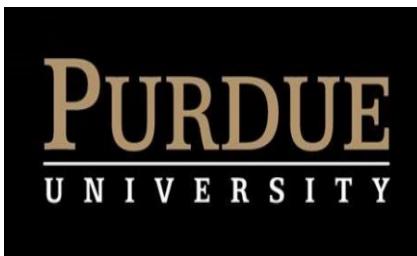
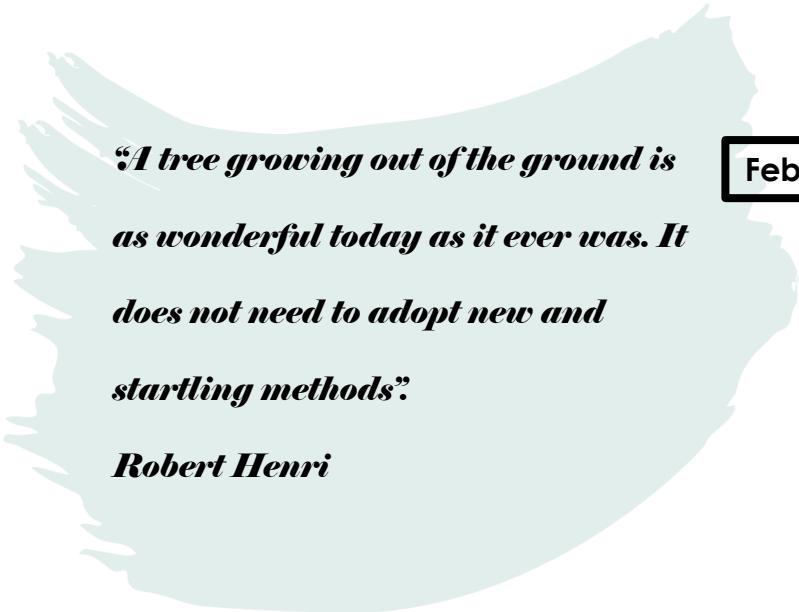




Snapshots of Work Done!

RAJ BIREWAR





February 2020 – April 2020

Live Projects

Industry Experience

BIM/VDC Association

Coursework:
Student and
Teaching
Assistant

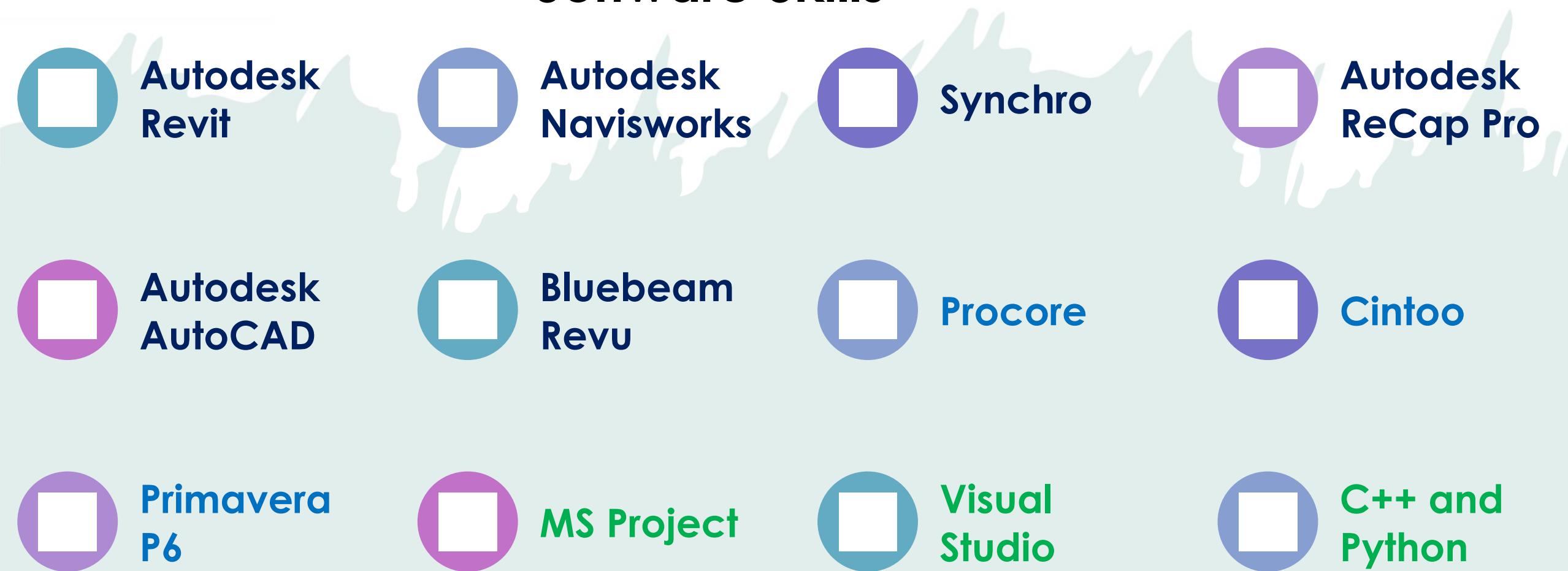
Research
and
Dissertation

November 2019 -Present

May 2016 – July 2016
May 2017-July 2017
May 2018-July 2018
January 2019-May 2019
May 2020 – August 2020

