In our design, we focus on the buildability.

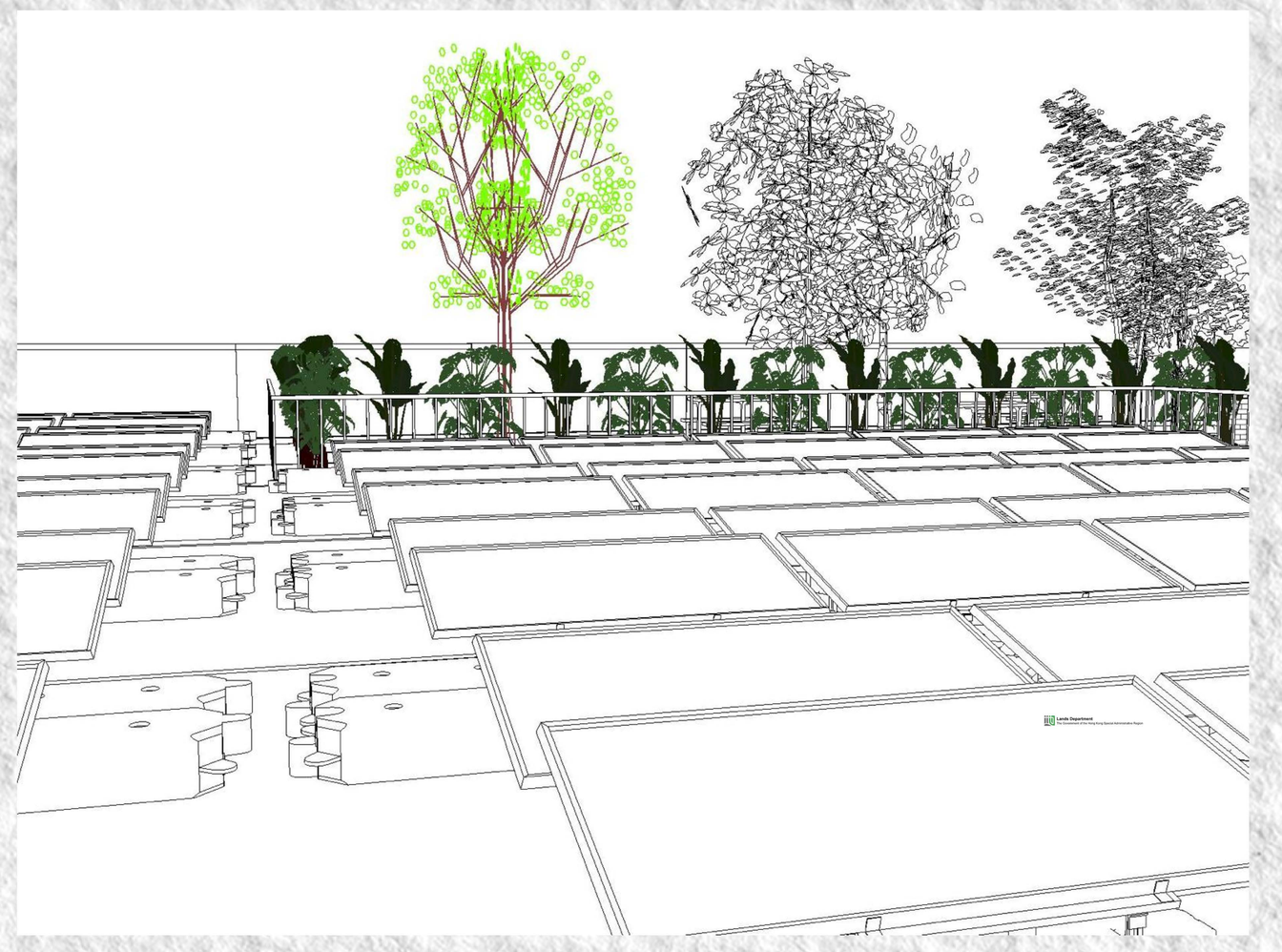
HOW to finish the construction as soon as possible ? We asked at the early stage.

