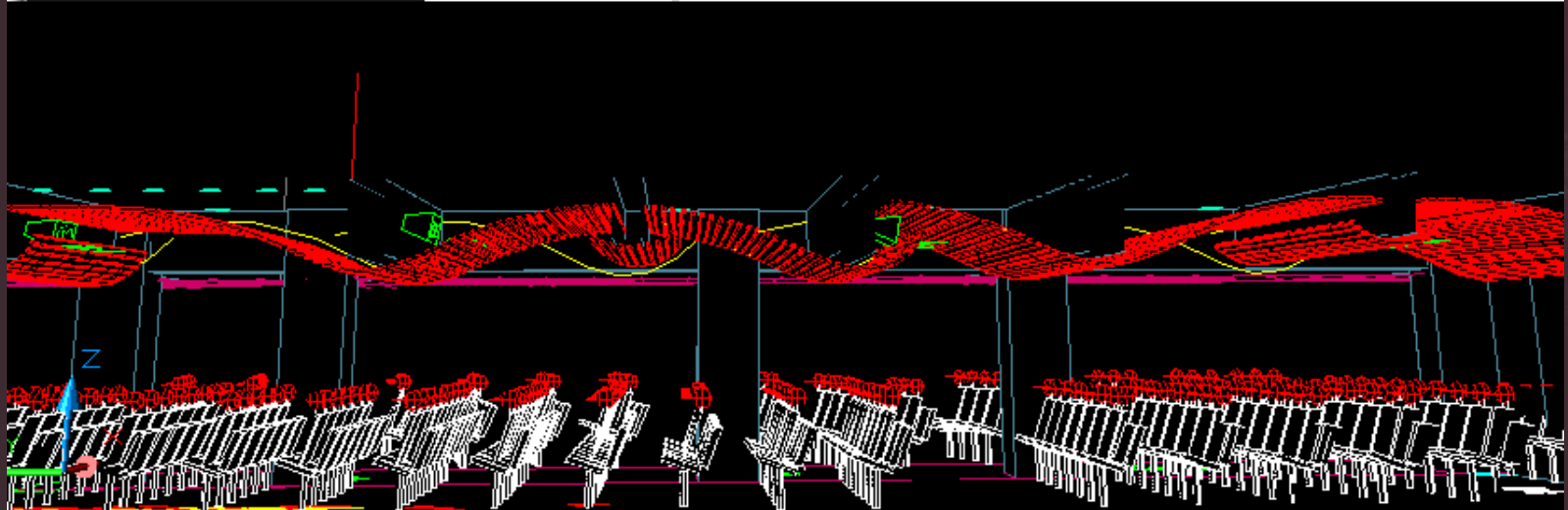
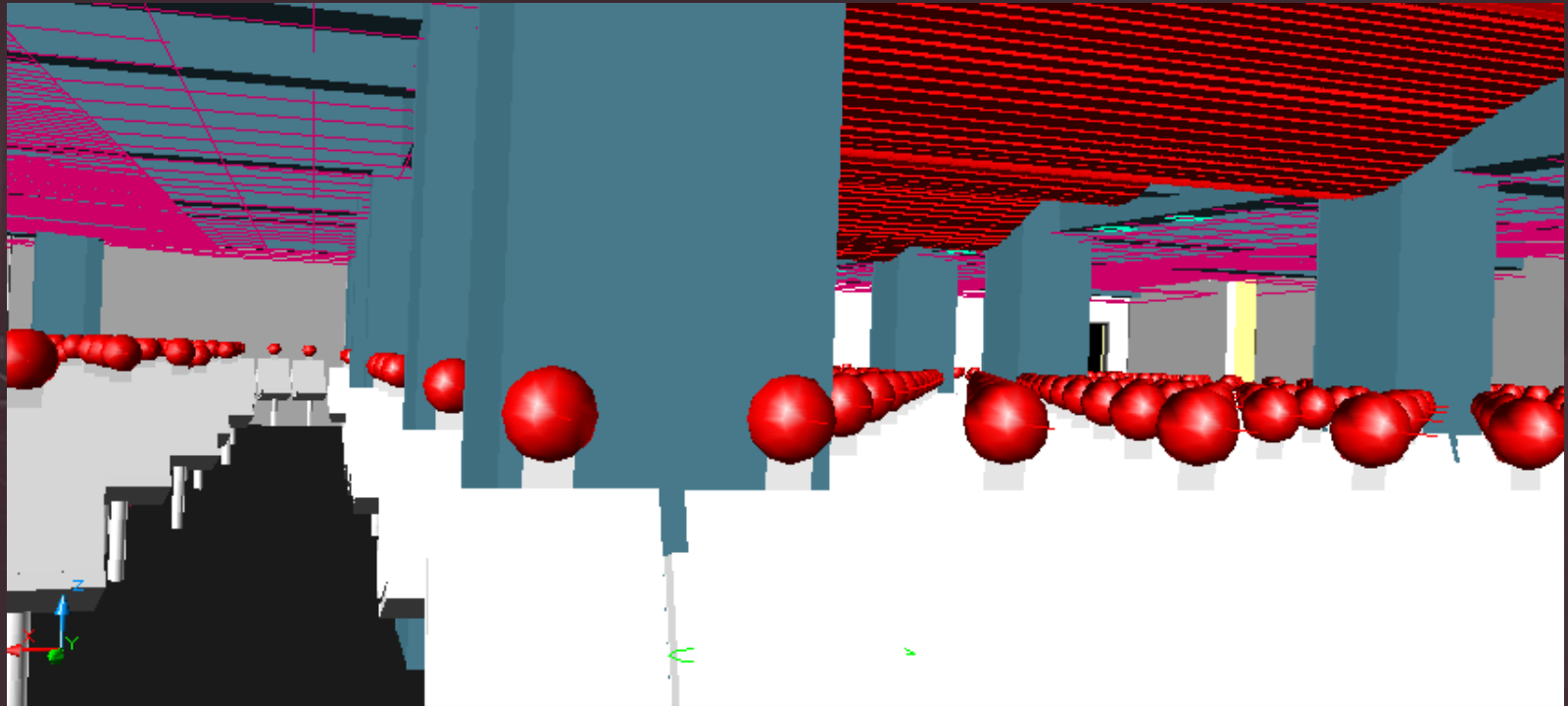




MAIN HALL DESIGN



MAIN HALL DESIGN