August 2019-Present

Software Skills

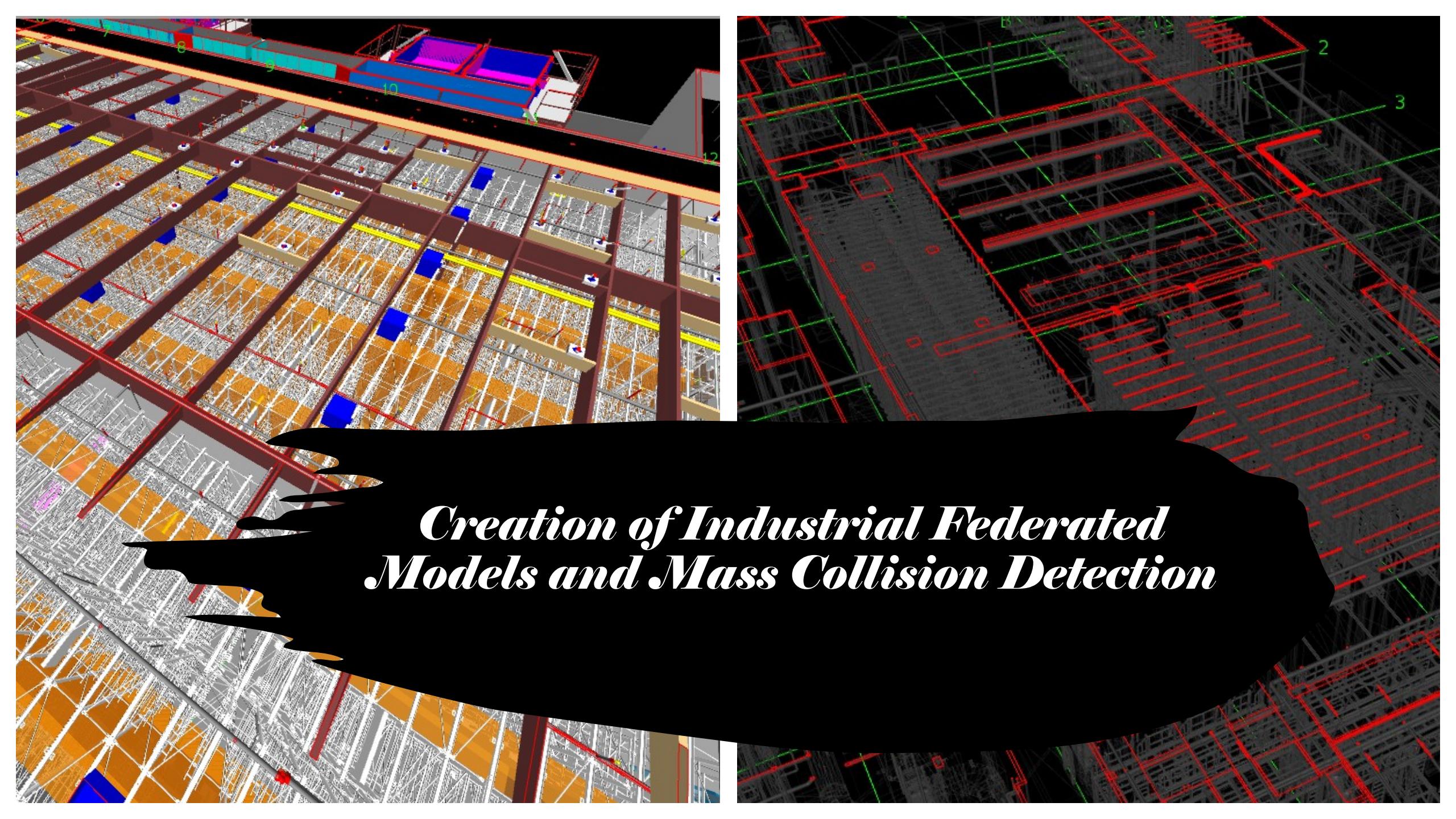


LEGEND

■ Advanced Proficiency

■ Intermediate Proficiency

■ Basic Proficiency



Creation of Industrial Federated Models and Mass Collision Detection

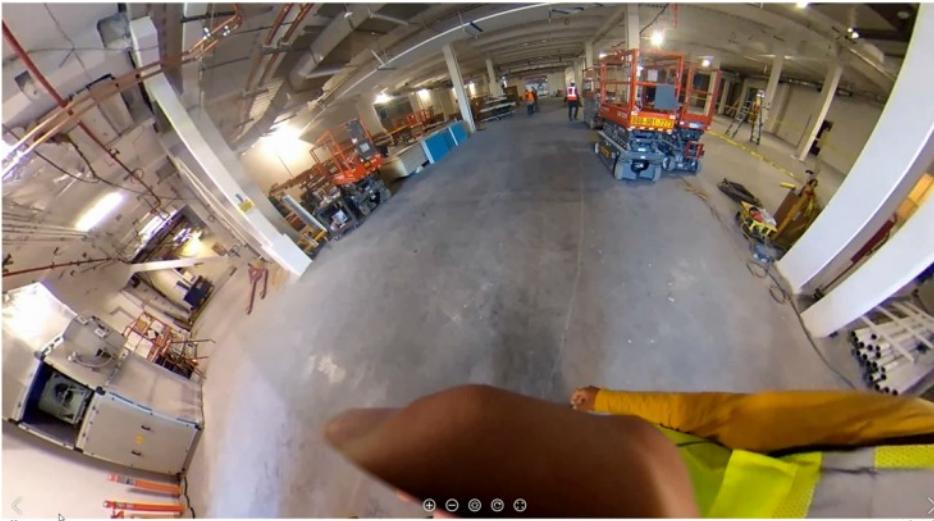
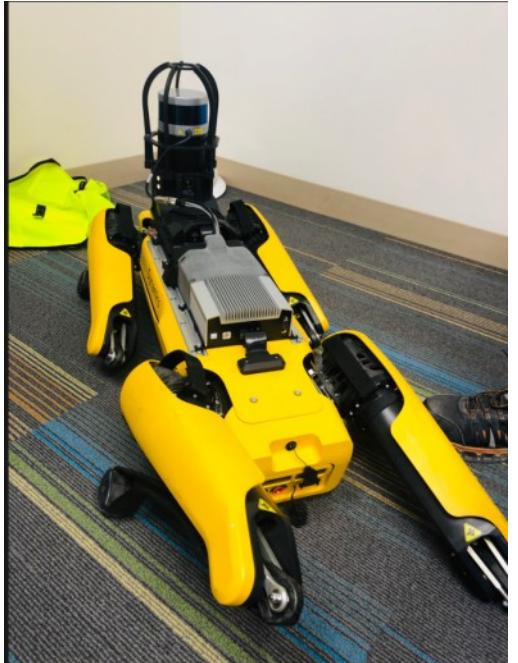