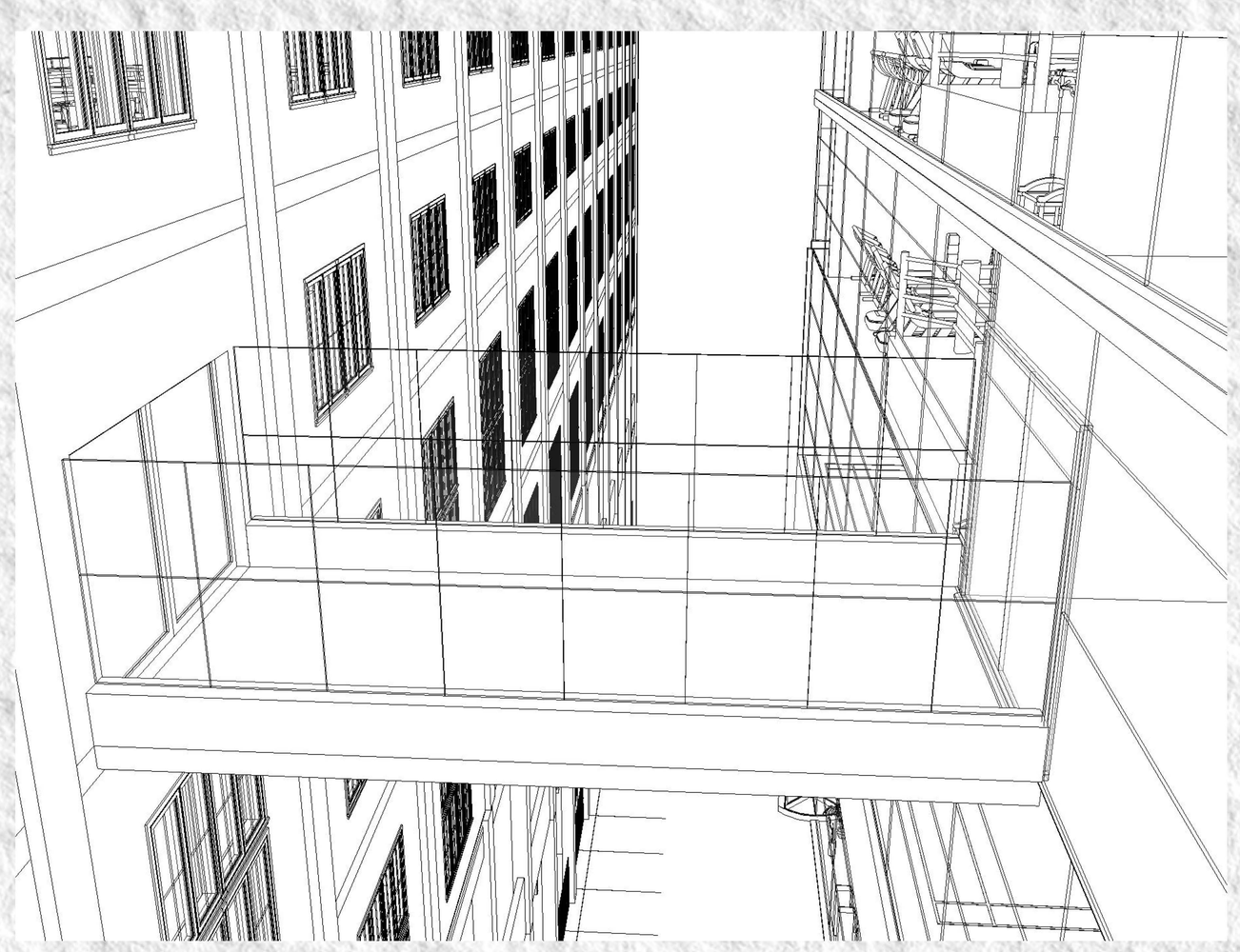
To answer this, we have to commence our project at acquiring the geogtechnical information by the a software called 'ArcGIS'. We collected the important data like coordinate
and angle of slope. With the help of the software, we can begin to design our campus.