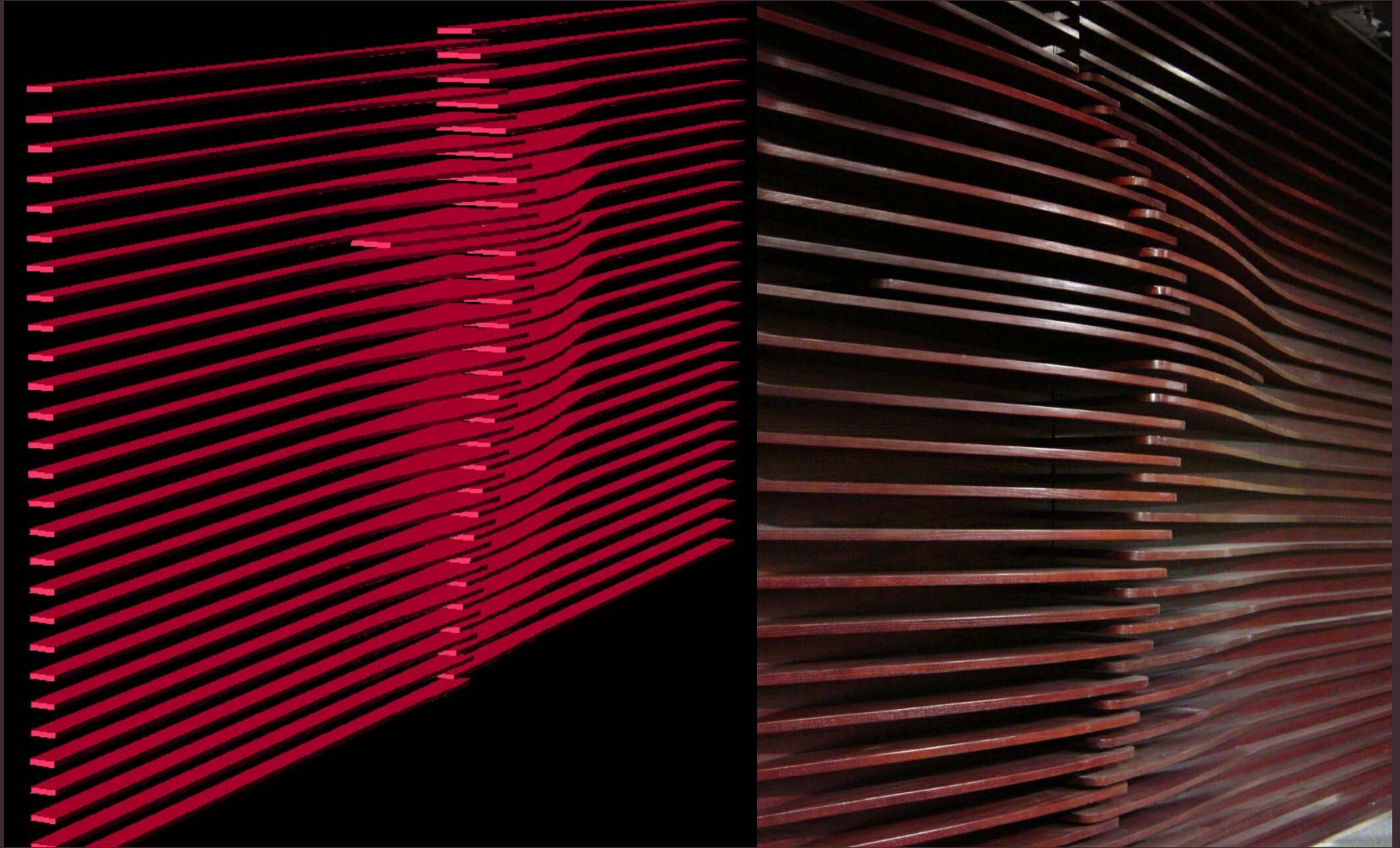




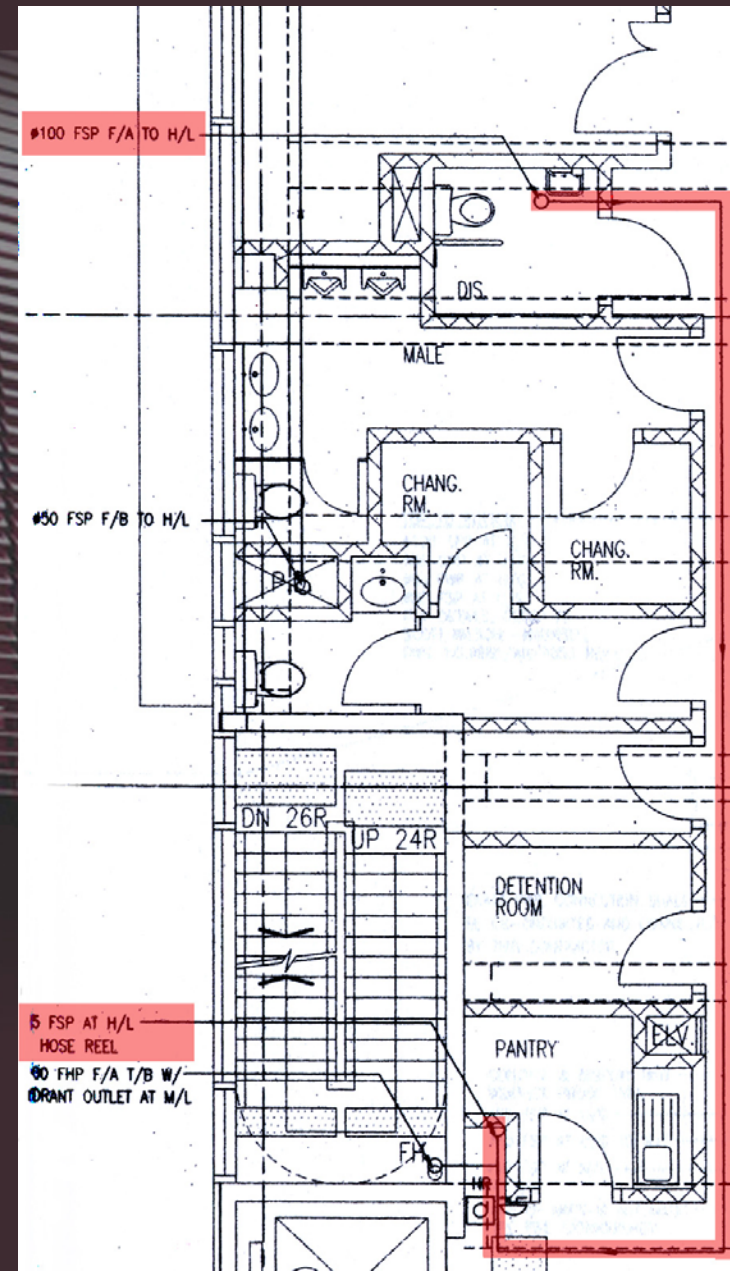
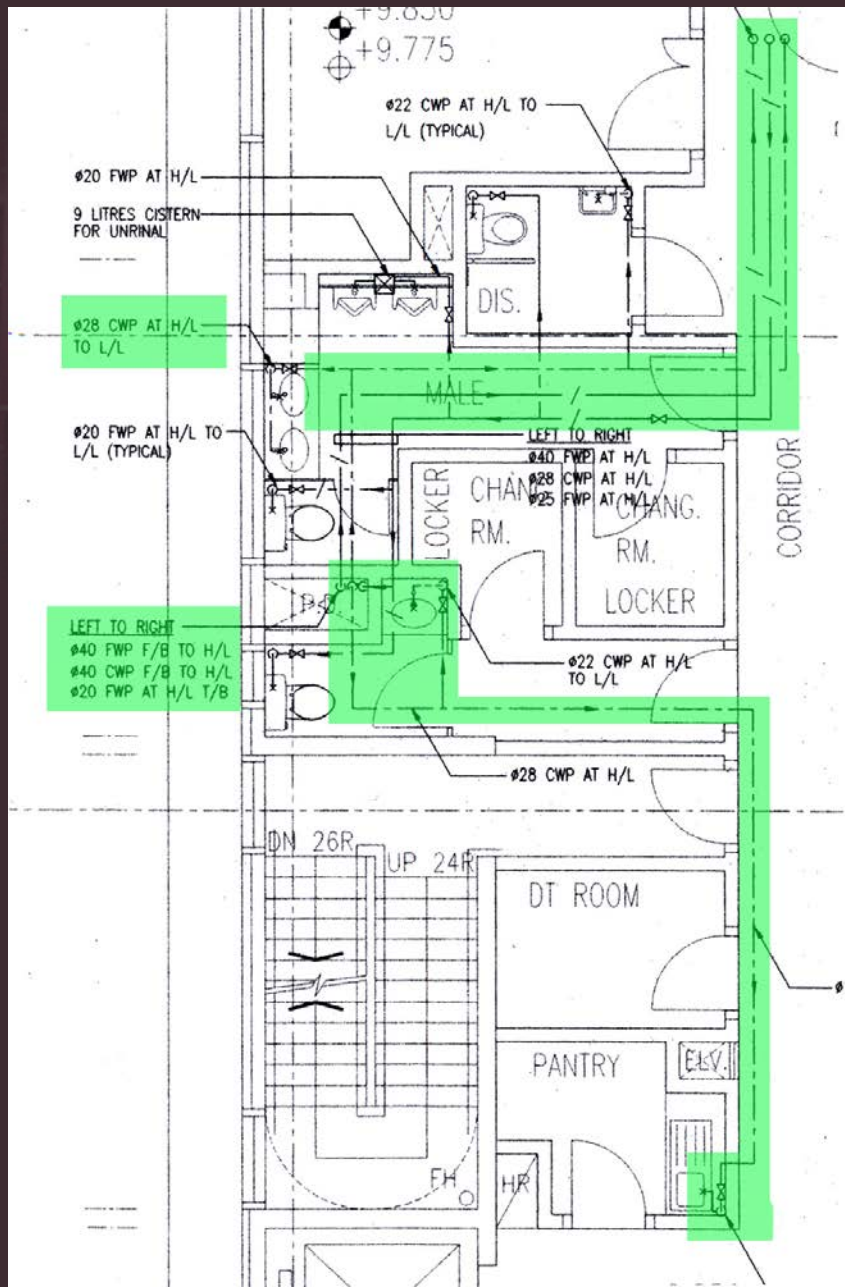