Virtual and Augmented Reality



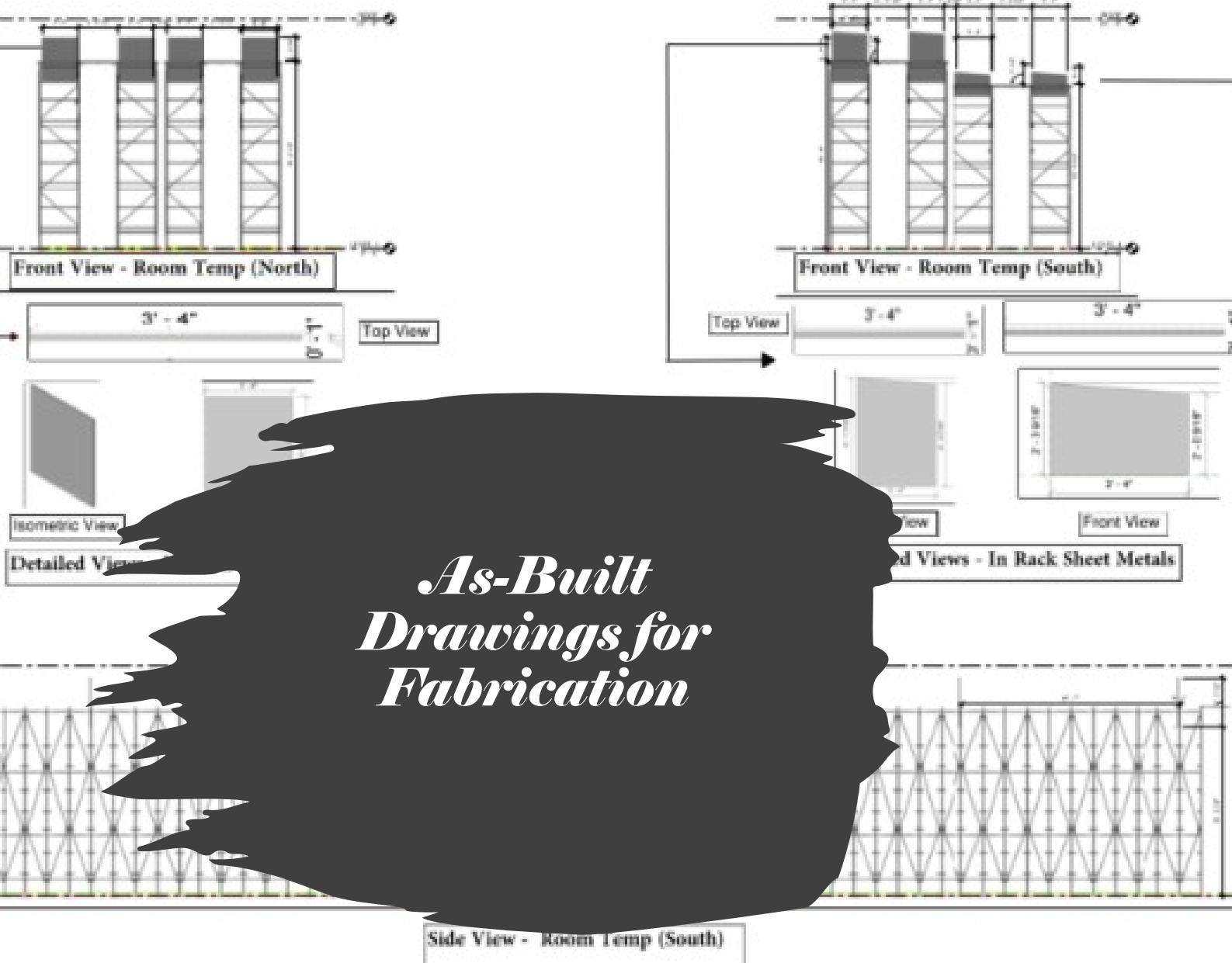


Laser Scanning



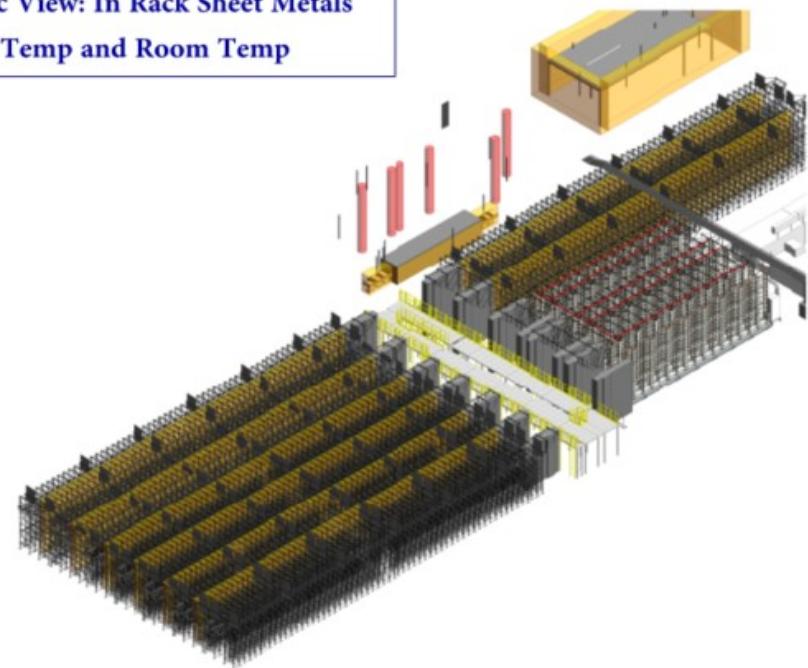
Robotics in Construction

Room Temp Section Views



*As-Built
Drawings for