In the campus, we have two major design philosophies. The first one if call ' simplisticism' so as to cope with the application of MIC in the main campus. Most of the stores are planned to be constructed by Mic, and this construction method can allow us to speed up the building process and create a simple appearance. We all know, the most simplest designed structure usually possess financial and time-saving advantage.

The second major design philosophy is 'man and nature. We input significant amount of vegetation in students' leisure time. Most entertaining facilities are in the guest building. Students can take rest in their room and do sport in the stadiums. Most importantly, they are recharging with the nature. According to science research, staying with the nature can enhance our mantel heath owing to its creation of pleasant surrounding.

# Design Philosophy 1





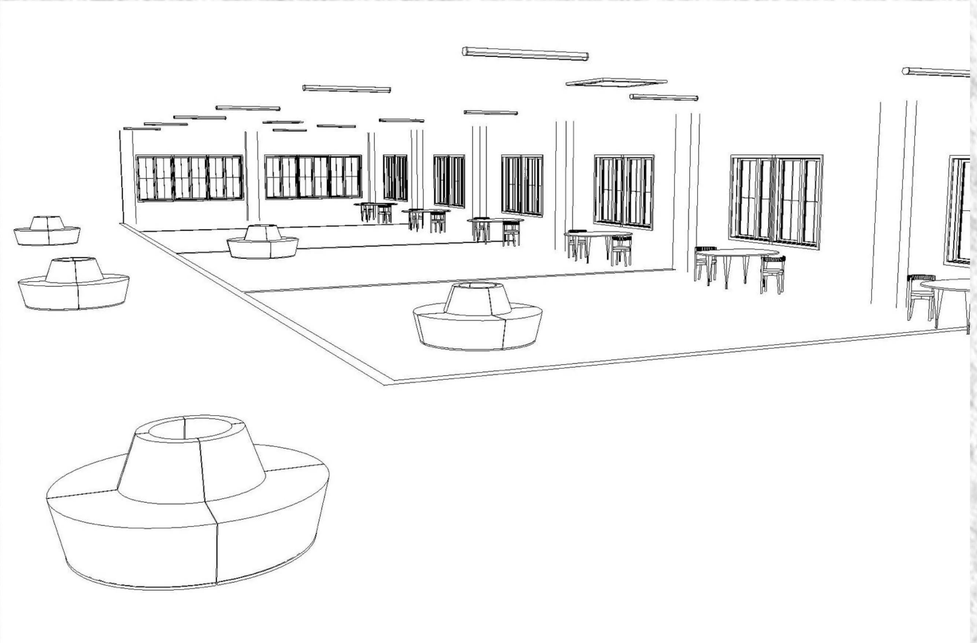
Besides the above concepts, we want to facilitate the accessibility between the two main building, a bridge isuilt. The bridge can allow students and staff to transport between two buildings. Furthermore, we also install solar panels to support the idea of renewable energy. We believe that the generated energy can withstand 10% of the overall electricity consumtion.

# Design Philosophy 2

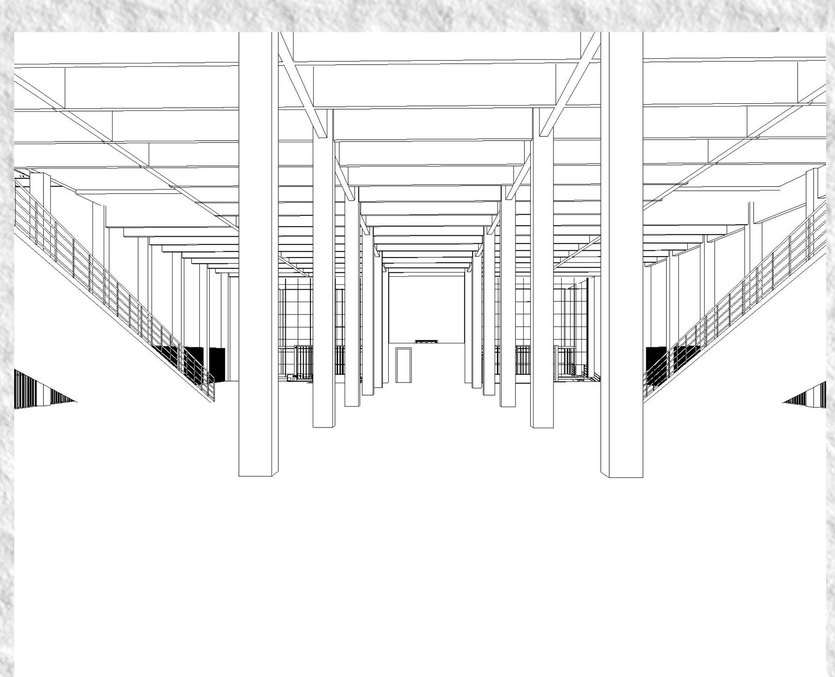
To analysis our design base on the real geographic situation, we check the digital topographic map from the land department. We discovered that the existing structure is lying on a slope at between of 80 meters to 110 meters of the contour lines. ,namely the two buildings need to be built in two different levels which one of them is at a higher level than that of the other, and we chose the guest house.