WYSIWYG – What You See Is What You Get



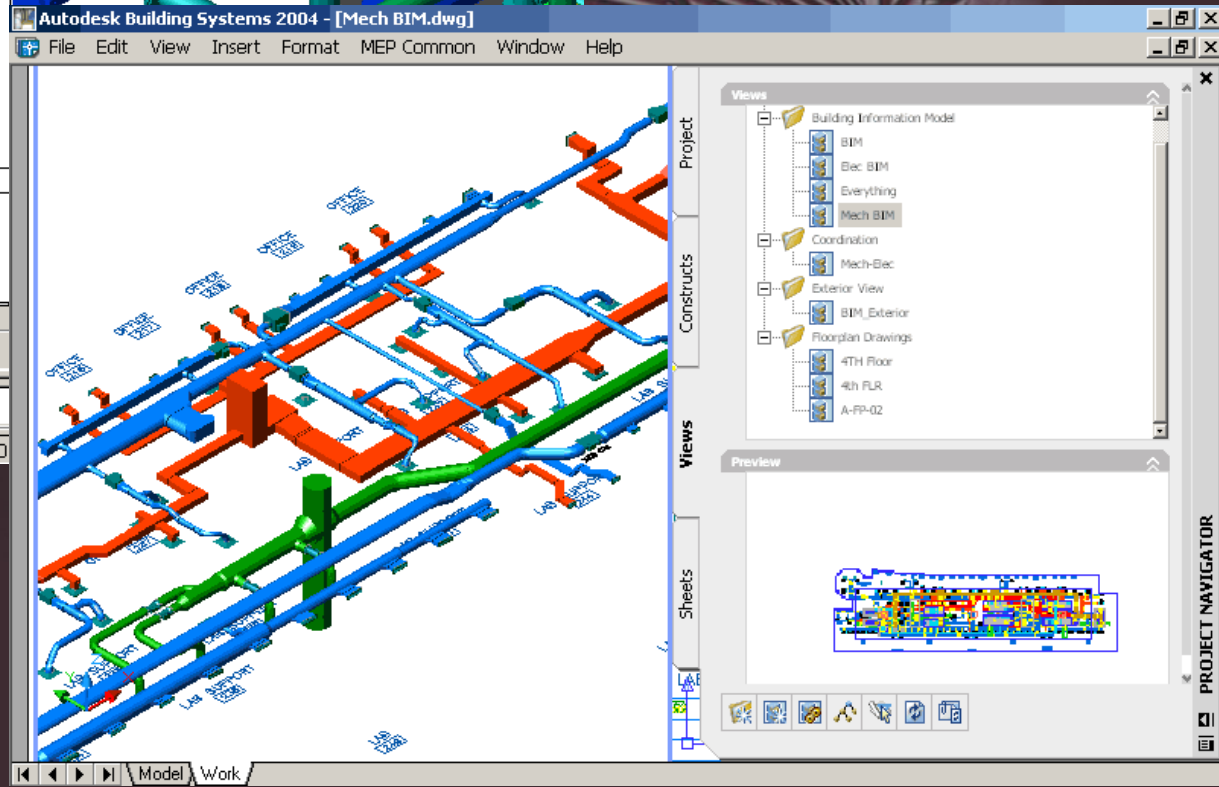
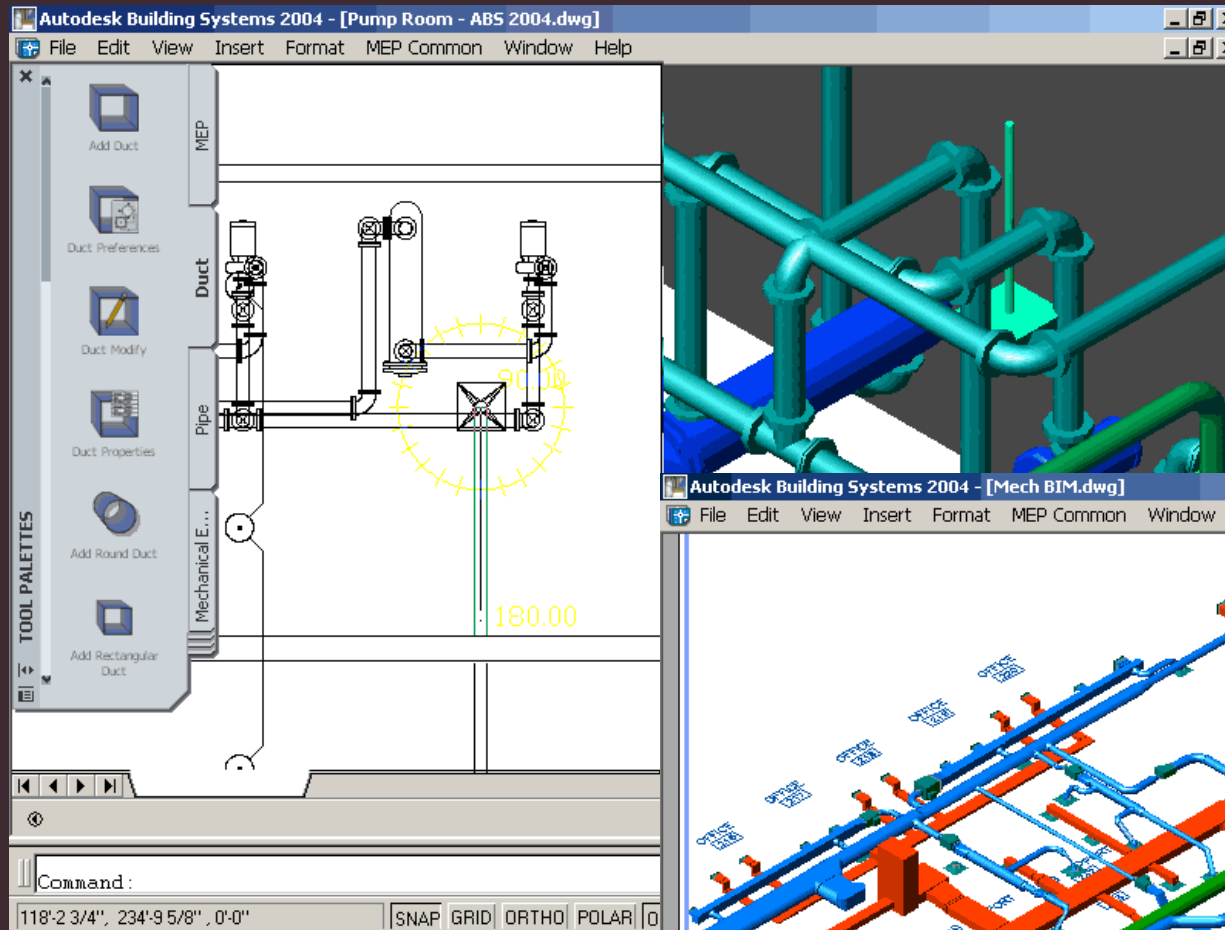