Fabrication*

Isometric View: In Rack Sheet Metals on High Temp and Room Temp

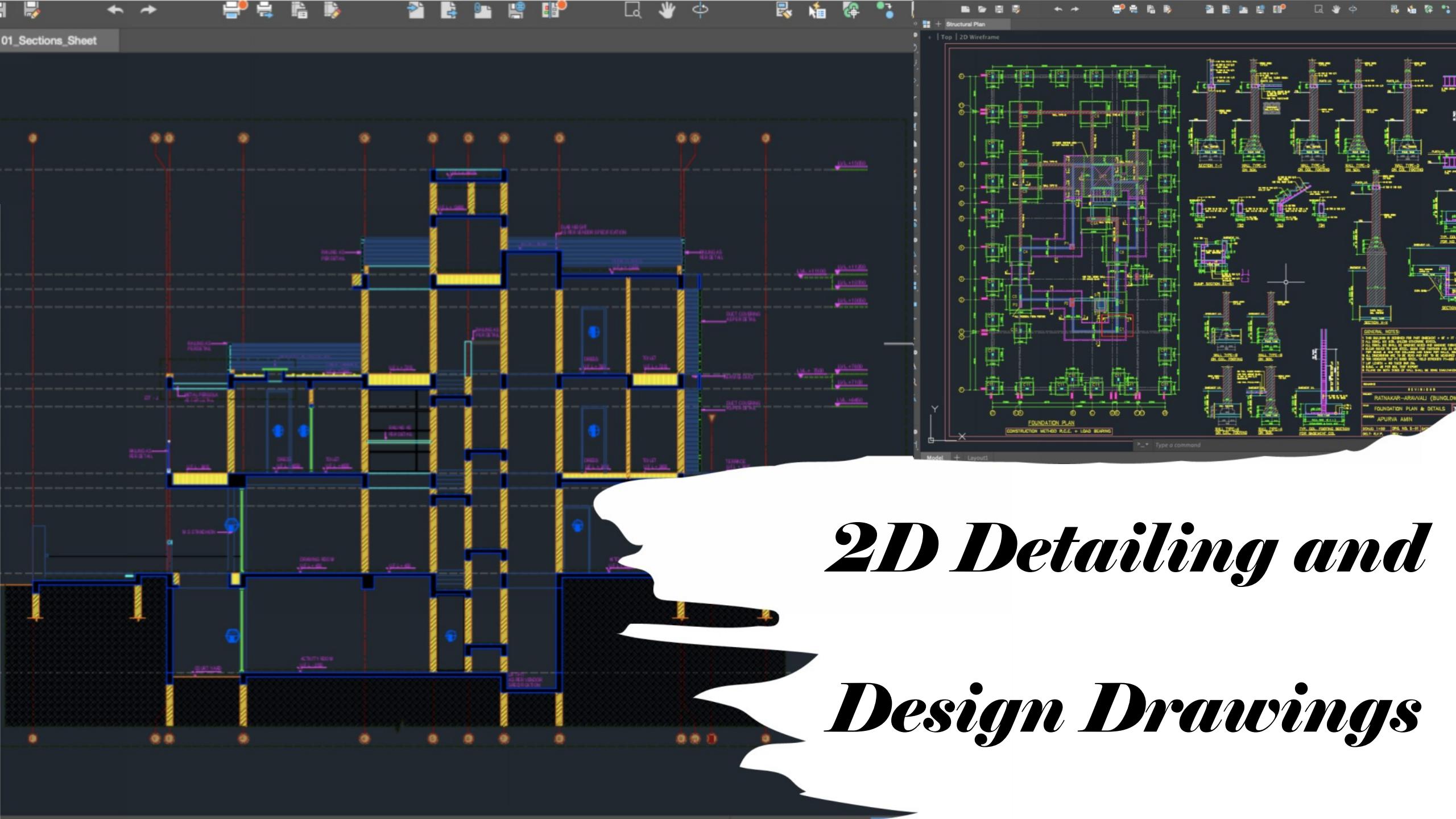


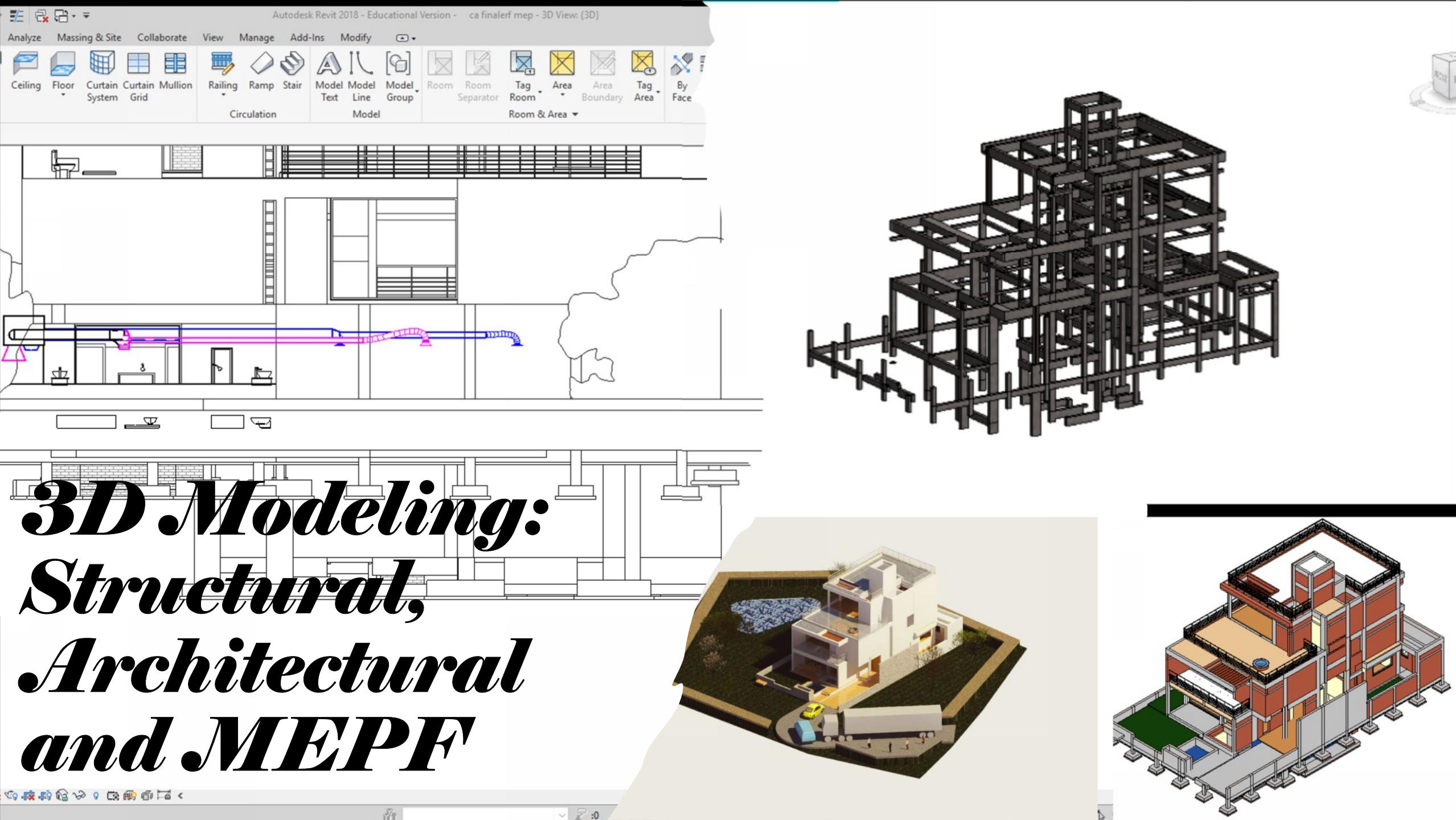
Floor Plan : High Temp and Room Temp (South) - Top View