To deal with this special situation, we need to make connections from the ground floor to the podium. We use elevators to serve as the main transportation method. To deal with the high usage in peak hour, we decide to have 8 elevators to separate the crowdedness.

As a student, we truly understand the space for private study or group discussion. Thus, we insert tons of seating area, enough for various size of group discussion and provide comfortable environment for self-study. Students or other users can find a seat where ever they are and different level of comfort like armchairs, lounger, sofa , and so on. They can enjoy magnificent view of the mount. In this school, they would not stress out by searching a long while for a sitting place.



# Design Philosophy 3

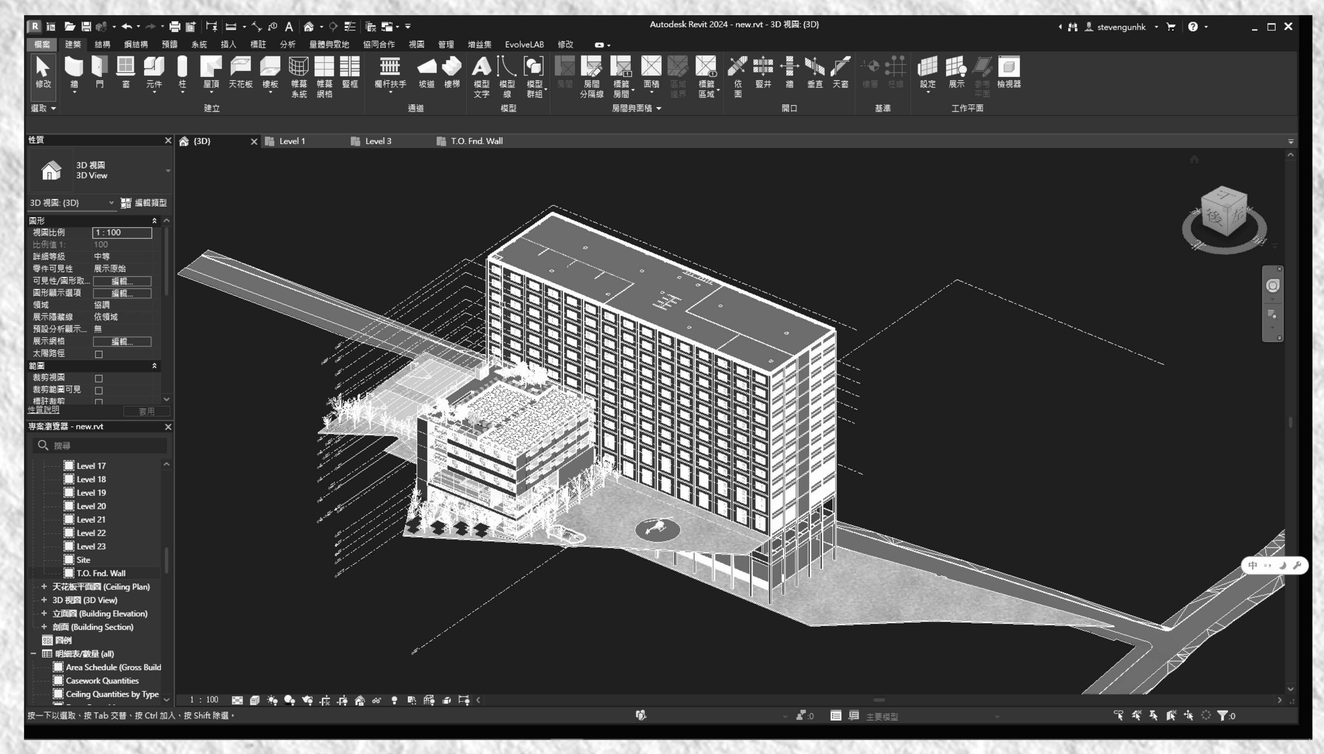


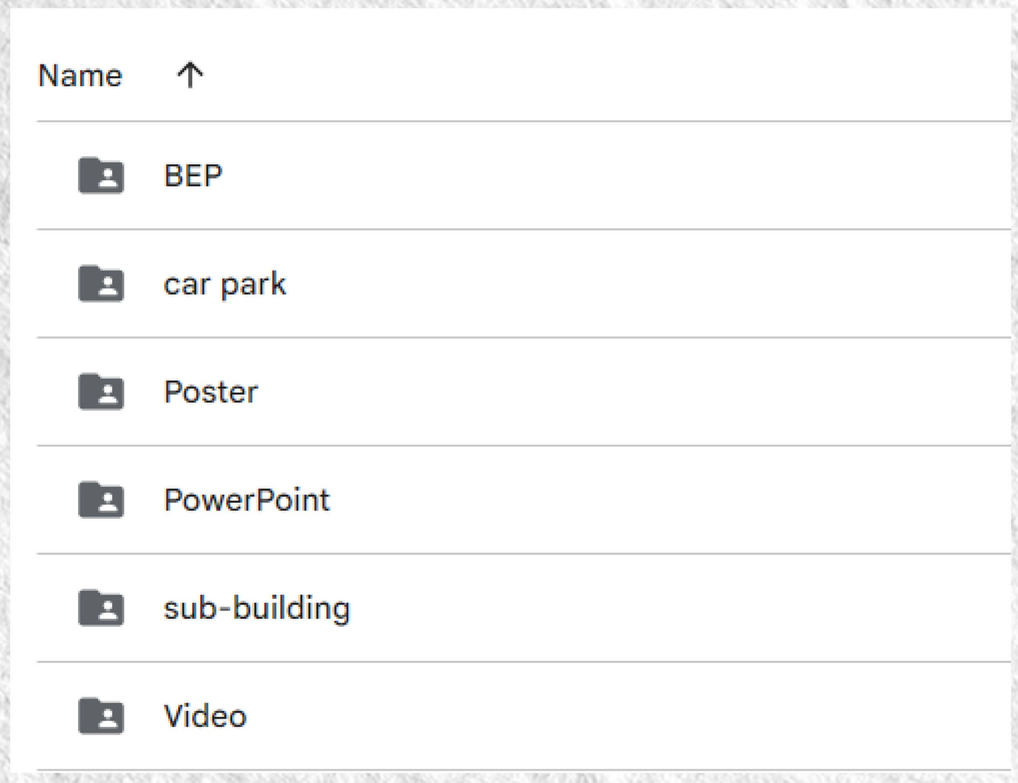
For the structural design, it is divided into three types of structures: “the hall”, “MIC and frame”, “traditional structure ”. The structure of “the hall” appears on 1/F to 5/F of the main building, where the rooms that require an extra building height and area effective like car parks and exhibition area are located. To achieve extra building height and area effectiveness, prestressed concrete and waffle slab is used to increase span length. “MIC and frame”structures are used in 6/F to 10/F of the main building for the highly repeated structures for instance the lab and lecture room. The guest building is a “traditional structure” as it has a low repeatability of structure and high construction difficulties. In that case, traditional construction methods adopted for its high feasibility

The construction starts with the excavation and foundation work, in this period construction work on both main building and guest house proceed in parallel. Then as the construction work of Main campus continues,the foundation of the guest house will be used for MIC components’ storage. While the MIC components are installed to the main campus, the guest house site will start work on the greening of the garden area. After all components are settled, the guest house building will then start.