WYSIWYG – What You See Is What You Get



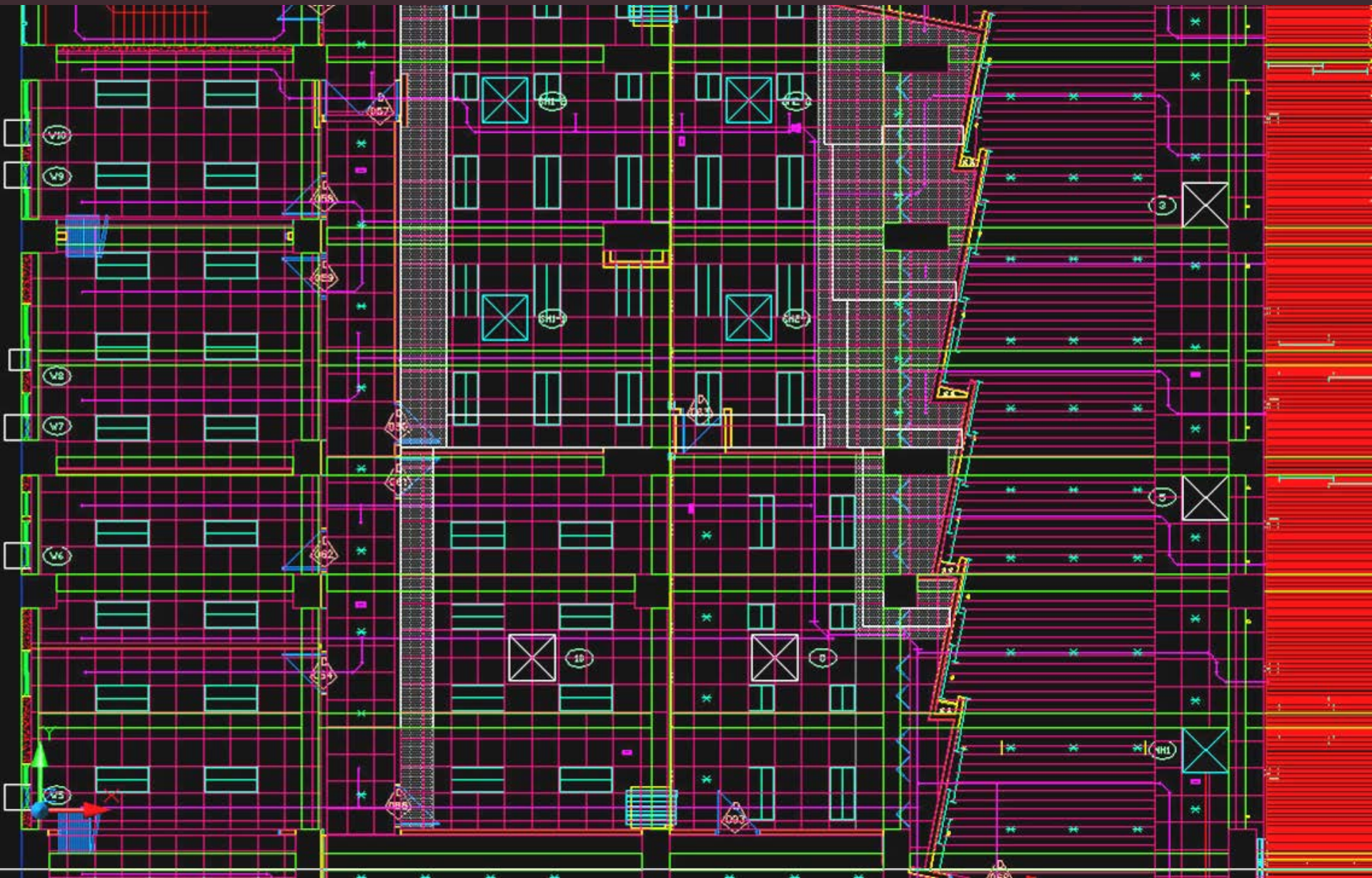
CO-ORDINATION OF SERVICES



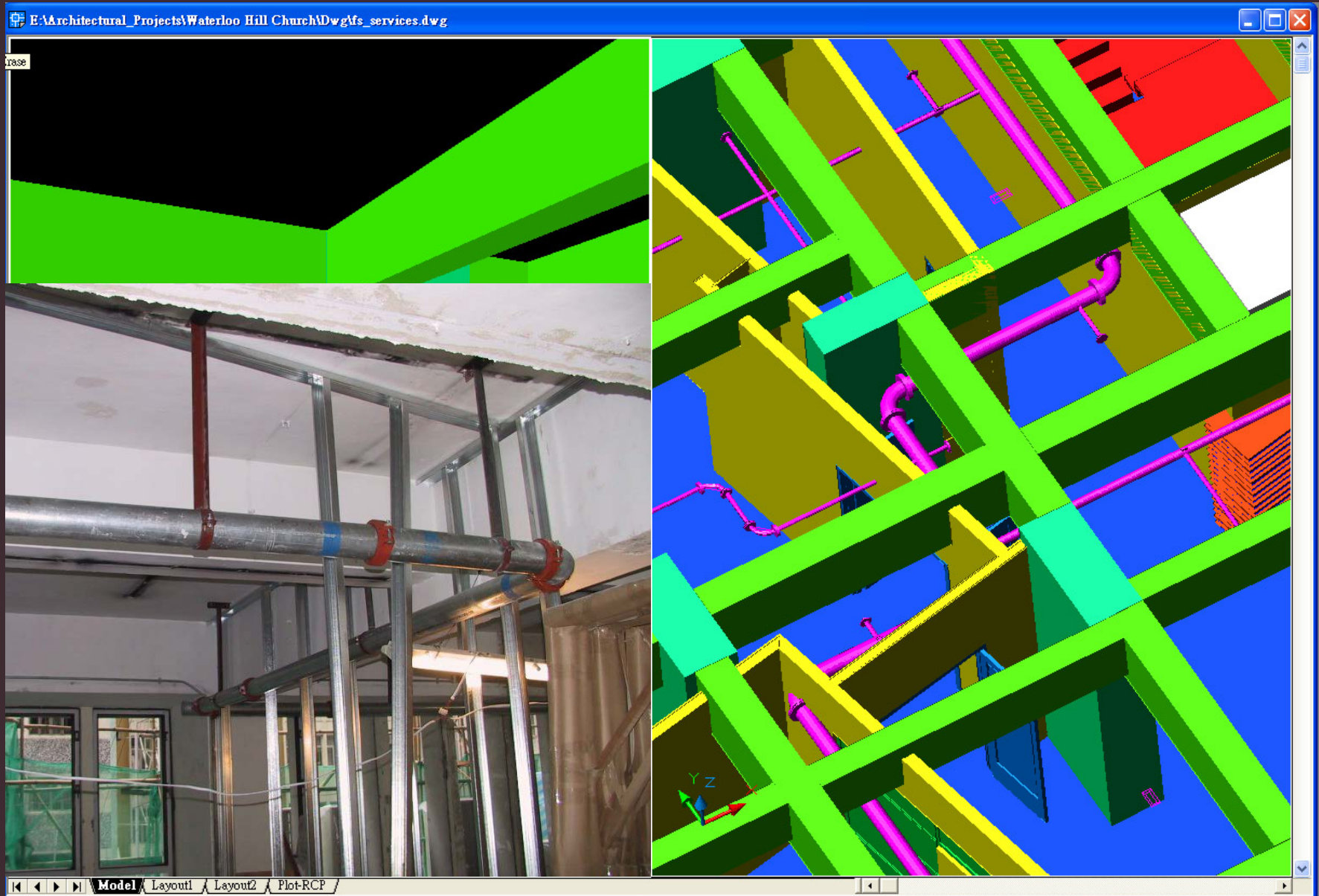