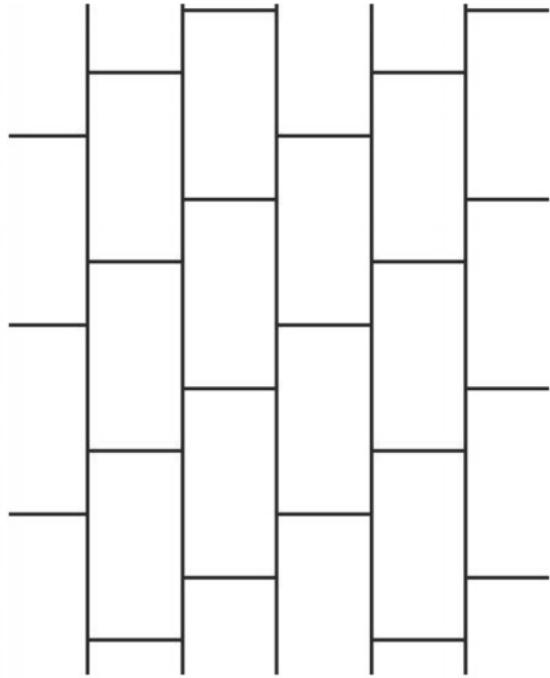


*On Field
Verification*



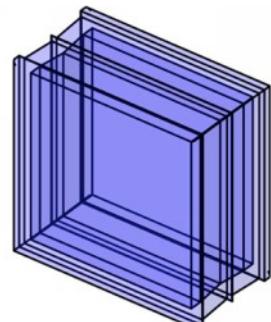
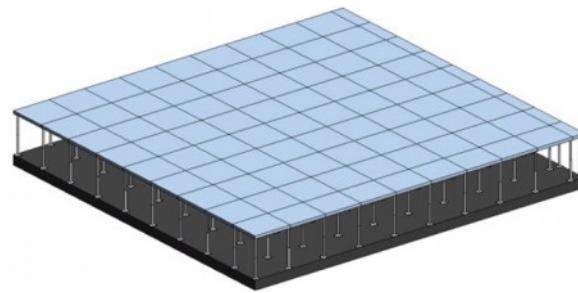


3D Modeling: Structural, Architectural and MEPF



12" x 24" Tile Pattern

Raised Floor-
Computer Floor
System

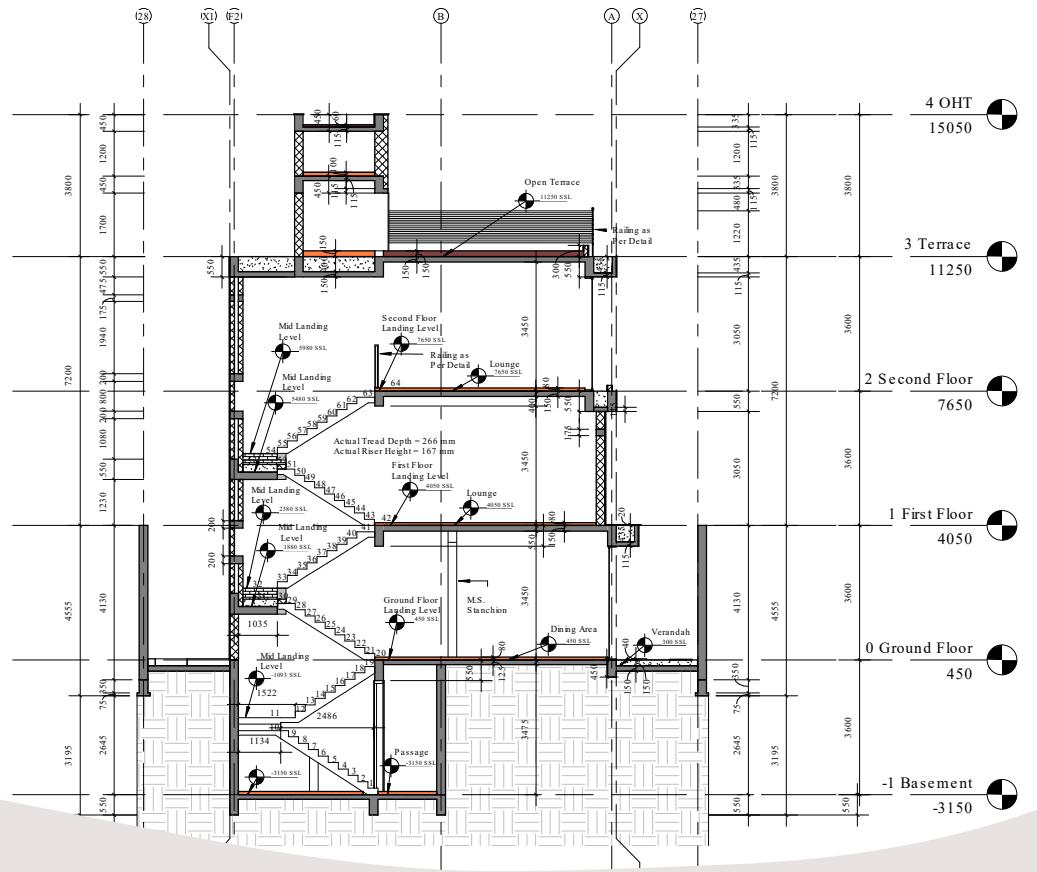
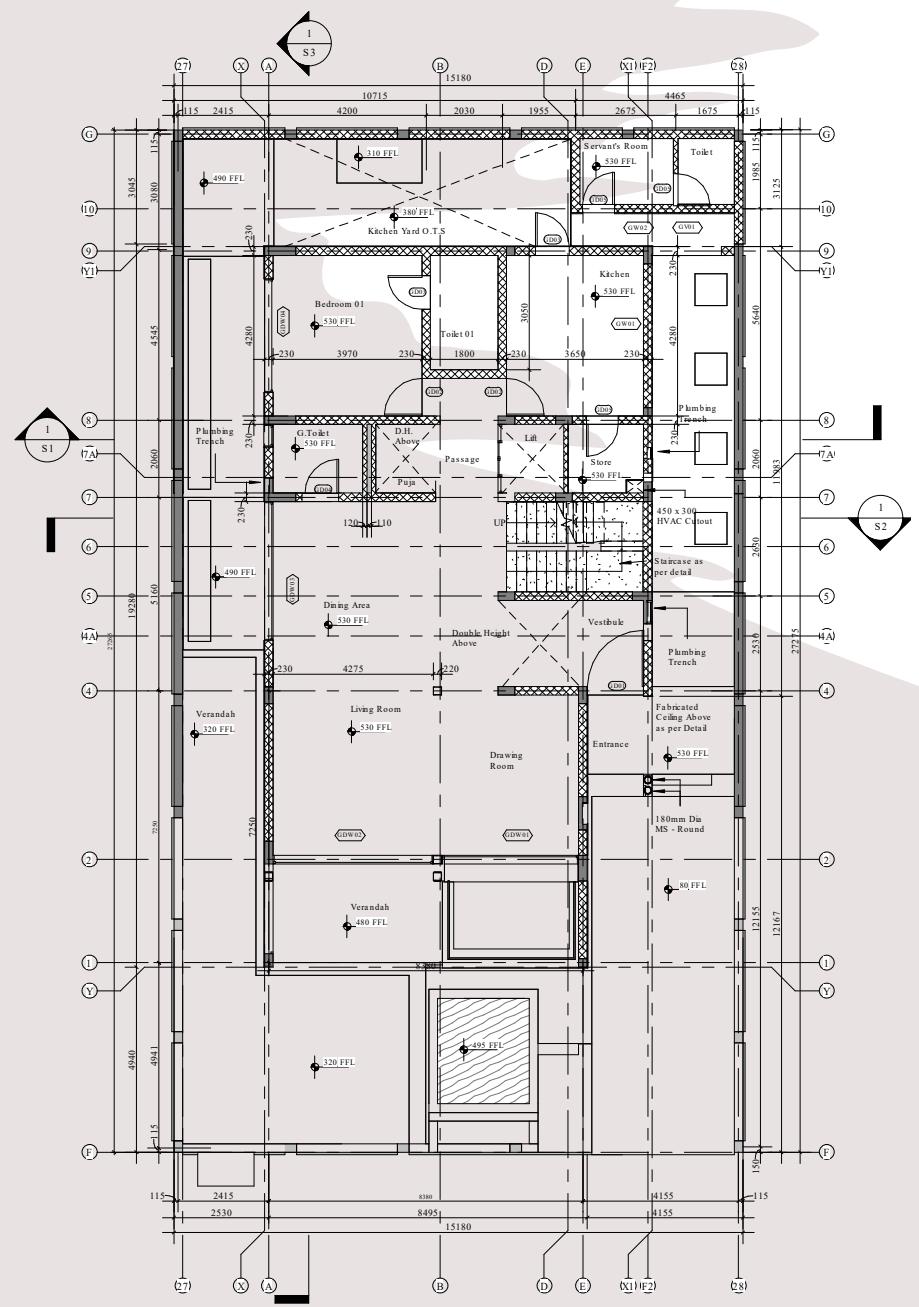