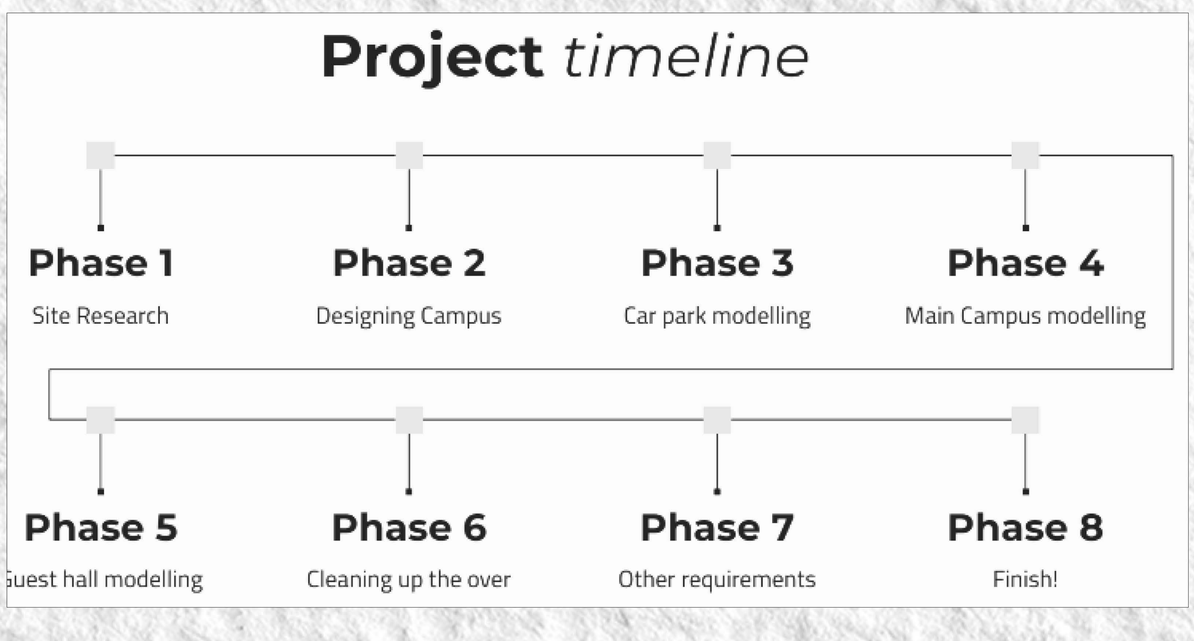
# BIM Platform and methodology of coordination

The main BIM software that we used is revit 2024. This is a 3D in the BIM life cycle because it can provide both 2D and 3D modeling. We can simulate the buildings by creating spans, beam, and families. For example, cars, furniture, and sport facility. In this software, we can produce detailed floor plan and material schedules.






To perform a successful BIM model, we strongly believe that effective communication adn collaboration are vital. Therefore, before modeling, we have a detailed work schedule and clear illustration on everyone's responsibility. During modeling, we were continuously communicating and updating our progress day by day. By doing this, all of us can have a clear picture on the project and can able to have comprehensive understanding on what they we are required to finish. Thanks to the strong communication, problem can also be solved immediately, and brain storming can also be efficient.




| Name | Responsibilities (Model) | Responsibility (Other) |
|---|---|---|
| 黃思然 Wong Sze Yin | Starting + Entrance + Car park | PPT slides + Poster |
| 李文豪 Li manho | Starting + Entrance + Car park | BEP |
| 陸宇軒 LU YUXUAN | Main Campus + MiC units | Video |
| 伍濱揚 Wu Binyang | Main Campus + MiC units | Polishing |
| 霍翼航 Fok Yik Hong | Guest house | Video |
| 張麗瑩 Cheung Lai Ying | Guest house | Polishing |