3D SERVICES CO-ORDINATION



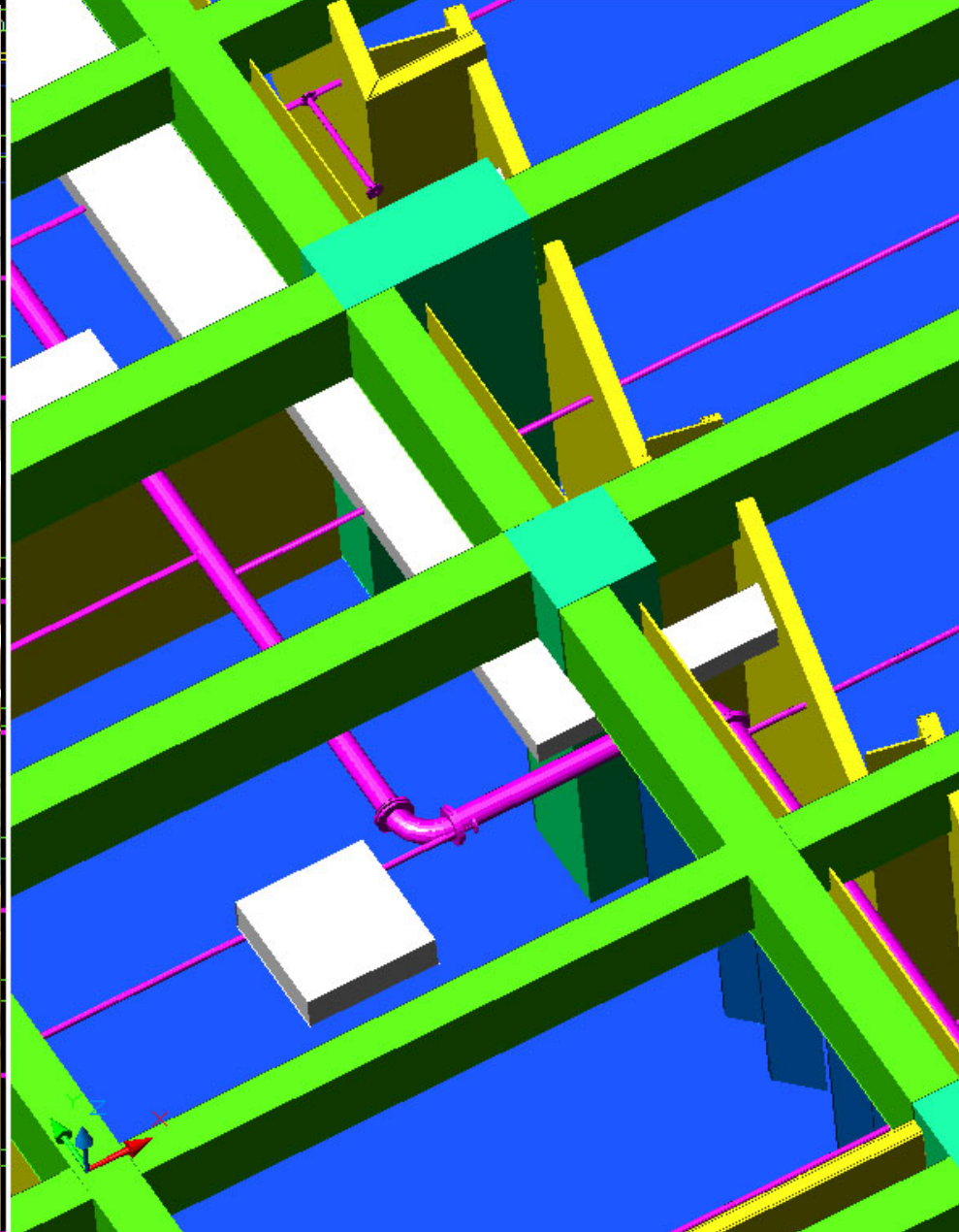
CO-ORDINATION OF SERVICES