Glass Block
Unit

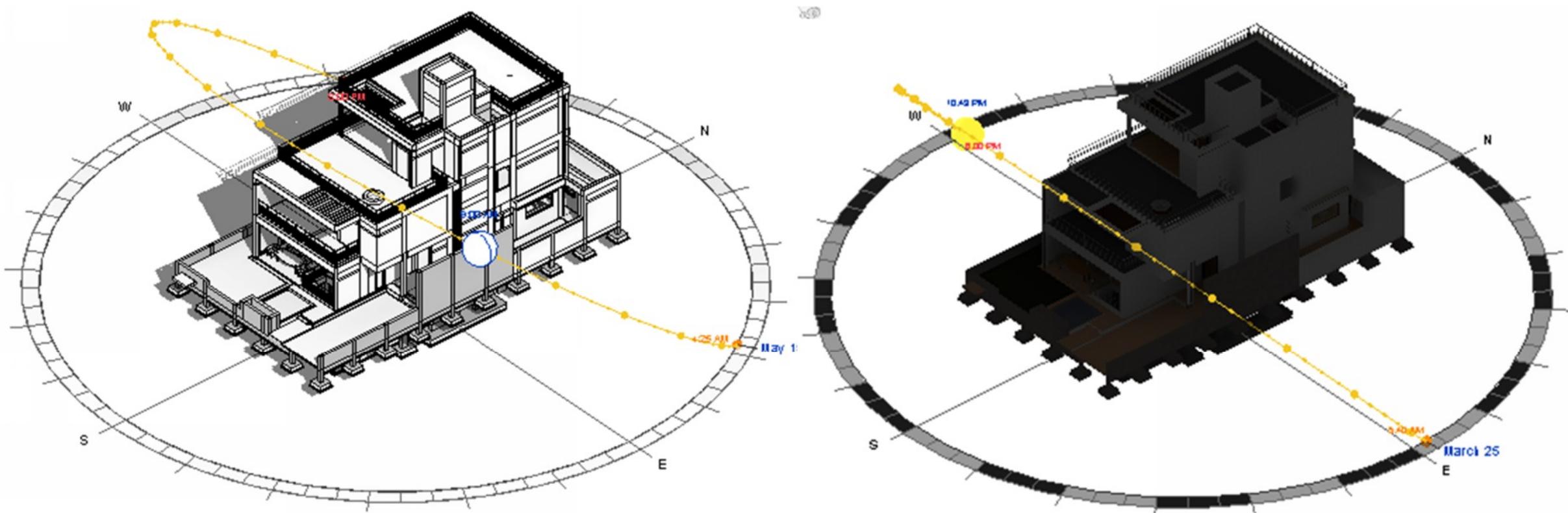


Opening Based Family –
Four Panel Bi-Fold Door

*Family and
Content Creation*



Construction Documentation



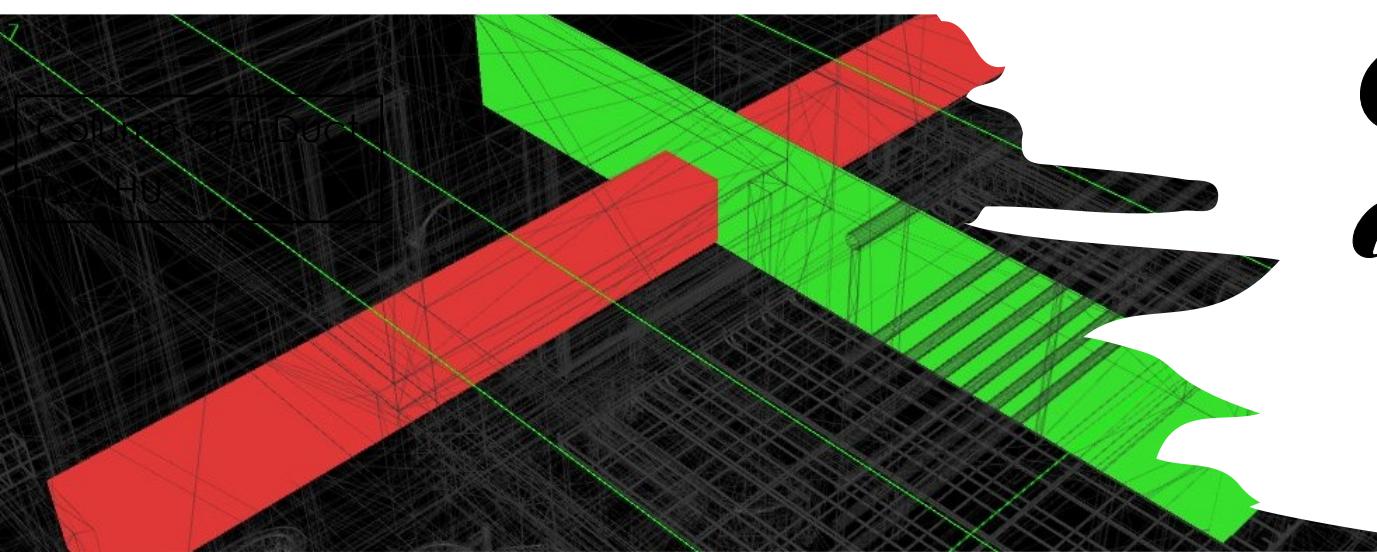
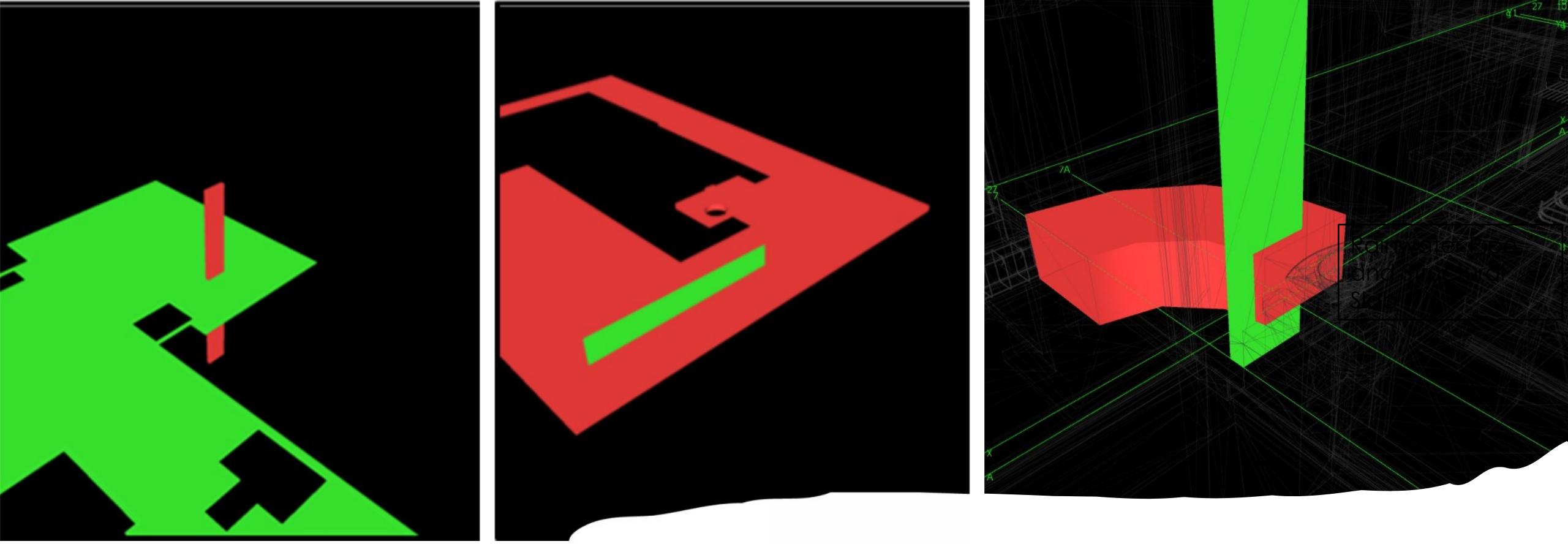
Solar Radiation Analysis



Exterior Flythrough and Interior Walkthrough



*Rendered
Sna~~sh~~ots*

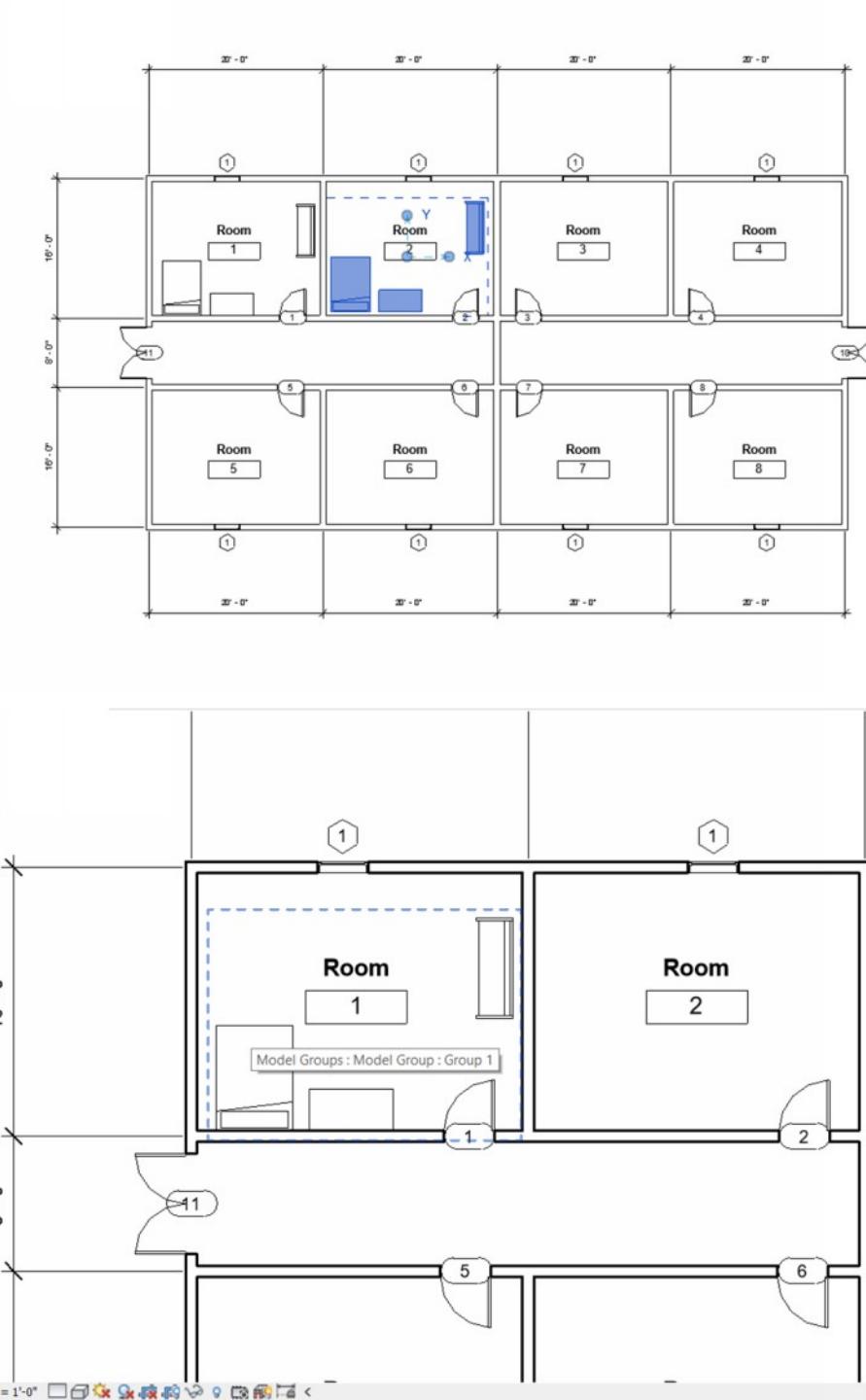


Clash Detection and Coordination

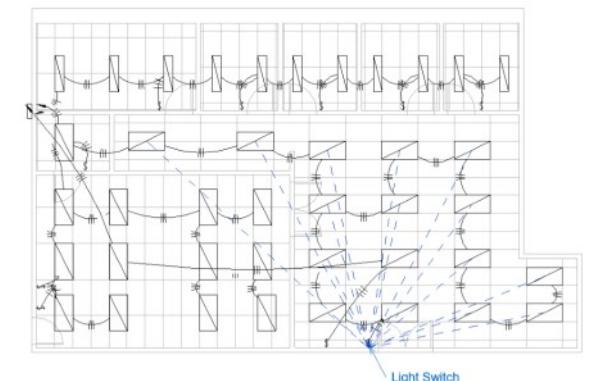
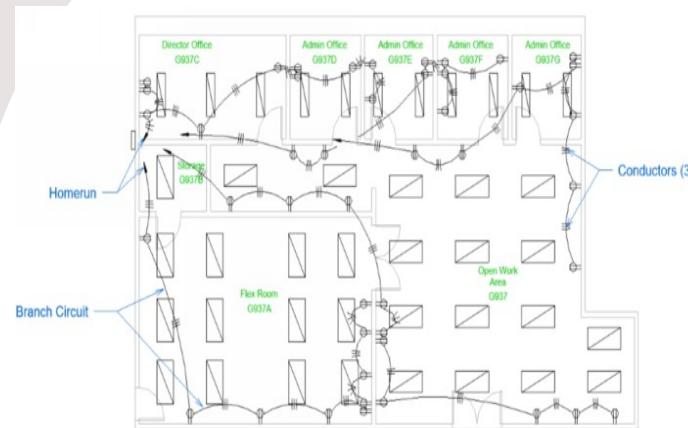
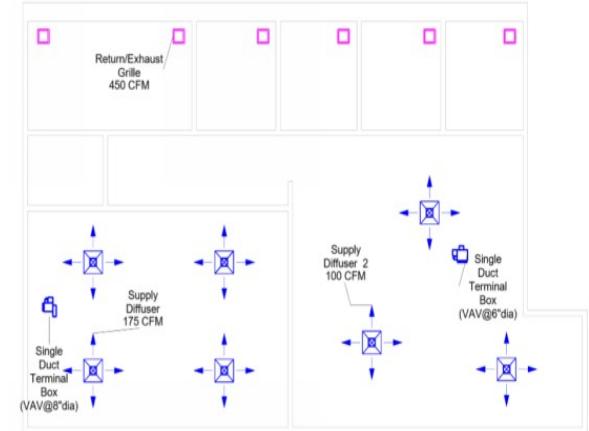
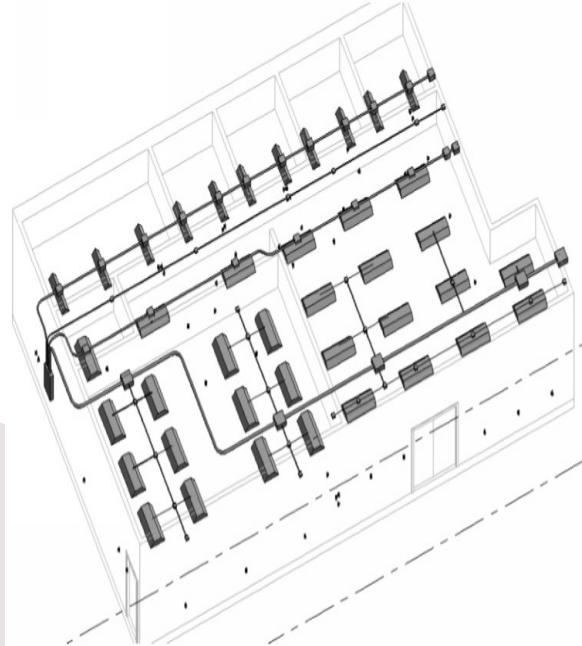
Lab1PlaceGroup

```
10  using Autodesk.Revit.UI.Selection;
11
12  namespace Lab1PlaceGroup
13  {
14      [Transaction(TransactionMode.Manual)]
15      [Regeneration(RegenerationOption.Manual)]
16      0 references
17      public class Class1 : IExternalCommand
18      {
19          0 references
20          public Result Execute(ExternalCommandData commandData, ref string message, ElementSet
21          {
22              //Get application and document objects
23              UIApplication uiapp = commandData.Application;
24              Document doc = uiapp.ActiveUIDocument.Document;
25
26              //Define a reference Object to accept the pick result
27              Reference pickedref = null;
28
29              //Get the Selection object
30              Selection sel = commandData.Selection;
31              sel.PickObject("Please select a group");
32
33              //Get the selected element
34              Element el = sel.PickObject("Please select a place group");
35
36              if (el != null)
37              {
38                  //Do something with the selected element
39              }
40
41          }
42
43      }
44
45  }
```