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 | | | | | | | | |
| 038 | 850 | 2100 | 40 | HC | | | | | | | | |
| 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

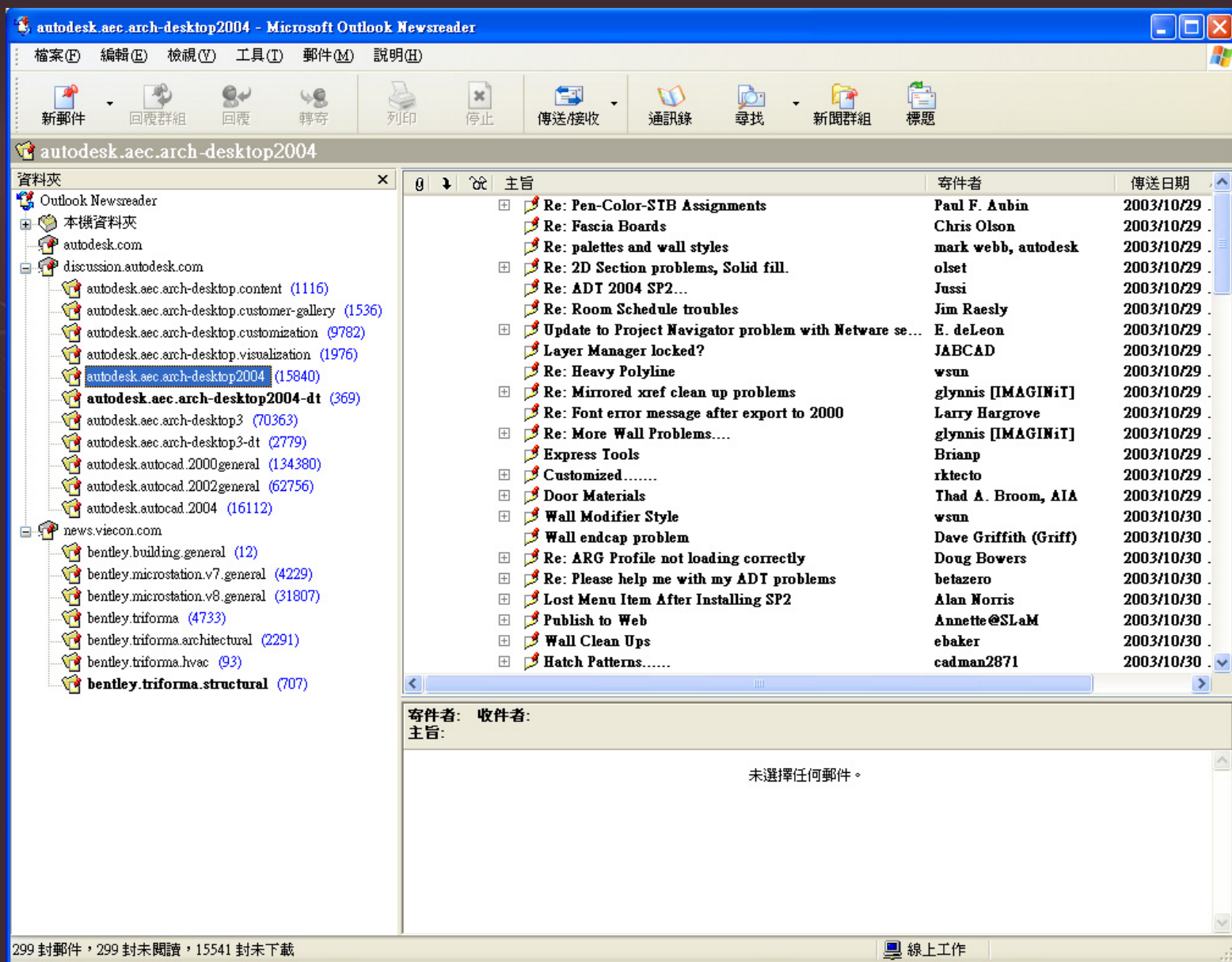
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SNAP GRID ORTHO POLAR OSNAP OTRACK LWT MODEL



WE ARE NOT ALONE!!!



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!!!