Accessing APIs for Automation

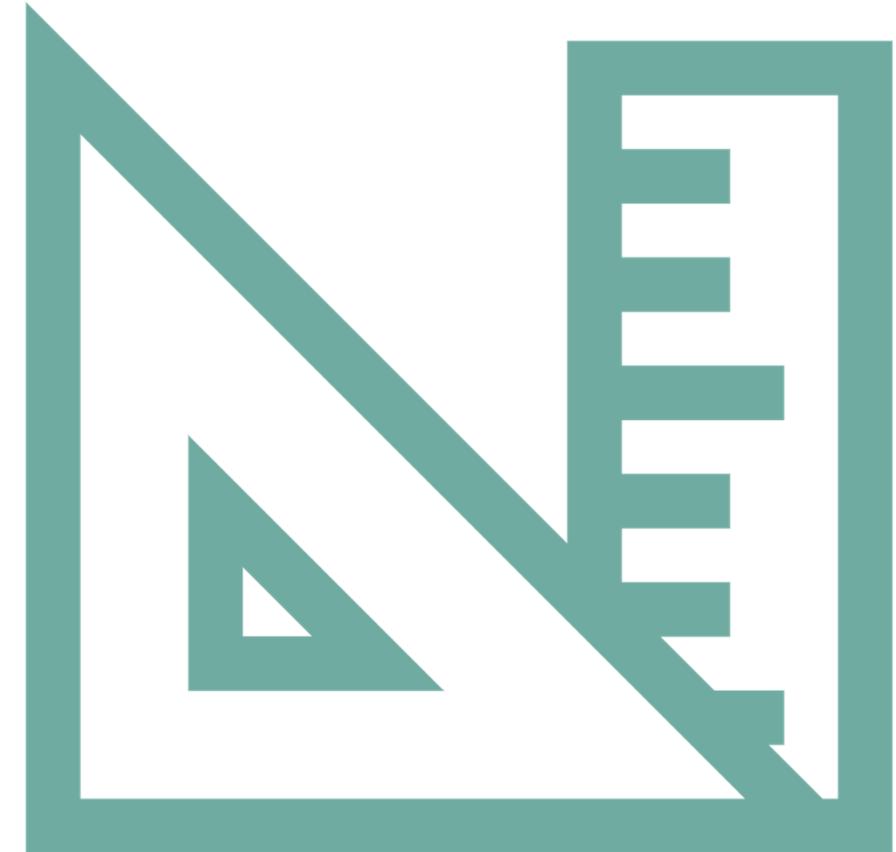


Electrical and Mechanical Coordination of Underground Library

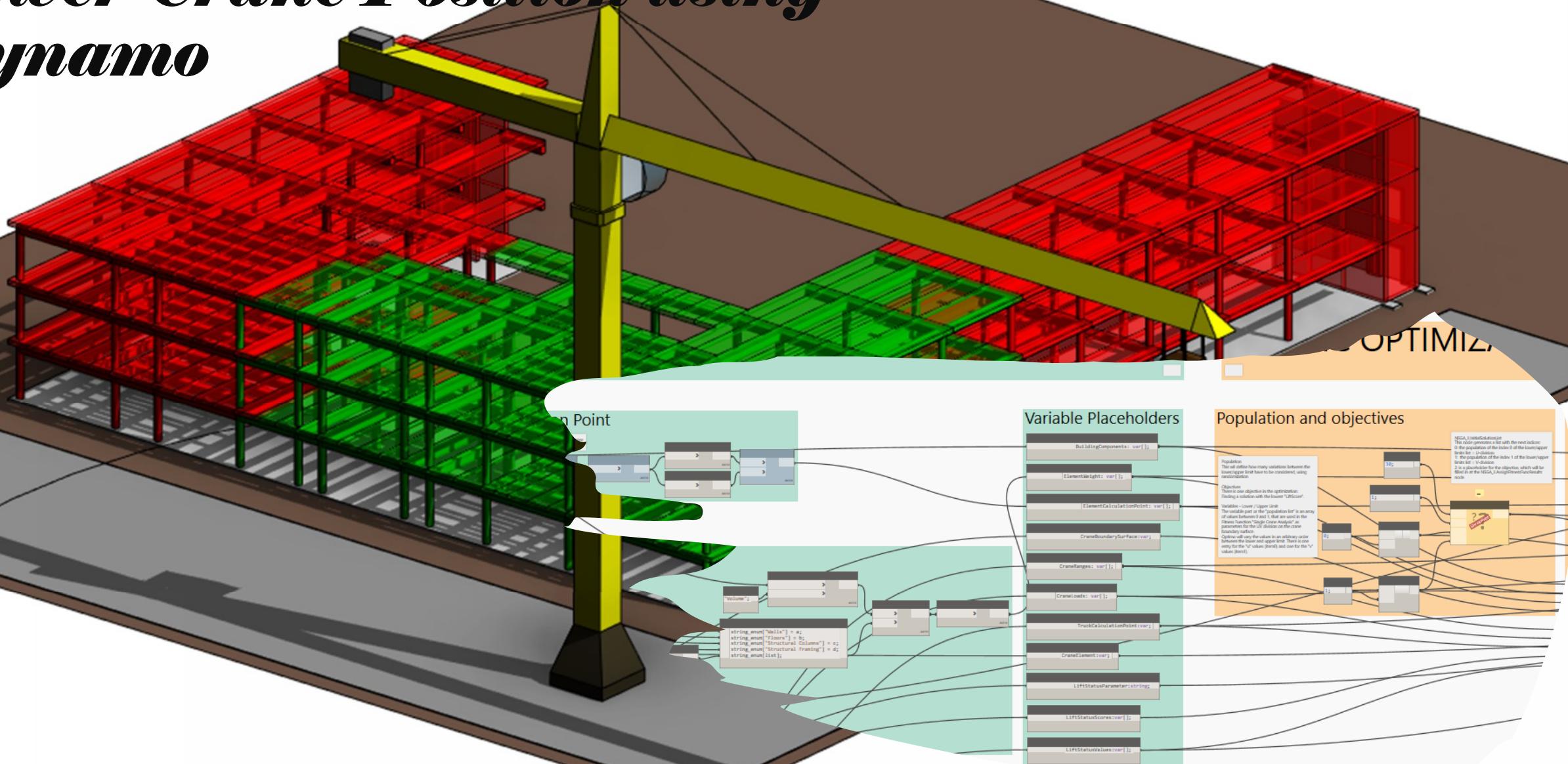


Master's Thesis:

*Generative
Design for
Construction
Site Layout
Planning*



Genetic Optimization for Tower Crane Position using Dynamo





**Project Admin for BIM 360
@ Purdue**



**Guided over 200 students
(till date) in developing
BIM Models of Residential
and Commercial Projects.**

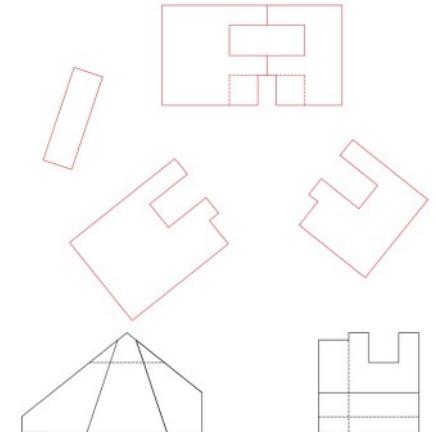
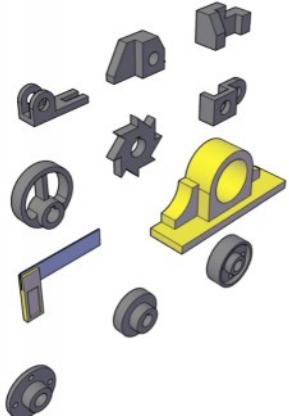
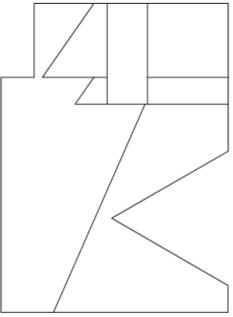
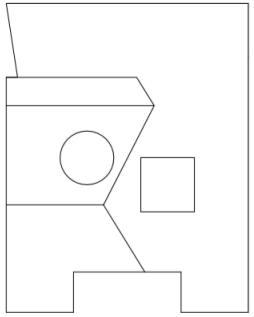
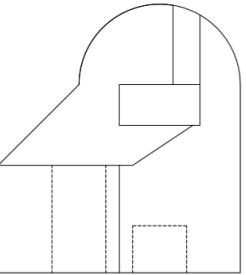
***VDC Graduate Teaching Assistant,
Purdue University***

3D Modeling in Revit and Sketchup

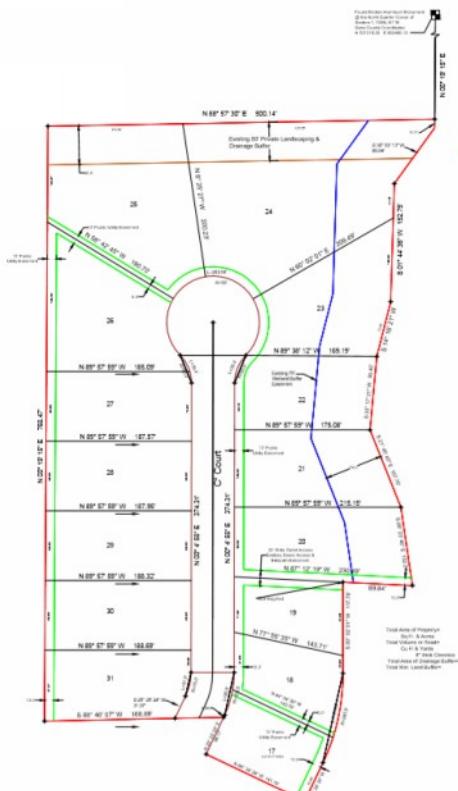
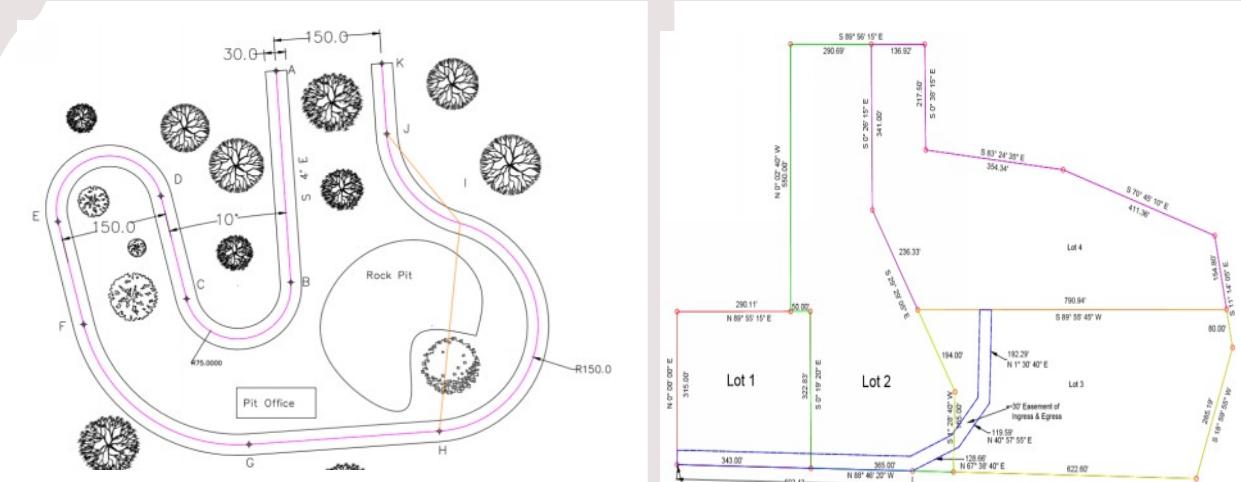


And 203 more...

CAD Drafting for Manufacturing and Visualization



AutoCAD: Plot, Road, Highway, RCC Pool Modeling





Thank You!

*If only one book were to be written about BIM, it might have
“ALWAYS EMERGING” printed in large uppercase letters on the
front cover.*

- Inspired by Pete Zyskowski